USAID
FROM THE AMERICAN PEOPLE

USAID
ASSIST PROJECT
Applying Science to Strengthen and Improve Systems

USAID APPLYING SCIENCE TO STRENGTHEN AND IMPROVE SYSTEMS

Semi-Annual Performance Monitoring Report

Cooperative Agreement No.:
AID-OAA-A-12-00101

USAID Funding Office:
Office of Health Systems

Performance Period:
October 1, 2014 – March 31, 2015

MAY 15, 2015

This semi-annual performance monitoring report was prepared by University Research Co., LLC (URC) for review by the United States Agency for International Development (USAID). The USAID Applying Science to Strengthen and Improve Systems Project is made possible by the generous support of the American people through USAID.

USAID ASSIST Project: Semi-Annual Performance Monitoring Report FY15

Cooperative Agreement Number AID-OAA-A-12-00101

USAID Funding Office: Office of Health Systems

Performance Period: October 1, 2014- March 31, 2015

May 15, 2015

DISCLAIMER

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

Acknowledgements

This semi-annual performance monitoring report was prepared by University Research Co., LLC (URC) for review by the United States Agency for International Development (USAID) as a deliverable under the USAID Applying Science to Strengthen and Improve Systems (ASSIST) Project.

The USAID ASSIST Project is made possible by the generous support of the American people through USAID's Bureau for Global Health, Office of Health Systems. The project is managed by URC under the terms of Cooperative Agreement Number AID-OAA-A-12-00101. URC's global partners for USAID ASSIST include: EnCompass LLC; FHI 360; Harvard University School of Public Health; HEALTHQUAL International; Initiatives Inc.; Institute for Healthcare Improvement; Johns Hopkins Center for Communication Programs; WI-HER LLC; and the World Health Organization Service Delivery and Safety Department.

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

Recommended citation

USAID Applying Science to Strengthen and Improve Systems (ASSIST) Project. 2015. USAID ASSIST Project: Semi-annual Performance Monitoring Report FY15. Performance Period: October 1, 2014–March 31, 2015. Published by the USAID ASSIST Project. Bethesda, MD: University Research Co., LLC (URC).

Table of Contents

List of Figures and Tables II
Acronyms VI

EXECUTIVE SUMMARY XII

1. FIELD SUPPORT-FUNDED ACTIVITIES 1

AFRICA 1
BOTSWANA 1
BURUNDI 12
COTE D'IVOIRE 18
DEMOCRATIC REPUBLIC OF CONGO 23
EAST AFRICA REGION 29
KENYA 30
LESOTHO 43
MALAWI 49
MALI 58
MOZAMBIQUE 68
SOUTH AFRICA 75
SWAZILAND 79
TANZANIA 89
UGANDA 110
ZAMBIA 131
ASIA 135
CAMBODIA 135
INDIA 140
INDONESIA 146
EUROPE AND EURASIA 148
GEORGIA 148
UKRAINE 161
LATIN AMERICA AND THE CARIBBEAN 167
HAITI 167
NICARAGUA 170

2. MNCH CORE-DIRECTED FUNDING 176

MATERNAL NEWBORN AND CHILD HEALTH 176

3. OFFICE OF HEALTH SYSTEMS-FUNDED ACTIVITIES 182

CROSS BUREAU ACTIVITIES 182

4. OFFICE OF HIV/AIDS-FUNDED ACTIVITIES 193

HEALTH WORKFORCE DEVELOPMENT 193
HIV AND AIDS: CHRONIC CARE, AND TREATMENT & PREVENTION 195
NACS-PHFS 209
VULNERABLE CHILDREN AND FAMILIES 214

5. COMMON AGENDA ACTIVITIES 217

GLOBAL TECHNICAL LEADERSHIP 217
KNOWLEDGE MANAGEMENT 227
RESEARCH & EVALUATION 238

6. OBSTACLES AND REMEDIES 248

7. ANALYSIS AND EXPLANATION COSTS 248

8. PERFORMANCE MONITORING PLAN 248

List of Figures and Tables

Figure 1. Botswana: Maternal deaths per month, all death nationwide (Jan 2013 – Dec 2014) 3
Figure 2. Botswana: Seasonal distribution of maternal deaths (Jan 2012 – Jan 2015) 4
Figure 3. Botswana: Causes of maternal deaths (2014) 6
Figure 4. Botswana: Maternal mortality audits – Health system contributory factors to maternal deaths (2014) 7
Figure 5. Botswana: Compliance with post-partum monitoring (4th stage of labor) in facilities with and without a QI team (Feb 2014 – Feb 2015) 7
Figure 6. Botswana: Percentage of vaginal deliveries monitored during the 4th stage of labor per protocol, 101 sites (Feb 2014 – Feb 2015) 8
Figure 7. Botswana: Percentage of vaginal deliveries that received AMTSL within the first minute of delivery, 101 sites (Feb 2014 – Feb 2015) 8
Figure 8. Botswana: Women with severe pre-eclampsia managed with Magnesium sulfate (MgSO4) and early delivery, 26 sites (Feb 2014 – Feb 2015) 9
Figure 9. Botswana: Percentage of women with incomplete abortion that receive uterine evacuation in two hours, 26 sites (Jan 2014 – Feb 2015) 10
Figure 10. Burundi: Closing gap between pregnant women attending first ANC visit and those tested during ANC visits, 12 districts, 4 provinces (July 2012 – Feb 2015) 14
Figure 11. Burundi: Increasing early first ANC visits in Karusi, Kayanza, Kirundo and Muyinga provinces (July 2012 – Feb 2015) 14
Figure 12. Burundi: Percentage of women in ANC whose partners are tested for HIV in 12 districts, 4 provinces (July 2012-Feb 2015) 16
Figure 13. Democratic Republic of Congo: Percent of PLHIV who received a nutritional assessment according to norms, 4 sites, Lubumbashi (Jan – Dec 2014) 26
Figure 14. Democratic Republic of Congo: Percent of PLHIV with correct classification of nutritional status, 4 sites, Lubumbashi (Jan – Dec 2014) 26
Figure 15. Democratic Republic of Congo: Percent of PLHIV assessed on nutrition who received appropriate nutritional counseling according to their nutritional status, 4 sites, Lubumbashi (Jan – Dec 2014) 27
Figure 16. Kenya: Percent eligible for ART, started on ART, Mbagathi Hospital (July 2014 – Dec 2014). 34
Figure 17. Kenya: Percent of HIV-exposed <=6 mo. exclusively breastfed, 12 PHFS sites, Kwale County (Jan 2014 – Jan 2015) 35
Figure 18. Kenya: Percent of HIV-exposed mother-baby (0-24 months) pairs in active care, 11 PHFS sites, Kwale County (Jan 2014 – Jan 2015) 35
Figure 19. Kenya: Percent CD4 baseline testing at enrolment into care, Isiolo County (Jan 2014 – Dec 2014) 36
Figure 20. Kenya: Percent HIV-positive MAM and SAM receiving food by prescription (both therapeutic and supplementary), Isiolo County (Jan 2014 – Dec 2014) 37
Figure 21. Kenya: Percent MAM and SAM at the CCC during the month, Isiolo County (Jan 2014 – Dec 2014) 37
Figure 22. Kenya: Number of children linked to health services, HVFI - Nyandarua County (Jan 2014 – Feb 2015) 39
Figure 23. Kenya: Clinical malaria cases, Busia County (Jan 2014 – Dec 2014) 41
Figure 24. Kenya: Clinical and confirmed malaria cases, Teso North District Hospital (Jun – Dec 2014). 41
Figure 25. Lesotho: Percentage of eligible mother-baby pairs who receive ART and under 5 care each month, 4 sites, Thaba-Tseka District (April 2014-Dec 2014) 45
Figure 26. Malawi: Average percentage of pupils passing exams, 7 primary schools in 4 terms, Balaka and Mangochi Districts (Dec 2013 – Dec 2014) 54

Figure 27. Malawi: Percentage of pupils passing exams on 4 terms, 3 primary schools under Nkata QI team (Dec 2013 – Dec 2014) 54
Figure 28. Mali: Compliance rate for preventive care during antenatal period, 47 sites, Kayes District (June 2014 – March 2015) 60
Figure 29. Mali: Percentage of newborns successfully resuscitated, 74 sites, 2 districts (July 2013 – March 2015) 61
Figure 30. Mali: Percentage of new pregnant women enrolled in antenatal care who received iron/folate, 25 sites (Oct 2012 – March 2015) 62
Figure 31. Mali: Results from community committees in 24 villages in Bougouni (Aug 2014 – Feb 2015) 63
Figure 32. Mozambique: Number of pregnant women identified by all community groups and percent of community-identified pregnant women who received first ANC in the same month, 15 *bairros*, Licilo Health Center (March 2014 - Feb 2015) 71
Figure 33. Pregnant women attending first ANC by weeks of gestation, Licilo Health Center (Aug 2013 and Aug 2014) 72
Figure 34. Mozambique: Number of pregnant women identified by community groups per month and percent of community-identified pregnant women who received first ANC in the same month, Chissano Health Center (11 *bairros*) (June 2014 - Feb 2015) 72
Figure 35. South Africa: Number of patients on ART (ART starts and remaining) in Mpumalanga and Limpopo (Apr 2012 - Dec 2014) 77
Figure 36. Swaziland: Comparison of national uptake to 2 hospitals ART uptake (Jan 2012 – March 2015) 83
Figure 37. Tanzania: Percentage HIV exposed children receiving confirmatory test six weeks after complete cessation of breastfeeding, 12 sites, Arusha Region (Jan 2014 – Feb 2015) 93
Figure 38. Tanzania: Percent of children below 15 years receiving HIV tests at pediatric wards, 9 sites and Sokoine Regional Hospital, Lindi Region (Jan – Dec 2014) 94
Figure 39. Tanzania: Pregnant and lactating mothers taking ART, 10 sites, Nzega District (June 2013 – Dec 2014) 95
Figure 40. Tanzania: Percent of HIV exposed infants started on Nevirapine 12 hours after birth, 29 sites, Magu District, Mwanza Region (Aug 2013 – Jan 2015) 96
Figure 41. Tanzania: Percent HIV-positive pregnant women started on appropriate ARVs, 29 sites, Magu District, Mwanza Region (Oct 2013 – Jan 2015) 96
Figure 42. Tanzania: Improved uptake of ARV prophylaxis by newborns, 29 sites, Magu District, Mwanza Region (Aug 2013-Jan 2015) 97
Figure 43. Tanzania: Improved uptake of ARV prophylaxis by newborns, 29 sites, Magu District, Mwanza Region (Aug 2013-Jan 2015) 99
Figure 44. Tanzania: Proportion of children under 15 years tested for HIV at pediatric wards, Shinyanga Regional Hospital (March – Dec 2014) 102
Figure 45. Tanzania: Increase in uptake of HIV testing and counseling among children admitted in pediatric in patient wards, Igunga District Hospital (May 2014 – February 2015) 102
Figure 46. Tanzania: Increase in HIV+ infants and children enrolled in HIV care, 10 sites, Shinyanga Region, (May 2014 – Oct 2014) 103
Figure 47. Tanzania: Percentage of HIV-exposed children receiving confirmatory HIV test after cessation of breastfeeding, 11 sites, Njombe Region (May 2014 – Feb 2015) 103
Figure 48. Tanzania: Increasing HIV testing in children admitted in pediatric ward at Makete district hospital compared to 11 aggregated sites, Njombe Region (May 2014 – Feb 2015) 105
Figure 49. Tanzania: Percentage of male partners tested for HIV at RH/PMTCT, Ngerengere, and Mafiga Health Centers (Jan 2014 – Jan 2015) 108
Figure 50. Uganda: Percentage of children 2-14 years attending OPD during the month and had an HIV test done, 5 HIV COR sites, Kamgue Health Center (July – Dec 2014) 115

Figure 51. Uganda: Percentage of HIV-negative clients provided with prevention services, Kuluva and Kasanda hospitals (July 2014 – Feb 2015) 116
Figure 52. Uganda: Percentage of clients who return for review within 48 hours after circumcision and percentage of clients who experience moderate to severe adverse events after circumcision, 30 sites (Feb 2013 – Feb 2015) 117
Figure 53. Uganda: Percentage of SMC clients who return for follow up, 9 phase I sites and 4 phase II sites (Jan 2013 – Jan 2015) 117
Figure 54. Uganda: Percentage of mother-baby pairs retained in care, 22 demonstration and 4 spread sites (April 2013 – Jan 2015) 119
Figure 55. Uganda: Percentage of OPD patients and household contacts evaluated for active TB 120
Figure 56. Uganda: Successful spread of MNCH best practices at Butunduzi HC III (July 2014 – Feb 2015) 122
Figure 57. Uganda: Successful spread of MNCH best practices at Butunduzi HC III (July 2014 – Feb 2015) 124
Figure 58. Uganda: Percentage of households in village savings and loan association groups regularly saving, households supported by demonstration CSOs compared with households supported by spread CSOs (Sept 2013 – Feb 2015) 125
Figure 59. Uganda: Percentage of OVC linked to services of need by 25 old VCPC and 45 new VCPC (Aug 2013 – Feb 2015) 126
Figure 60. Uganda: Percentage of SMC clients who attend group education with their partners, Kibuku HCIV (Dec 2013 – Feb 2015) 129
Figure 61. Zambia: Percentage of clients assessed and categorized for nutrition status, 6 sites, and one health center, Kitwe District (June 2014 – March 2015) 133
Figure 62. Zambia: Number of clients who have severe or moderate acute malnutrition, 6 sites, Kitwe District (June 2014 – March 2015) 133
Figure 63. Perinatal mortality rate in all ASSIST supported facilities which deliver 12,000 to 17,000 babies per month (July 2013 – Jan 2015) 141
Figure 64. Percentage of stillbirths in all private and public facilities, 5 districts, Punjab (July 2013 – Jan 2015) 142
Figure 65. Percentage of stillbirths in all ASSIST vs. non-ASSIST supported sites, 5 districts, Punjab (July 2013-Dec 2014) 142
Figure 66. Sick neonates being referred out from all 327 ASSIST supported facilities in India (July 2013 – Jan 2015) 143
Figure 67. Perinatal mortality rate at Jama Community Health Centre (May 2014 – Jan 2015) 143
Figure 68: Clinical practice and patient care scores in 9 hospitals (Q2 FY13 – Q4 FY14) 147
Figure 69: Georgia: Average compliance with all percentage process indicators per clinical focus area, Imereti Region (April 2012 – January 2015), average 343 monthly charts reviewed 151
Figure 70. Georgia: Percent medical charts with improved documentation of screening and counselling on CVD behavioral risk factors (n=562) (April 2012-Sept 2013) 151
Figure 71. Georgia: Percent medical charts with improved screening and modification of CVD physiologic risk factors (n=562) (April 2012-Sept 2013) 152
Figure 72. Georgia: Calculation of 10 year CVD risk and primary and secondary prevention of CVD (n=562) (April 2012-Sept 2013) 152
Figure 73. Georgia: Increasing compliance with ACS initial assessment best practices: results of baseline assessment and attributable difference at the endline (n=564) (April 2012-Sept 2013) 152
Figure 74. Georgia: Improved compliance with initial (n=264) and ongoing (n=218) medication treatment and discharge medication prescription (n=217) with evidence base ACS treatment practices (April 2012-Sept 2013) 153
Figure 75. Georgia: Increased CVD risk factor assessment and modification best practices in patients with ACS at hospital discharge (n=217), (April 2012-Sept 2013) 153

Figure 76. Georgia: Percent of charts with evidence-based (EB) prescription practices of ambulatory management of COPD (n=109) (April 2012-Sept 2013) 153
Figure 77. Georgia: Percent of charts with EB prescription practices of ambulatory management of Asthma. (n=225) (April 2012-Sept 2013) 154
Figure 78. Georgia: Percent of charts with EB medication administration practices of hospital management of COPD exacerbation (n=143) (April 2012-Sept 2013) 154
Figure 79. Georgia: Percent of charts with EB medication administration practices of hospital management of asthma exacerbation (n=117) (April 2012-Sept 2013) 154
Figure 80. Georgia: Improved compliance with EB practices: Baseline and attributable improvement in compliance with EB practice to treat pediatric respiratory infections at ambulatories (n=212) (July 2012-Dec 2013) 155
Figure 81. Georgia: Improved compliance with EB practices: Baseline and attributable improvement in compliance with evidence-based practices to treat pediatric pneumonia in hospitals (n=274) (July 2012-Dec 2013) 155
Figure 82. Georgia: Decreased use of non-EB practices: Baseline and attributable improvement in prescription of non-EB medications for pediatric patients with respiratory infections at ambulatories (n=212) (July 2012-Dec 2013) 155
Figure 83. Georgia: Decreased use of non-EB practices: Baseline and attributable improvement in administration of non-EB medications for pediatric patients with pneumonia at hospitals (n=274) (July 2012-Dec 2013) 156
Figure 84. Ukraine: Cotinine tests versus self-reported smoking rates (July – Aug 2014) 162
Figure 85. Ukraine: Percentage of pregnant women who were screened for tobacco and alcohol use among those registered, individual results for the nine facilities and average across facilities (red line) (Aug 2014- March 2015) 163
Figure 86. Ukraine: Percentage of pregnant women who test positive for tobacco use during first antenatal visit and who accept BPI, 9 facilities, Poltava Oblast (July 2104 – April 2015) 164
Figure 87. Ukraine: Percentage of pregnant women who test positive for alcohol use during first antenatal visit and who accept BPI, 9 facilities, Poltava Oblast (July 2104 – April 2015) 164
Figure 88. Self-reported alcohol and tobacco use among pregnant women in Ukraine (Sept 2014) 165
Figure 89. Nicaragua: Number of rapid cycles designed and under implementation at 6 universities (Oct 2014 - March 2015) 173
Figure 90. Niger: Comparison of PP women who received FP counseling before exit, chose a modern FP method and left with their preferred FP method, 16 sites (Oct 2013 – Dec 2014) 185
Figure 91. Niger: Comparison of PPFP where couples received FP counselling before exit, 16 sites and in the Konni District Hospital (Oct 2013 – Dec 2014) 186
Figure 92. Niger: Postpartum women who received FP counselling before exit, 16 sites (in 2 districts) and the Regional Hospital Poudrière - Niamey (Oct 2013 – Dec 2014) 187
Figure 93. Niger: Postpartum women who left with their preferred FP method, 16 sites, 2 districts and in Tsernawa Health Center (Oct 2013 – Dec 2014) 188
Figure 94: Swaziland: Average compliance with injection safety and health care waste management standards, 20 intervention sites (Oct 2014-March 2015) 199
Figure 95: Uganda: Coverage, retention and outcomes of ART patients, Mityana (early intervention) chronic care sites (April 2013 - Dec 2014) 200
Figure 96: Uganda: Coverage, Retention and Outcomes of ART patients, Nakaseke (late intervention) chronic care sites (April 2013 – Dec 2014) 201
Figure 97: Uganda: Performance dashboard on SMC quality standards, 30 sites (Feb-May 2013 vs. Feb 2015) 202
Figure 98: Uganda: Performance dashboard on SMC quality standards, 19 new sites (June 2014 vs. Feb 2015) 203

Figure 99. Uganda: Percentage of SMC clients who attend group education with partners, Kibuku Health Center IV (Dec 2013- Feb 2015) 207
Figure 100. Uganda: Percentage of HIV-exposed babies discharged from PMTCT programs who test positive at 18 months, 22 sites, 3 districts (Feb 2013 – Jan 2015) 211
Figure 101. Excerpt of Aim, Indicator, and Content Template 215
Figure 102. Screen capture of the Improvement Methods Toolkit 230
Figure 103. ASSIST Facebook fan growth and page impressions (Oct 2014 – March 2015) 235

Table 1. Malawi: Changes tested by the Community QI teams to address the identified challenges in 14 targeted primary schools 52
Table 2. South Africa: MMC Dashboard – Summary baseline scores in eight key quality standard areas from all USG IPs (134 sites) 78
Table 3. Key findings and recommendations from TB IPC assessment at Good Shepherd Hospital 84
Table 4. Georgia: Knowledge and self-reported practices of medical care providers, managing project priority diseases in intervention ambulatory care clinics and hospitals (April 2012 – Dec 2013) 156
Table 5. Georgia: Summary cost results per all clinical focus areas 158
Table 6. Haiti: Numbers and types of people trained in Quality Improvement (May 2013 – March 2015) 168
Table 7. USAID ASSIST Project conference participation, Q1-Q2 FY15 220
Table 8. USAID ASSIST Project publications (Oct 2014 – March 2015) 222
Table 9. ASSIST knowledge portal sites usage (Oct 2014-March 2015) 230
Table 10. USAID ASSIST gender integration activities (Oct 2014 – March 2015) 232
Table 11. List of ASSIST studies as of March 31, 2015 239
Table 12. Progress on USAID ASSIST Project performance monitoring indicators through March 31, 2015 248

Acronyms

AAC	Area Advisory Council
AAP	American Academy of Pediatrics
ACS	Antenatal Corticosteroids
ACSM	Advocacy and social mobilization
ADESENI	Association for Human Rights of Nicaraguan Sexual Diversity
AFG	AIDS-Free Generation
AGPAHI	Ariel Glaser Pediatric AIDS Healthcare Initiative
AIDS	Acquired immunodeficiency syndrome
AIMGAPS	Assuring Infants and Mothers Get All PMTCT Services
AMTSL	Active management of the third stage of labor
ANC	Antenatal care
ANPPCAN	African Network for the Protection and Prevention of Child Abuse and Neglect
AOR	Agreement Officer's Representative
APHIA	AIDS, Population, and Health Integrated Assistance
ART	Antiretroviral therapy
ARV	Antiretroviral virus
ASHA	Accredited Social Health Activists
ASSIST	USAID Applying Sciences to Strengthen and Improve Systems
BCC	Behavior change communication
BICU	Bluefield Indian & Caribbean University
BMJ	British Medical Journal
BPI	Brief physician intervention
CBO	Community Based Organizations
CCC	Comprehensive Care Centers

CCM	Chronic Care Model
CCN	Cambodian Council of Nurses
CDC	U.S. Centers for Disease Control and Prevention
CDCS	Country Development Cooperation Strategy
CDO	Community Development Officers
CHMT	Council Health Management Team (Tanzania)
CHSS	Community Health System Strengthening
CHW	Community health workers
CME	Continuing medical education
CMC	Cambodian Midwives Council
CMS	Central Medical Stores
COE	Center of Excellence
COMBI	Communication Behavioral Impact
COP	Chief of Party
COPD	Chronic obstructive pulmonary disease
COR	Continuum of Response
CP	Child protection
CQI	Continuous quality improvement
CSO	Civil society organization
CTC	Care and treatment center
CVD	Cardiovascular disease
DAR	Daily activity register
DBS	Dried blood spot
DCS	Department of Children Services
DGS	General Health Directorate
DHMT	District Health Management Team
DHO	District Health Office
DIPE	National Health Information System
DMH	Department of Medical Practice
DNA	Deoxyribonucleic acid
DOH	Department of Health
DOTS	Directly Observed Therapy
DRC	Democratic Republic of Congo
DSW	Department of Social Welfare
EGPAF	Elizabeth Glaser Pediatric AIDS Foundation
EHCP	Essential Health Care Package
EmONC	Emergency Obstetric and Neonatal Care
eMTCT	Elimination of mother-to-child transmission of HIV
ENC	Essential newborn care
EONC	Essential obstetric and newborn care
EPCMD	Ending Preventable Child and Maternal Deaths
FANTA	Food and Nutrition Technical Assistance Project
FGM/C	Female genital mutilation/cutting
FISP	Fertilizer and farm inputs program
FKP	FUNZO Kenya Project
FP	Family planning
FY	Fiscal year
GAO	Western Self-Help Groups for People Living with HIV/AIDS
GDA	Global Development Alliance
GH	Global Health
GHeL	Global Health eLearning

GHS	Georgia Health Strategy
GOL	Government of Lesotho
HAART	Highly active antiretroviral therapy
HAST	HIV, AIDS, Sexually Transmitted Diseases and TB
HBB	Helping Babies Breathe
HBC	Home-based care
HCI	USAID Health Care Improvement Project
HCW	Health care workers
HEI	HIV-exposed infant
HES	Household economic strengthening
HIDN	Health and Infectious Diseases and Nutrition
HIV	Human immunodeficiency virus
HMIS	Health management information system
HQ	Headquarters
HR	Human resources
HRD	Human resources department
HRH	Human resources for health
HRSA	Human Resources and Services Administration
HSD	Health sub district
HSS	Health systems strengthening
HTC	HIV testing and counseling
HTSP	Healthy Timing and Spacing of Pregnancies
IBESR	Institut du Bien Etre Social et de la Recherche (Haiti)
ICF	Intensified case finding
IMCI	Integrated Management of Childhood Illnesses
IP	Implementing partners
IPC	Infection prevention and control
IPT	Isoniazid preventive therapy
IRB	Institutional Review Board
IST	In-service training
IYCF	Infant and young child feeding
JHU CCP	Johns Hopkins University Center for Communication Programs
JICA	Japan International Cooperation Agency
KARS	Komisi Akreditasi Rumah Sakit (Indonesia)
KM	Knowledge management
KMC	Kangaroo Mother Care
LAC	Latin America and Caribbean
LAM	Lactational amenorrhea method
LIFT	Livelihoods and Food Security Technical Assistance Project
LMIC	Low and/or middle-income
LTFU	Lost-to-follow-up
MAM	Moderate acute malnutrition
M&E	Monitoring and evaluation
MCC	Medical Council of Cambodia
MCDMCH	Ministry of Community Development, Mother and Child Health
MDG	Millennium Development Goals
MDR-TB	Multidrug-resistant tuberculosis
MEPI	Medical Education Partnership Initiative
MGSO4	Magnesium sulfate
MLSS&S	Ministry of Labour, Social Security, and Services (Kenya)
MMAS	Ministry of Women and Social Action (Mozambique)

MMC	Medical male circumcision
MMR	Maternal mortality ratio
MMRI	Maternal Mortality Reduction Initiative
MNCH	Maternal, newborn, and child health
MOGCDSW	Ministry of Gender, Children, Disability, and Social Welfare
MOH	Ministry of Health
MOHSW	Ministry of Health and Social Welfare
MoLHSA	Ministry of Labor, Health and Social Affairs
MVC	Most vulnerable children
NACS	Nutrition assessment, counseling and support
NASCOP	National AIDS and STI Control Programme (Kenya)
NBR	Newborn resuscitation
NCCS	National council for children services
NCD	Non-communicable disease
NEPI	Nursing Education Partnership Initiative
NGO	Non-governmental organizations
NHA	National Hospital Accreditation
NMAPE	National Medical Academy of Postgraduate Education
NPA	National Plan of Action
NR	Newborn Resuscitation
NSTS	National Sample Transportation Services
NTCP	National TB Control Program (Swaziland)
ODETRANS	Female Transgender Organization
OHA	USAID Office of HIV/AIDS
OHS	Office of Health Systems
OPD	Outpatient department
OVC	Orphans and vulnerable children
PAHO	Pan American Health Organization
PCC	Pharmacy Council of Cambodia
PCR	Polymerase chain reaction
PDSA	Plan-do-study-act
PE/E	Pre-eclampsia/eclampsia
PEP	Post-exposure prophylaxis
PEPFAR	President's Emergency Plan for AIDS Relief
PHC	Primary health care
PITC	Provider-initiated HIV testing and counseling
PHFS	Partnership for HIV-Free Survival
PLHIV	Persons living with HIV
PMTCT	Prevention of mother-to-Child transmission of HIV
PNDS II	National Plan for Health Development
PNLS	National AIDS Control Program (Burundi)
PNC	Post-natal care
PNP	Policies, Norms, and Protocols
POLISAL	Instituto Politécnico de la Salud "Luis Felipe Moncada"
PPFP	Post-partum family planning
PPH	Post-partum hemorrhage
PSS	Psychosocial support
PTL	Preterm labor
QA	Quality assurance
QAD	Quality Assurance Department
QAP	Quality Assurance Project

QI	Quality improvement
QIF &SP	Quality Improvement Framework and Strategic Plan
QIP	Quality improvement plans
QIT	Quality improvement team
QMP	Quality Management Program
R&E	Research and evaluation
R&R	Recording and reporting
RC	Relais communautaire (community health workers)
RCH	Reproductive and child health
RCQHC	Regional Center for Quality in Health Care
REPPSI	Regional Psychosocial Support Initiative
RESAR	Regional Semi-Annual Reviews
RH	Reproductive Health
RHMT	Regional Health Management Team
RMNCH+A	Reproductive health, maternal, neonatal, child, and adolescent health
SAM	Severe acute malnutrition
S&T	Survive and Thrive
SBC	Social and Behavior Change
SCC	Safe Childbirth Checklist
SCORE	Sustainable Comprehensive Responses
SDS	Service Delivery and Safety
SILC	Savings and Internal Lending Communities
SMaCKM	Safe Male Circumcision Knowledge Management
SMC	Safe male circumcision
SMGL	Saving Mothers Giving Life
SOP	Standard operating procedures
SNAP	Swaziland National AIDS Program
SPAQS	Service de la Promotion de l'Assurance Qualité en Santé
SRH	Sexual and Reproductive Health
TA	Technical assistance
TB	Tuberculosis
TBD	To be determined
TFR	Total fertility rate
TOT	Trainer of trainer
TNA	Training Needs Assessment
TRT	Technical Reference Team
TWG	Technical working group
UAM	Universidad Americana
UCAN	*Universidad Cristiana Autónoma de Nicaragua* (Christian Autonomous University of Nicaragua)
UI-CFW	Universitas Indonesia (UI) – Center for Family Welfare
UNAN	*Universidad Nacional Autónoma de Nicaragua* (National Autonomous University of Nicaragua)
UNCoLSC	UN Commission on Life Saving Commodities
UNICEF	The United Nations Children's Fund
UPHS	Uganda Private Health Support Program
UPOLI	*Universidad Politécnica de Nicaragua* (Polytechnic University of Nicaragua)
URACCAN	*Universidad de las Regiones Autónomas de la Costa Caribe de Nicaragua* (University of the Autonomous Regions of the Caribbean Coast of Nicaragua)
URC	University Research Co., LLC
USAID	United States Agency for International Development
USG	United States Government

VCPC	Village child protection committee
VHT	Village Health Team
VMMC	Voluntary medical male circumcision
VS&L	Village Savings and Loan
WASH	Water Sanitation and Hygiene
WHO	World Health Organization
WIT	Work improvement teams

Executive Summary

University Research Co., LLC (URC) and its partners have completed the second year and a half of implementation of the USAID Applying Science to Strengthen and Improve Systems (ASSIST) Project. This report is the fifth Semi-Annual Performance Monitoring Report for the project and aims to summarize the accomplishments and results toward the program objectives of USAID ASSIST activities during quarter (Q)1 through 2 of Fiscal Year 2015 (FY15).

Objective of USAID ASSIST

The overall objective of the USAID ASSIST Project is to foster improvements in a range of health care processes through the application of modern improvement methods by host country providers and managers in USAID-assisted countries. The project's central purpose is to build the capacity of host country systems to improve the effectiveness, efficiency, client-centeredness, safety, accessibility, and equity of the services they provide. In addition to supporting the implementation of improvement strategies, the project seeks to generate new knowledge to increase the effectiveness and efficiency of applying improvement methods in low- and middle-income countries. USAID ASSIST country programs are designed with host-country leadership at the forefront to ensure context appropriateness and local ownership and are in alignment with the goals of the United States Government and global initiatives, including Ending Preventable Maternal and Child Deaths and Achieving an AIDS-Free Generation.

Scale of work during FY15

Technical assistance to countries to create, institutionalize, and scale up results: During the first two quarters of FY15, USAID ASSIST provided assistance in 22 countries through field and core funding. Work in 20 of the countries was funded through field support: Botswana, Burundi, Cambodia, Cote d'Ivoire, Democratic Republic of Congo, Georgia, Haiti, India, Indonesia, Kenya, Lesotho, Malawi, Mali, Mozambique, Nicaragua, South Africa, Swaziland, Tanzania, Uganda, and Zambia. Activities in nine countries were supported through core funds. Funds from the USAID Office of HIV/AIDS supported activities in health workforce development in Swaziland; HIV and AIDS activities in Swaziland and Uganda; nutrition assessment, counselling, and support in Zambia; technical assistance for the Partnership for HIV-Free Survival (PHFS) in Mozambique and technical leadership for PHFS, which ASSIST is supporting in Kenya, Lesotho, Mozambique, Tanzania, and Uganda. USAID cross-bureau-funded activities, through the Office of Health Systems, supported: the rebuilding and strengthening of health systems of the recently Ebola-affected countries through providing technical expertise in health workforce development; developing a Family Planning Quality Framework for improved health and social outcomes for women and their families; post-partum family planning improvement activities in Niger; and use of internet-based applications to promote quality improvement and to disseminate evidence-based maternal and newborn interventions and communities of practice in the Latin America and Caribbean Region. In addition, cross-bureau funds supported developing a basic improvement course for the USAID Global Health eLearning platform, as well as developing a concept note for incorporating improvement competencies into existing pre-service curricula of medical training institutions. The project also provided technical assistance to the Regional Center for Quality in Health Care with field support from the East Africa Region and assistance in Ukraine with Europe and Eurasia Bureau funding.

Learning agenda

Research and evaluation (R&E) activities to help show country programs how and why investment in improvement adds value to health care delivery, and to build up the body of evidence of what works and what does not in terms of improvement methods. In Q1-Q2 FY15, the R&E team supported 25 country-led research studies in 10 countries (Burundi, Cote d'Ivoire, Democratic Republic of Congo, India, Malawi, Mali, Swaziland, Tanzania, Uganda, and Ukraine) as well as a multi-country study on orphans and vulnerable children in Africa. The R&E team also provided technical assistance to Burundi, Cote d'Ivoire, India, Kenya, and Uganda on validation of their improvement indicators as well as collecting data from control group from studies in Burundi, Cote d'Ivoire, Burundi, and Uganda.

Applying knowledge management (KM) principles and techniques to integrate learning across countries and support the scale-up and institutionalization of better care practices. ASSIST designed and implemented a knowledge handover meeting in Kampala, Uganda to support the transfer of guidance and change ideas for improving the quality of male circumcision. ASSIST staff from Uganda and Bethesda facilitated interactive sessions to harness learning from participants in a Lesotho-Uganda knowledge

exchange. In addition, the headquarter KM team provided support to the HIV aims, indicators, and content meeting in Durban, South Africa to maximize future sharing and continued learning to strengthen HIV/PMTCT improvement work across the project. Ongoing gender support was provided to other field offices to collect and analyze sex-disaggregated and gender-sensitive indicators, identify gender-related gaps and issues affecting outcomes, and respond to those gaps. We continued to enhance the ASSIST Knowledge Portal with new content and features, including the launch of the Improvement Methods Toolkit. Usage of the portal continued to grow during this reporting period and there was an increase in ASSIST Facebook users.

Global technical leadership to serve as a conduit and catalyst for sharing, learning, and advancement in the field of improvement applied to health and social services. Major global technical leadership activities during the first two quarters included: convening a high-level Technical Advisory Group Meeting with a distinguished group of improvement science and health system experts to review ASSIST's strategies and accomplishments to date and provide recommendations for future USAID efforts to improve quality of care; presenting evidence for collaborative improvement and use of cost-effectiveness analysis to a select Institute of Medicine panel – the standing Committee to Support USAID's Engagement in Health Systems Strengthening; participation in a WHO expert meeting to develop a monitoring and evaluation framework for non-communicable diseases and mHealth; participation in an expert panel convened by the Institute of Medicine to recommend strategies for scaling up population-level health interventions in the United States; working with the UN Commission on Life Saving Commodities Newborn Resuscitation working group to incorporate improvement into their work; and participation in the meeting of the Survive & Thrive Global Development Alliance to discuss integration of improvement capacity building into country clinical training and implementation activities. In addition, USAID ASSIST staff and partners presented six webinars on improvement approaches and results and four Spanish-language webinars on newborn care.

Results (Oct 2014 – March 2015):

- Improvement in key indicators: As discussed in this report, ASSIST-supported programs demonstrated improved care and outcomes for a range of services, including antenatal and postnatal care, essential obstetric and newborn care, PMTCT, HIV care and treatment, TB-HIV case management, services for vulnerable children and their families, malaria, and NCD services.
- Research and evaluation studies: ASSIST currently has 25 research studies in planning or underway in 10 countries.
- Publications: Published 4 peer-reviewed articles; 5 case studies; 3 technical reports; 3 flyers and short reports; 4 videos to complement our written publications; 1 technical assistance guide; 22 annual reports; and launched the USAID ASSIST subscription to the *British Medical Journal* Improvement Reports program, which allows users to submit quality improvement project reports.
- Presentations: ASSIST staff made 23 oral presentations and presented 8 posters on ASSIST results and improvement methods at regional and international conferences, thereby sharing knowledge of lessons learned from the use of modern improvement approaches.

Challenges

While the work under ASSIST is proceeding, there remain serious funding issues, in particular the discrepancy between the timing of the funding and the work planning requirements. During the first two quarters of FY15, ASSIST received three different modifications with additional funding for continuing and new scopes of work, presenting a challenge in terms of planning and resourcing the work. This has consequences for the timing and speed by which project activities can be implemented. More serious consequences can happen if an activity goes into closedown mode and is then expected to ramp up. The staffing implications of such erratic timing of funding makes managing the work and paying due diligence to our country staff very difficult in view of the host country labor law requirements we also have to abide by. Moreover, the ASSIST Project and URC have been put in the risky financial position of forward-funding activities in order not to lose momentum of some mission- and core-funded activities and not have to re-start project activities from the beginning if and when funds are made available.

1. Field Support-funded Activities

AFRICA

BOTSWANA

Background

The United States Agency for International Development (USAID) Applying Science to Strengthen and Improve Systems (ASSIST) Project started working in Botswana in January 2013, building on planning activities conducted in 2012 through the USAID Health Care Improvement Project (HCI). ASSIST is supporting the Ministry of Health (MOH) in pursuing its national level goal of reducing maternal mortality from 160 to 80 per 100,000 live births (MDG5), setting a clear implementation schedule of quality improvement (QI) activities with explicit delegation of responsibilities, and aligning activities at all levels to meet the national level goal.

Institutionalization/Sustainability Strategy

The project was designed since its inception to be managed by the MOH with technical support from ASSIST. ASSIST supports the MOH-led National Maternal Mortality Reduction Initiative (MMRI) with technical assistance from a National Coordinator based at the MOH, an outside consultant with extensive QI experience who provides coaching and capacity building through monthly visits to different districts in the country, and a senior technical advisor based at the University Research Co., LLC (URC) headquarters. The MOH has appointed 11 midwife coordinators to support the coordination of QI activities in the 26 health districts in the country and to provide logistical support for the implementation of project activities.

ASSIST has recently begun the process of handing over technical activities and transitioning support for the initiative from the project to the MOH. Various processes have been, or are currently being, put into place to support institutionalization:

- Capacity building of a team pulled from the existing cadre of district coordinators to serve as national QI coaches for ongoing support to district coordinators and QI teams.
- Development of a change package of successfully proven changes that lead to improvement to facilitate scaling up improvement in facilities throughout the country.

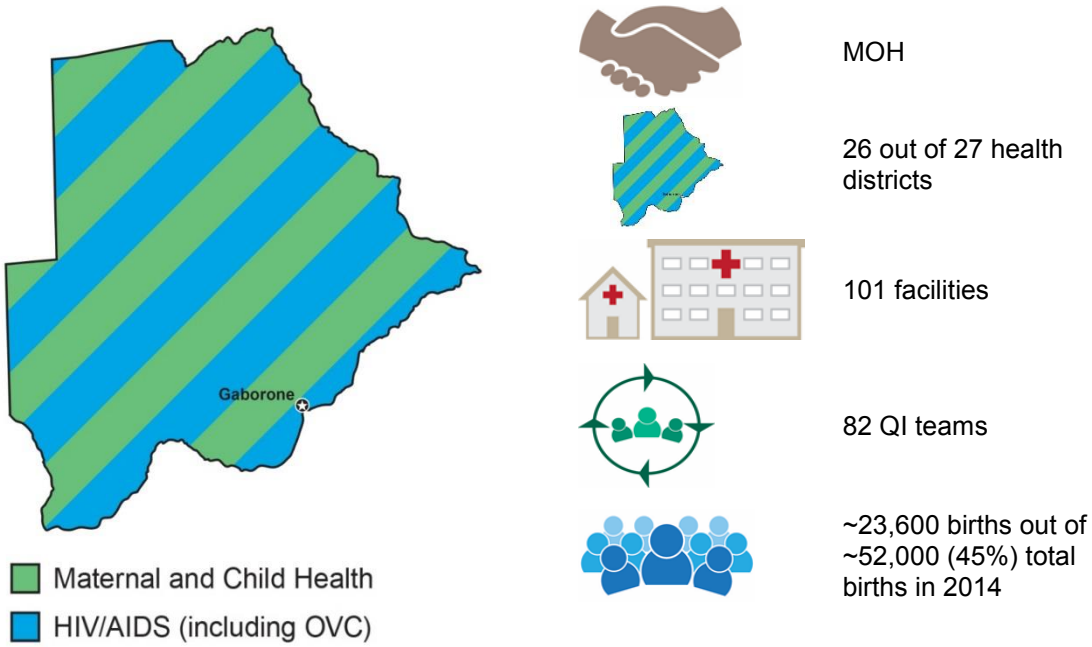
In the next quarter, a senior technical advisor from headquarters will conduct a training in Botswana to build the capacity of approximately 30 M&E officers at the MOH to continue monitoring of performance indicators through the MMRI M&E framework using the monitoring and reporting tools developed by the project. The MOH has expressed considerable satisfaction with the timely analysis and results provided by the tools and has showed interest in replicating the tools for use in other clinical areas in which the QI methodology will be introduced

ASSIST is supporting the district coordinators in the development of work plans that will guide the implementation of QI activities at the facility level. The work plan developed for each facility will provide district coordinators with a road map to monitor the performance and progress of each QI team in improving care.

To facilitate the continuation of the analysis of the Maternal Mortality Audits that ASSIST conducted, ASSIST has developed a data extraction tool to analyze qualitative data from the audits and will build capacity within the Maternal Mortality Unit to analyze and use this data. To facilitate data reporting and analysis of maternal complications, ASSIST has adapted an existing paper-based MOH monitoring tool (MH 3123). The tool was developed in Excel to facilitate more timely reporting through emails and reduce data entry errors. The tool will facilitate better analysis of routine data linking to a master database that pulls from other data sources. ASSIST has provided ongoing training for MOH personnel in data management and analysis and has been conducting consolidation and analysis in parallel with designated MOH personnel since the inception of the project. ASSIST has created a manual for MMRI data collection and data analysis to further knowledge transfer to the MOH.

ASSIST provided ongoing support to the MOH with timely and specific analyses to inform decision making and policy changes at high levels. Areas analyzed include: seasonal mortality spikes, staffing distributions at the facility level, distribution of home deliveries per district, referral patterns for obstetric emergencies and rates of PPH post C-section.

Scale of USAID ASSIST's Work in Botswana



Program Overview

What are we trying to accomplish?	At what scale?
1. National Maternal Mortality Reduction Initiative (MMRI)	
• Reduce maternal mortality through implementation of evidence-based, high-impact interventions • Contribute to improving maternal outcomes of human immunodeficiency virus (HIV) + women through improving maternity care and PMTCT for HIV+ women and their newborns	• Districts: 26 out of 27 health districts • Facilities in selected districts: 2 referral hospitals, 22 district and primary hospitals, and 77 clinics with maternity services. 77% of maternity coverage (78 QI teams in 101 facilities)

Improvement Activity

Accomplishments and Results by Activity (October 2014 – March 2015)

Activity 1. National Maternal Mortality Reduction Initiative (MMRI)

Overview:

The focus of the MMRI-related QI activities are implementation of evidence-based, high-impact interventions. The top three causes of maternal death identified in Botswana in 2012 were severe pre-eclampsia/eclampsia, post-partum hemorrhage (PPH) and post-abortion complications (MOH Maternal Mortality Report 2007-2011). By targeting these three major causes of mortality, we expect to see a

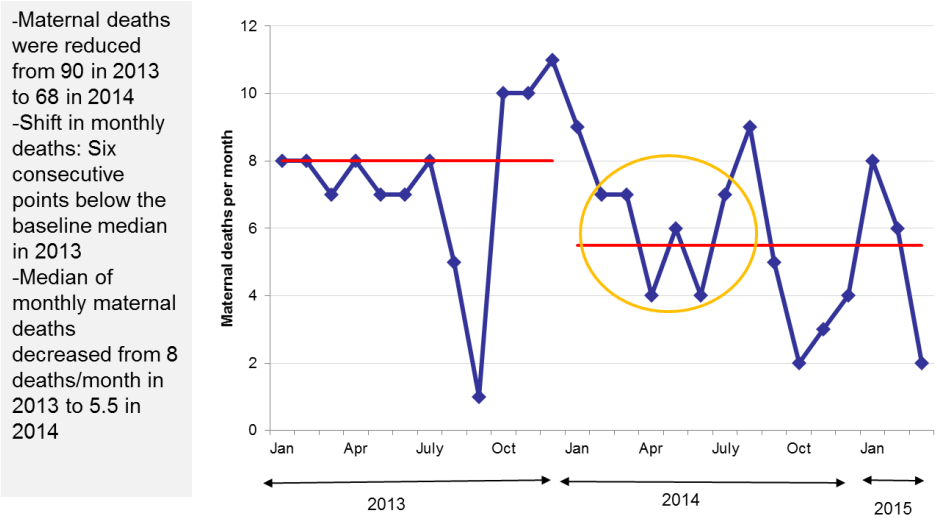
measurable reduction in the maternal mortality in the country. High impact interventions include: immediate administration of magnesium sulfate in patients with severe pre-eclampsia/eclampsia, promotion of monitoring fourth stage of labor to identify early onset of complications that require immediate intervention, active management of the third stage of labor (AMTSL), and the immediate uterine evacuation in cases of complicated (septic) incomplete abortion.

The work is being implemented in almost all the facilities providing maternity services in Botswana. At present, the MMRI is focusing on services provided during labor and in future stages will expand to incorporate antenatal services.

Accomplishments and Results:

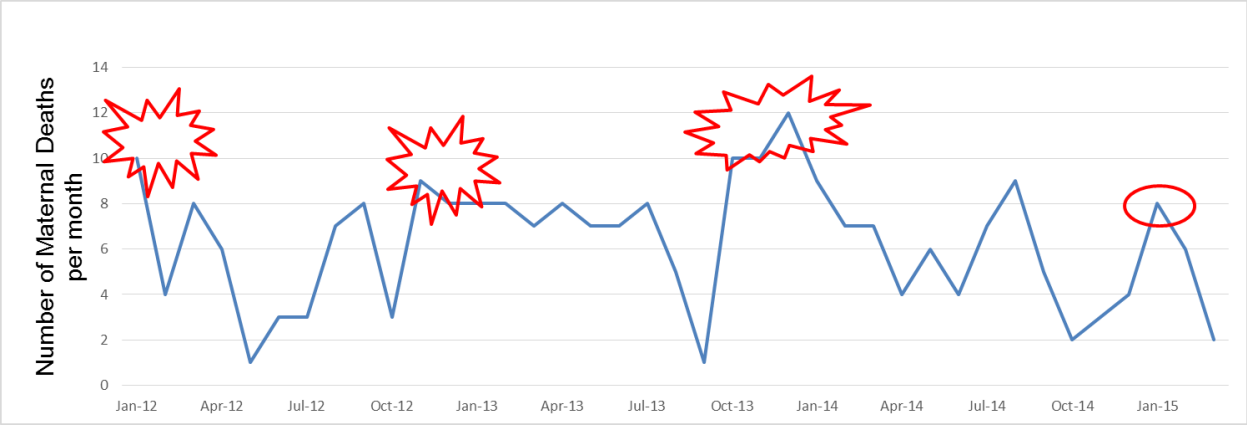
- **Improvement in reduction of maternal mortality:** The number of maternal deaths reduced from 90 deaths in 2013 to 68 deaths in 2014**. Figure 1** depicts the number of maternal death per month in 2013 and 2014 demonstrates six consecutive points below the median of eight maternal deaths/month in 2013, which indicates improvement in the reduction of maternal mortality. The median in 2014 reduced to 5.5 deaths/month compared to eight deaths/month in 2013.

Figure 1. Botswana: Maternal deaths per month, all death nationwide (Jan 2013 – Dec 2014)



- **Reduction of the seasonal "mortality peak**". The mortality peak during the holiday season was averted this year due to advocacy carried out by the project to improve awareness and engage hospital management in planning for sufficient personnel to provide services during the holidays. While successful, this effort was complicated by the decision by the Department of Clinical Services in December 2014 of a massive transfer of midwives, totaling 759 nationwide, which affected personnel working in clinics and hospitals across the country. Advocacy was conducted to delay the transfers and to encourage their implementation in a gradual manner to allow for adjustment in the facilities and in the QI Teams. The transfers were delayed to the month of January-February 2015, but were implemented all at once. The increase in maternal mortality in January (8 deaths) and February (6 deaths) could be attributed in part to the effect of the transfers (**Figure 2**).

Figure 2. Botswana: Seasonal distribution of maternal deaths (Jan 2012 – Jan 2015)



- **Conducted ongoing technical/clinical advice in management of obstetric emergencies** (Oct 2014 – March 2015). Poor clinical competence of health personnel and inconsistent compliance with protocols is playing a major role in the volume of maternal complications being seen in Botswana, as has been shown in the maternal mortality audits and periodic visits conducted by the MMRI National Coordinator to the facilities.

  Because of ongoing QI activities, facilities have become increasingly aware of the importance of timely identification and management of obstetric complications. This awareness has resulted in an increased demand for clinical guidance for the management of obstetric emergencies. ASSIST, through the support of the MMRI National Coordinator, has been providing consistent and ongoing assistance to these facilities to help troubleshoot complicated cases, improve the procurement of essential commodities vital to the provision of emergency obstetric care, and coordinate emergency referrals.

  While the ongoing technical assistance and coordination provided by ASSIST in this capacity has helped to address complicated obstetric emergencies and avert maternal deaths, this approach is considered temporary and is not a sustainable strategy in the long term.
- **ASSIST is working with the MOH to create a national call center for obstetric emergencies** that will be manned by specialists trained to respond to the need for clinical advice in emergency situations as well as to coordinate the referral of obstetric emergencies to facilities with the capacity to manage the patient appropriately, thus reducing the incidence of multiple referrals before treatment. In addition to the establishment of such a center, the MOH will need to focus on strategies to improve the knowledge and clinical skills of health professionals.
- **Provided ongoing support to the QI strategy being implemented in the facilities** (Oct 2014 – March 2015). MMRI district coordinators (previously coached by ASSIST) continue to provide regular and ongoing support to QI teams at the facility level. The visits include a review of the data collected by the teams, coaching in problem identification and analysis, and support with running PDSA cycles to test changes in their chosen areas of improvement.
- **Coaching support provided by an external QI specialist** (Oct 2014 – March 2015). An ASSIST consultant made two visits to Botswana to provide a seven days of intensive coaching support to three of the district coordinators in the districts of Ngami, Palapye and Tutume. These visits covered: Preparing for QI meetings with a clear agenda and objectives; working systematically through priority topics; testing change ideas until improvement has been secured; increasing the pace of the QI work; and sustaining improvements. In addition, in December 2014, the consultant provided a two-day QI training program to five midwife district coordinators in Gabarone.
- **ASSIST and MOH conducted a third QI learning/sharing workshop, Kansane** (Feb 22-28, 2015). Participants included MMRI district coordinators, MOH officers (Deputy Permanent Secretary, Director of Sexual and Reproductive Health Department, Director of Maternal Services) and the ASSIST team. The workshop provided a forum for QI coordinators to share progress on their improvement work and discuss improvement strategies and barriers to implementation. Participants reviewed the importance of utilizing Plan-Do-Study-Act (PDSA) cycles and were coached to review

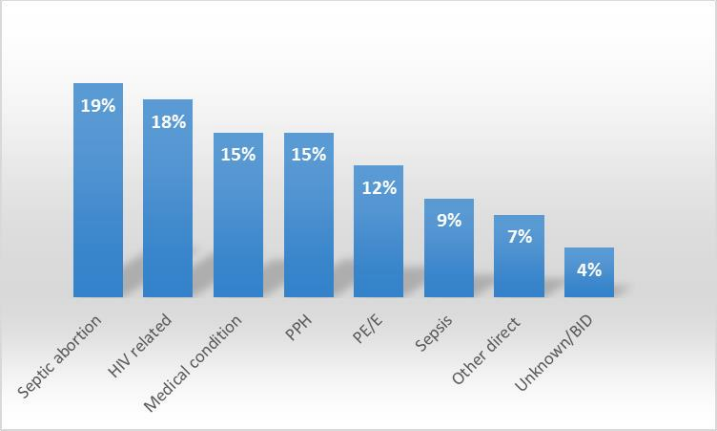
data reported through the MMRI monitoring and evaluation (M&E) system. Performance results were shared and workshops were conducted to analyze factors leading to maternal deaths in each facility as per the maternal mortality audits conducted. Coordinators worked on developing a work plan to support QI teams in moving forward with QI activities.

- **Daily participation in the morning clinical rounds at the National Referral Hospital Princess Marina**. ASSIST, through the support of the MMRI National Coordinator, has been attending the daily morning rounds of the OB-GYN department at Princess Marina Hospital in Gaborone, the country's main referral hospital. During the rounds, the National Coordinator has responded to both clinical and quality issues and instituted considerable changes to improve process malfunctions in the ward. For example, the issue of overcrowding in the ward was discussed during the morning rounds. The hospital reported up that often up to 20+ patients wait in a single day to have an elective C-section and occupy beds usually held for emergencies. ASSIST worked with the management of the hospital and coordinated with other referral hospitals to absorb the backlog in elective C-sections. This is expected not only to improve the overcrowding of patients in the hallways but also to improve infection control and postoperative monitoring and bring about a reduction in postoperative sepsis.
- **Supported Sexual and Reproductive Health Department of the MOH with data analysis** (Oct 2014 – March 2015, ongoing)**.** To improve facility compliance with routine monthly reporting to the MOH on obstetric complications, in February 2015 ASSIST adapted the existing paper tool MH3123 to an excel format that will allow for electronic reporting via email and will facilitate timely analysis and consolidation of records in a master database. Currently, the routine reporting to the MOH is inconsistent and infrequent. The burden of transferring data from paper-based data collection tools to electronic formats for analysis further delays timely analysis. ASSIST's analysis of the relevant data has informed MOH decisions on the necessary staff rate per delivery in maternity facilities that will lead to a more adequate distribution of staff based on the demand for services and complexity of pathologies treated at each facility. The project has presented to the MOH a preliminary analysis of referral patterns during obstetric emergencies that subsequently resulted in a maternal death, as well as provided quarterly M&E reports and annual project reports.

  During the reporting period, the MOH district coordinators conducted weekly monitoring and reporting on the availability of essential drugs and commodities in the facilities and reported findings to the MMRI Coordinator so that he could inform the MOH and the Central Medical Stores (CMS). As a result of improved monitoring and reporting of stock-outs, the MOH and CMS are taking immediate action to address the availability of essential drugs and commodities. ASSIST has been working directly with facilities in which stock-outs have been reported to develop a contingency plan to make those drugs available, coordinate with the facility pharmacy to improve procurement, and in some cases arranging for drugs from one facility to be sent immediately to the facility with a stock-out to make treatment available to patients. The MMRI Coordinator meets weekly with the CMS to compare data from their inventories and the data on drug availability collected by the MMRI district coordinators and prioritize those facilities with stock-outs or with minimum availability of essential drugs. ASSIST has also been working closely with the National Blood Transfusion Services to improve the availability of blood at the facility level.
- **ASSIST conducted weekly monitoring of near misses and immediate audit of near misses** (Oct 2014-March 2015, ongoing)**.** Through this process as well as a review of the national maternal mortality audits, the project has developed a more nuanced understanding of the causes of near misses and maternal deaths, allowing for more targeted follow-up of potential complications and the development of strategies to address ongoing process failures. For example, a review of the maternal mortality audits in 2014 revealed that the majority of cases of PPH in Botswana are now not due to uterine atony but to poor clinical practices during and after C-sections. As a result, district coordinators have been asked to report all incidences of PPH to the National Coordinator on a weekly basis with specific details on the cause of bleeding, the estimated quantity of bleeding, how the patient was managed, and the fate of the patient. The National Coordinators has subsequently been responding to reports of inadequate management of PPH by paying targeted visits to specific facilities for immediate follow-up on clinical and process issues.
- **As a result of the audits that have been conducted, ASSIST developed a surgical checklist to improve compliance with best practices and allow for better management of surgical patients.**

- **ASSIST conducted a preliminary analysis of the maternal mortality audits for 2014** (Jan – Feb 2015). The analysis included 52 maternal audits conducted from a total of 68 maternal deaths in 2014. We will complete a final analysis once the remaining 16 maternal deaths audit reports are completed. With this timely analysis of maternal death audits we are providing evidence of gaps to support decision making at higher levels, as this is the first time that the country has a timely analysis of causes and contributors to maternal deaths in the facilities. Some of the current more relevant findings from this analysis are presented below:
    - **HIV status.** HIV-positive status was found in 51% of the deaths, HIV-negative in 30%, and unknown in 19% of deaths. HIV-related complications (acquired immunodeficiency syndrome (AIDS)) was responsible for 15% of all maternal deaths.
    - **Clinical causes of death.** A key finding of the analysis was that sepsis and septic abortions were responsible for the majority (28%) of deaths due to direct causes (63%), followed by PPH (15%), pre-eclampsia/eclampsia (PE/E) (12%) and other direct obstetric complications (7%). Indirect causes of maternal deaths were responsible for 37% of the cases (**Figure 3**).

Figure 3. Botswana: Causes of maternal deaths (2014)

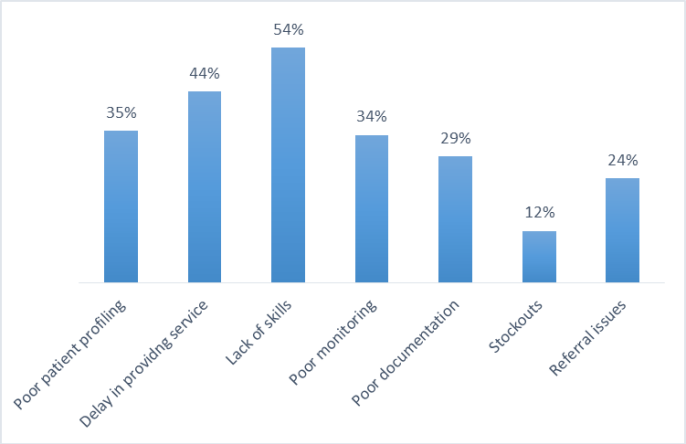


Source: Maternal Death Audits, 2014

- **Contributory causes of deaths.** The maternal audit committees divided the contributory causes of deaths (non-clinical) into three groups (**Figure 4**):

1. **Patient factors**: Patient factors played a role in 32 (47%) maternal deaths. Among the common factors were: delay of seeking help (43%), followed by late antenatal care (ANC) visit attendance (20%) or non ANC attendance (18%).
2. **Maternal clinic factors**: Clinical factors were identified in 26 (38%) maternal deaths. The most frequent was failure to investigate or recognize a disease (27%), followed by failure to initiate treatment or provision of the wrong treatment for the condition (22%), and poor patient profiling (15%).
3. **Hospital factors**: Hospitals factors were identified in the following categories:
    - Poor patient profiling and failure to recognize a patient with a clinical emergency in 35% of maternal deaths.
    - Delay in providing service was identified in 44% of maternal deaths.
    - Lack of skills was reported to be present in 54% of maternal deaths.
    - Poor monitoring was reported in 34% of maternal deaths.
    - Poor documentation was reported in 29% of cases.
    - Stock-outs and lack of availability/disrepair of lab machines were reported in 12% of maternal death cases.

Figure 4. Botswana: Maternal mortality audits – Health system contributory factors to maternal deaths (2014)

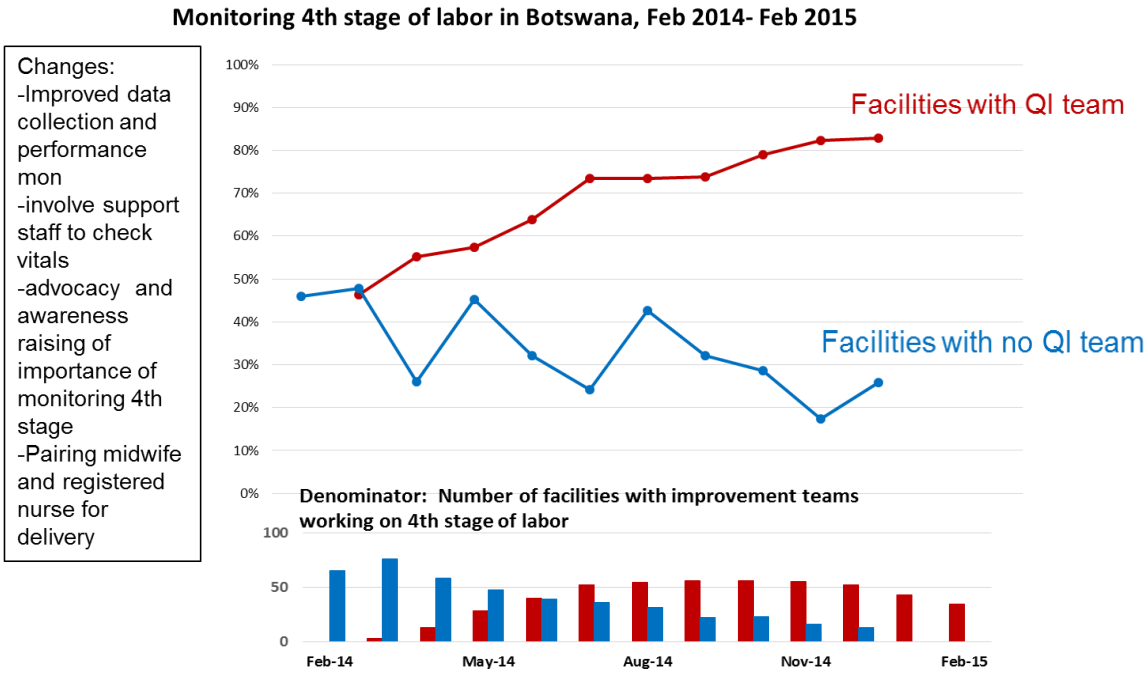


Source: Maternal Death Audits, 2014

Problems with referrals of emergencies were reported in 24% of maternal deaths. Of the 68 maternal deaths, 34 (50%) were referred to another facility, and 14 (21%) were referred to two facilities. Most referrals were directed to the two referral hospitals PHM and NRH but also to L11MH and DRMH. Three patients died in transit due to delayed and poorly coordinated referral and failure to stabilize the patient before sending to the referral hospital.

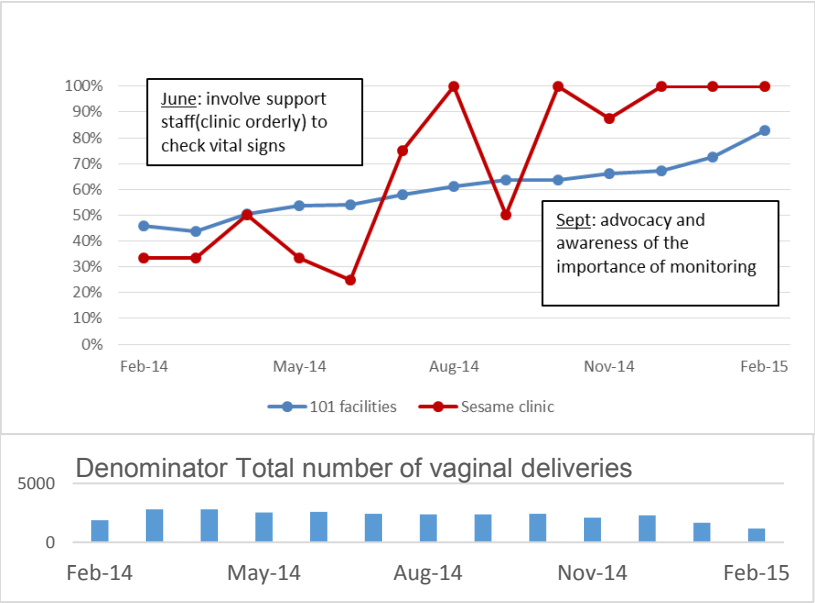
- **An analysis of key performance indicators was conducted by disaggregating the performance achieved by the facilities with QI teams working in the topic area compared to facilities reporting without a QI team.** Performance by QI teams working on improving monitoring of fourth stage of labor increased from a baseline of 46% in February 2014 to 83% in December 2015. Comparatively, performance in facilities without a QI team decreased from a baseline of 46% in February to 26% in December 2015 (**Figure 5**).

Figure 5. Botswana: Compliance with post-partum monitoring (4th stage of labor) in facilities with and without a QI team (Feb 2014 – Feb 2015)



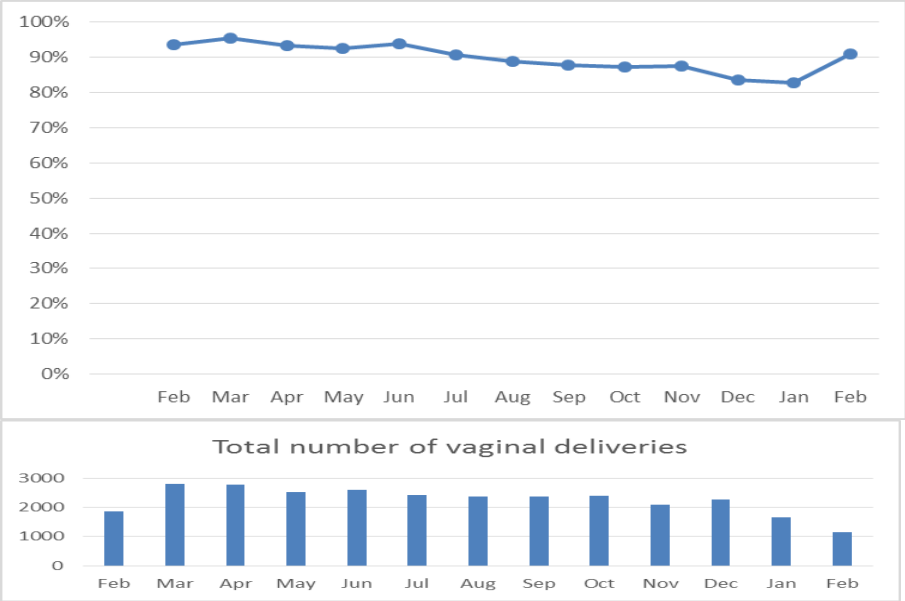
- **Figure 6 shows a comparison of the improved performance in monitoring the fourth stage of labor achieved by all facilities from 46% in February 2014 to 83% in February 2015.** Facilities with a QI team working in the topic area are the drivers of this improvement. The graph highlights the work of the Sesame Clinic in the District of Selibe Pikwe. The clinic is located in a rural area and is staffed only with nurses and midwives. Performance during the baseline was below the national median due to a lack of adequate numbers of staff to perform regular post-partum monitoring. After engaging auxiliary staff (orderlies) to support this function, they were able to reach and maintain 100% compliance.

Figure 6. Botswana: Percentage of vaginal deliveries monitored during the 4th stage of labor per protocol, 101 sites (Feb 2014 – Feb 2015)



- **AMTSL**. Compliance with the provision of oxytocin after delivery is high in Botswana (approximately 90%) (**Figure 7**).

Figure 7. Botswana: Percentage of vaginal deliveries that received AMTSL within the first minute of delivery, 101 sites (Feb 2014 – Feb 2015)



- **Management of severe pre-eclampsia/eclampsia.** We observed a general improvement in the performance of this indicator from a baseline of 21% in February 2014 to 78% in February 2015. Nevertheless, we need to be cautious with the interpretation of PE/E data, as we have observed a dramatic reduction in the number of cases of severe PE/E reported since August 2014. The cause of this reduction is unknown and will require further investigation of the data being reported to the MOH. **Figure 8** highlights the performance of Botswana's largest referral hospital, Princess Marina Hospital (PMH). By involving specialists earlier to assess patients, PMH was able to achieve an improvement in immediate treatment of severe pre-eclampsia (PE) per protocol.
- **Management of incomplete abortion with prompt uterine evacuation.** Performance in management of incomplete abortions within 2 hours of diagnosis improved from 50% in February 2014 to 74% in February 2015 in the 26 facilities reporting management of abortions (data on this indicator is only collected in hospitals, as clinics in Botswana do not perform evacuations).
    - **Figure 8** compares the performance of Athlone Hospital in Lobatse District with all reporting facilities. Athlone Hospital, with 7-17 incomplete abortions/month, reported 35% compliance with protocol at baseline, below the national average. After the introduction of a change idea of skipping the step of sending the patient to the gynecology ward before admission to the theater for the evacuation, a marked improvement was seen. Patients with incomplete abortions are now sent immediately to theater from the triage section of the emergency department and the operating physician is immediately notified. The new change idea presented difficulties when the theater was being used and the patient had to wait resulting in delay in uterine evacuation. A second change idea was introduced to coordinate the evacuation in an alternative minor theater when the gyn. theater was not available and resulted in 100% of cases of incomplete abortion being evacuated within two hours in the last two months of reported data (**Figure 9**).

Figure 8. Botswana: Women with severe pre-eclampsia managed with Magnesium sulfate (MgSO4) and early delivery, 26 sites (Feb 2014 – Feb 2015)

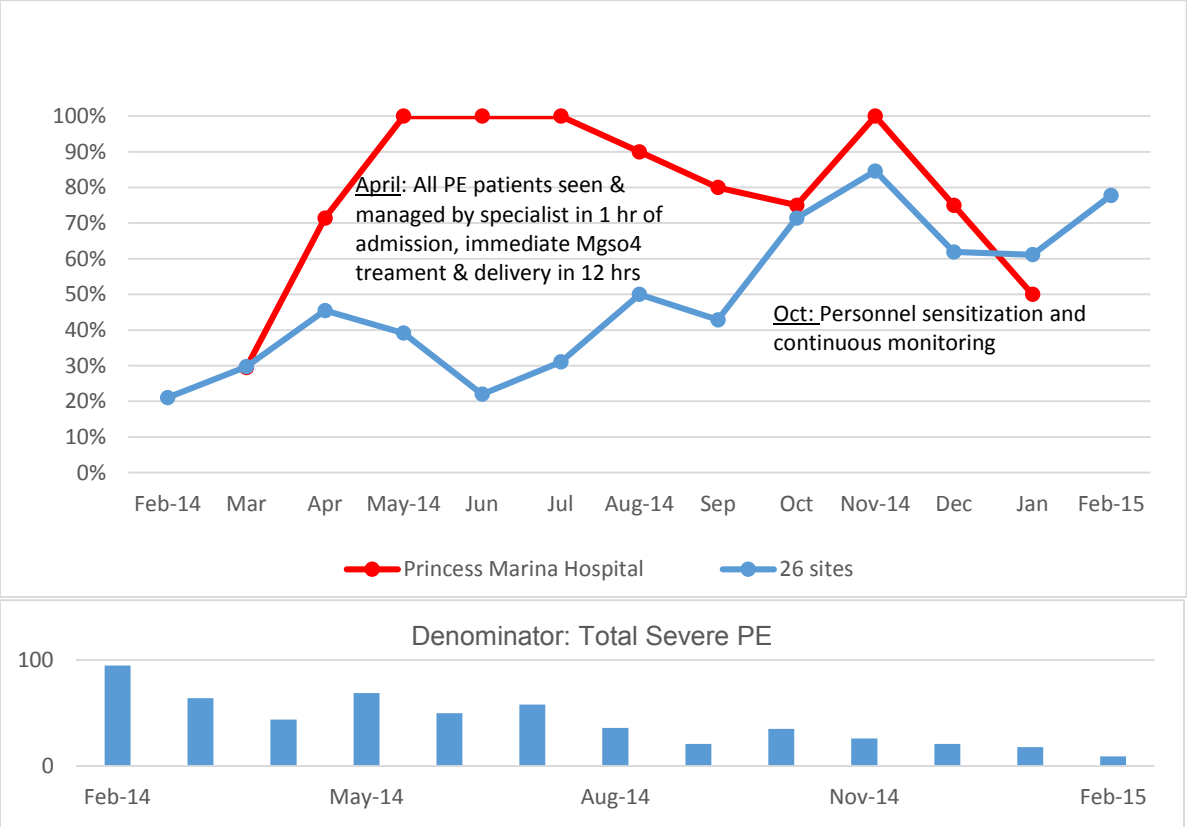
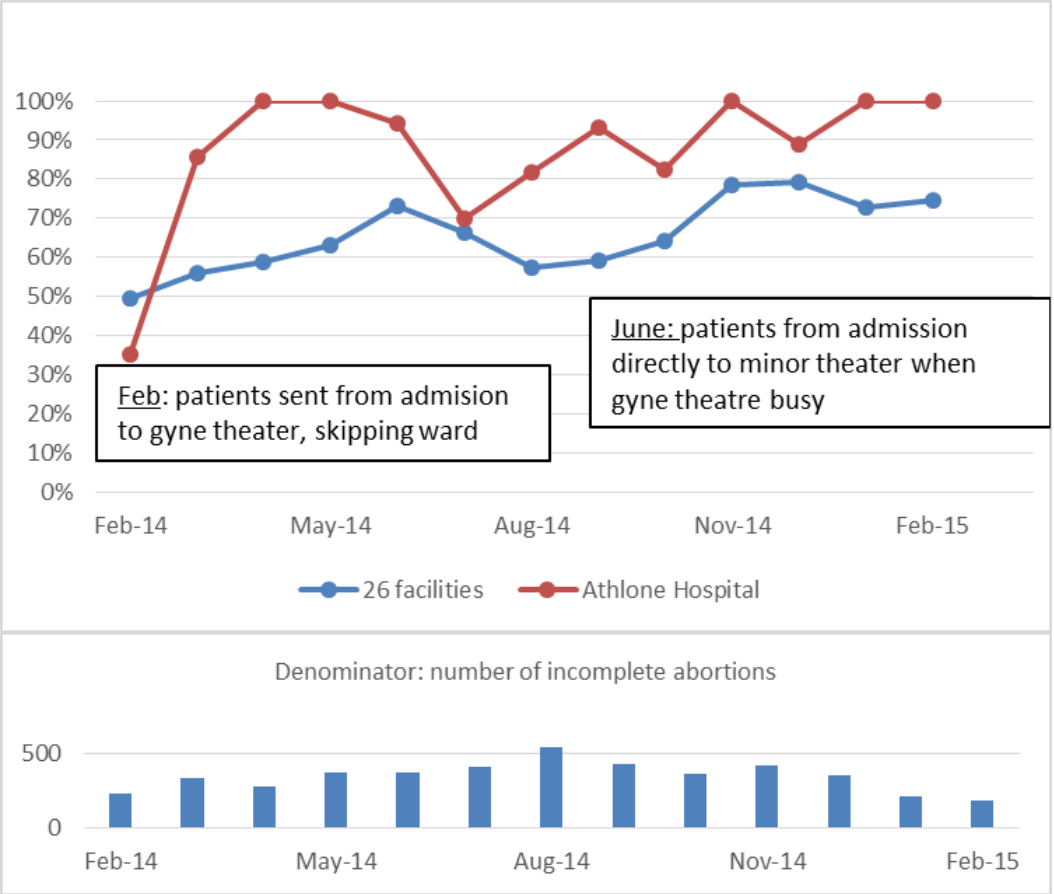


Figure 9. Botswana: Percentage of women with incomplete abortion that receive uterine evacuation in two hours, 26 sites (Jan 2014 – Feb 2015)



Improvement in Key Indicators

Activity	Indicators	Baseline (Feb 2014)	Last value (Feb 2015)
National Maternal Mortality Reduction Initiative	% of delivering women administered oxytocin in the first minute after delivery	82% (67 facilities, 2031 deliveries)	91% (54 facilities, 31 QI teams working on AMTSL)
	% of women monitored during the 4th stage labor per protocol	39% (67 facilities, 2031 deliveries)	83% (54 facilities, 34 QI teams working on 4th stage)
	% of women in ANC with severe pre-eclampsia managed per protocol	6% (68 facilities, 72 PE cases during ANC)	*
	% of women in labor with severe PE managed per protocol	18% (69 facilities reporting, 97 PE cases in labor)	*(61%) (4 QI teams working on this topic)
	% of incomplete abortions managed per protocol	45% (20 facilities reporting abortions)	74% (54 facilities reporting, 8 QI teams working on incomplete abortion

* Since August 2014 there was a significant reduction on the number of cases of severe PE reported. The high percentage of compliance with management of PE per protocol may be artificially inflated due to underreporting of PE overall. We will compare with data from the MOH once available before reporting on this indicator.

Challenges and Remedies

QI team performance has been affected in several districts due to ongoing health problems faced by some of the district coordinators that kept them from working for several months. Other coordinators showed poor compliance with coaching visits and support to QI teams. As a result, we did not receive data from facilities in five districts (three coordinators' catchment areas) during July, August and September 2014. QI team activity was minimal/non-existent. After support and performance management, two coordinators were replaced towards the end of 2014.

Due to the massive transfer of 759 midwives throughout the country from December 2014 through February 2015, many QI teams have been disrupted. The transfer will also impact the project's ability to maintain regular data collection and ensure the quality of the data and M&E activities. District coordinators are now being required to train new focal point persons in the teams for data collection. We expect a slowdown in QI activities as well as an increase in the number of errors in data reporting in the following months as a result of these transfers. ASSIST is trying to adjust to this decision by training new personnel in data collection and reforming the QI Teams in the facilities. In addition, a closer supervision of data reported will be done at the facilities by the coordinators and at the central level to identify data collection/reporting errors.

Knowledge Management Products and Activities

The project developed and pilot tested two capture tools to assist the coordinators in documenting the essential information arising from a QI team meeting, using this information to prepare carefully for subsequent team meetings and providing a reminder of the basic agenda for a meeting and what information they should be documenting during/immediately afterward.

Planned Activities Next Quarter: April - June 2015

ASSIST has begun the process of handing activities to the MOH. At this moment we have initiated joint planning with the MOH to ensure a smooth transition that is expected to be complete by the end of FY15.

- Two main activities are being planned to facilitate the MOH takeover of QI activities: coaching a select group of district coordinators to serve as expert coaches to other district coordinators in the country in order to continue regular support to QI teams and the development of a change package of ideas that proved successful in improving key indicators in the reduction of maternal mortality.
- Establish an emergency advisory and support call center for obstetric emergencies and coordination of referrals. The integration of these services with the ambulance call center being developed by the Clinical Services Department of the MOH is being considered.
- Train MOH M&E personnel for handover data monitoring and analysis.
- Develop improvement work plans to support district coordinators in planning the introduction of new areas of improvement by the QI teams.
- Focus on documentation of project activities conducted during the two years that ASSIST supported the MMRI.

BURUNDI

Background

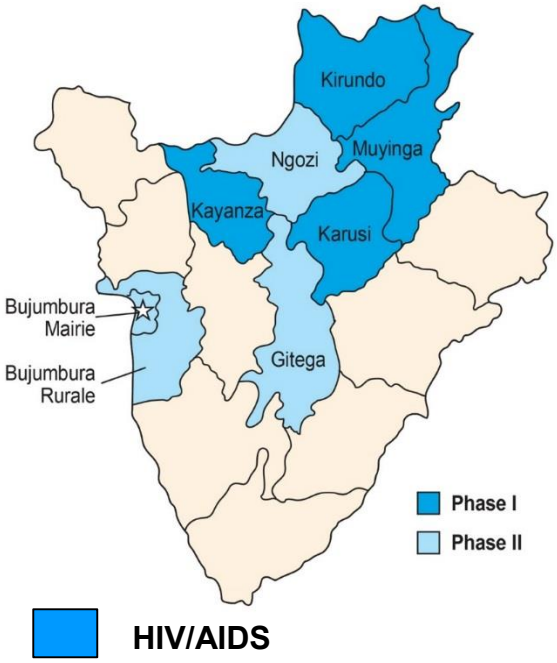
With funding support from the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), the USAID ASSIST Project began work in Burundi in January 2013, building on a prevention of mother-to-child transmission of HIV (PMTCT) service delivery assessment and human performance technology assessment conducted in 2012 under HCI. The project is working with the MOH, the Government of Burundi, and other USAID implementing partners to improve the uptake and quality of PMTCT services for mothers, their partners, and their infants, and to improve retention of mothers and infants along the PMTCT cascade. In addition, ASSIST is working in close collaboration with FHI 360, Pathfinder International, Management Sciences for Health (Supply Chain Management Systems), MEASURE Evaluation, Abt Associates, Engender Health, and local non-governmental organizations to address these health care gaps. In FY15, ASSIST Burundi is supporting improvement work at sites in eight provinces.

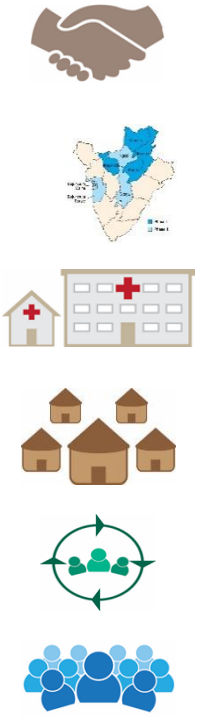
ASSIST is working closely with all levels of the health system, from the peripheral level through health districts and provinces level to the central level. This keeps a close link between the different levels.

ASSIST is actively continuing to engage national policy makers, as well as provincial and district health managers in all phases on design and implementation of work, especially in collection, synthesis, and validation of the best practices as well as in change package elaboration/validation and dissemination. District and Provincial Health Management teams are regularly trained on QI. Thus, district coaches and facility QI teams implement the improvement work.

Furthermore, with other PEPFAR implementer partners, ASSIST is contributing to national health systems strengthening (HSS) efforts through creating improvement capacity and by linking different complementary departments in this effort, including the National Health Information System (NHIS), the Human Resources Department (HRD), clinical/technical departments, and the planning/policy department. We expect that this synergistic approach will allow an opportunity to design a National Quality Improvement Strategy.

Scale of USAID ASSIST's Work in Burundi





MOH, 6 IPs

8 out of 17 provinces

379 facilities

24 communities

94 QI teams

5,608,308 out of 10,557,259 inhabitants

Program Overview

What are we trying to accomplish?	At what scale?
1. Implement a PMTCT improvement intervention in eight provinces	
• Improve uptake of PMTCT services (by mothers, infants, and partners) • Improve retention of mothers and infants along the PMTCT cascade • Improve quality of PMTCT services	• Provinces: 8 out of 17 provinces • Districts: 25 out of 25 health districts in the 8 provinces • Facilities in selected districts: 100% (379 out of 379 PMTCT sites in the 25 health districts • QI teams: 70 facility teams • Catchment population facilities/communities served: 5,608,308 out of 10,557,259 inhabitants
• Strengthen community system to improve the performance of CHWs to provide quality of PMTCT services at the community level	• Communities: 24 sub-collines surrounding 6 out of 15; and peripheral facilities in Giteranyi District • QI teams: 24 community teams • Catchment population communities served in the target health district: 123,748 out of 292,967 inhabitants

Improvement Activity

Accomplishments and Results by Activity (October 2014 – March 2015)

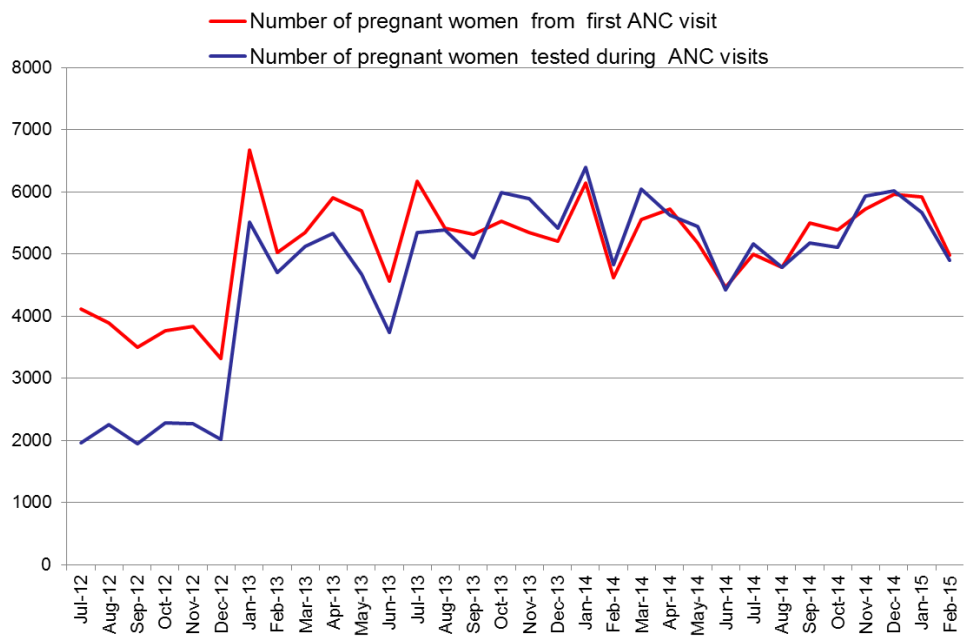
Activity 1. Implement a PMTCT improvement intervention in eight provinces

Overview: Although the current National Plan for Health Development (PNDS II) of Burundi has explicitly highlighted quality needs, it is lacking a continuous, methodological, and structured approach. ASSIST is introducing a modern QI approach and improvement science, both to the technical content and to the managerial practices at all levels of the system. Over time, ASSIST aims to have QI as an integrated part of the system. For the past two years, ASSIST has supported the MOH, district, and regional staff, including providers and managers, to improve quality of PMTCT services, consistent with the reaching the national targets and the PMTCT National Plan. To successfully integrate QI into the system, ASSIST will have to develop a clear policy on improvement. ASSIST is also supporting the MOH to introduce a Human Resources Performance Technology as an additional opportunity to enhance providers' productivity, motivation, and performance. In addition to the clinical collaborative approach, ASSIST is initiating community health improvement by creating community QI teams to improve the performance of community health workers (CHWs) in supporting PMTCT services at the community level in one pilot district, Giteranyi.

Accomplishments and Results:

- **Conducted monthly coaching visits to sites in four provinces (Kayanza, Kirundo, Muyinga and Karusi)** (Oct – March 2015)**.** To continue to improve PMTCT services and maintain or increase site-level performance, ASSIST continued to provide technical support to district and provincial coaches through monthly coaching visits. District coaches conducted coaching visits in all the 70 sites, and coaching visits in mixed teams (district coaches and National AIDS Control Program (PNLS) or ASSIST technical staff) were conducted in 26 out of 70 sites. The main purpose of the coaching visits included checking the quality of data previously submitted, collecting change ideas tested by each site, as well as the follow-up of improvement changes obtained per each change idea tested. As part of the coaching visit, ASSIST staff provided explanations to facility QI team members about how to conduct PDSA cycles to test change ideas and the importance of data collection and analysis to help ensure that the changes tested are resulting in quality improvement. **Figures 10-11** display key results. Please note that incentives given at churches vary per health facility and can include hygienic products, mosquito nets, ambulance benefits, etc. (see changes tested box).

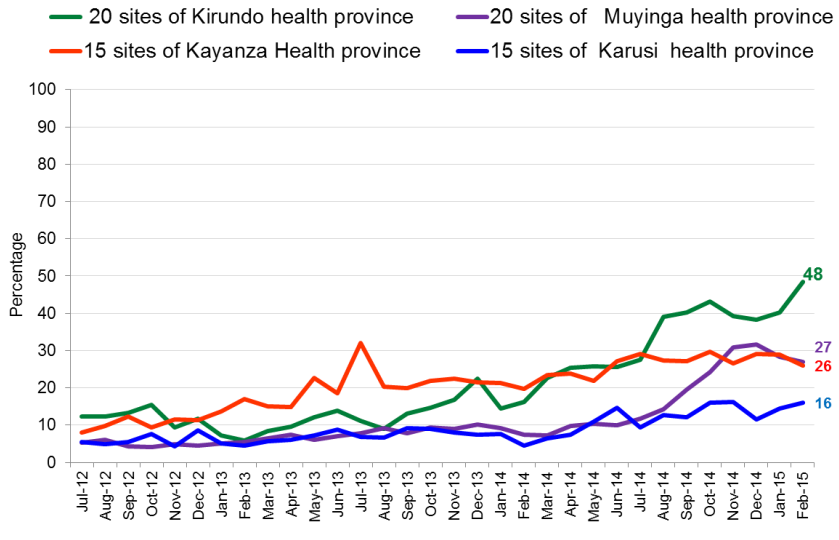
Figure 10. Burundi: Closing gap between pregnant women attending first ANC visit and those tested during ANC visits, 12 districts, 4 provinces (July 2012 – Feb 2015)



Changes tested:

1. HIV counseling and testing (HCT) conducted in ANC room and result given in the same room on the same day.
2. Increase in number of health education sessions in health facility per week on advantages of HCT for pregnant women
3. CHW sensitizes the community on advantages of early ANC and importance of HCT for pregnant women.
4. Announcement made in the church that any pregnant woman who attends 1st ANC visit before 14 weeks will receive an incentive.

Figure 11. Burundi: Increasing early first ANC visits in Karusi, Kayanza, Kirundo and Muyinga provinces (July 2012 – Feb 2015)



Changes tested:

1. Increase in number of health education sessions in health facility per week on advantages of early ANC.
2. CHW sensitizes community on advantages of early ANC and importance of HCT for pregnant women.
3. Announcement made in church that pregnant women who attend 1st ANC before 14 weeks will receive an incentive.

- **A few factors contribute to the performance of Kirundo Province displayed in Figure 11.** First, Kirundo started testing those changes listed before the other provinces. Also, Kirundo is one of the pilot provinces in the country which initiated the community health system improvement through creation of community health associations per each health facility. The members include CHWs, TBAs, chiefs of sub-Collins, and other opinion leaders identified in the community, and those community health associations are working under the supervision of the health facility.
- **Finalized elaboration of change package from phase 1 and its dissemination strategies in the new sites of the 8 provinces** (Oct – Dec 2014). ASSIST staff in Burundi, with the technical assistance of the regional office and in close collaboration with the MOH through the HIV/AIDS National Program, developed basic documents to extend the project into the new sites in eight

provinces, such as the final change package from phase 1 and its dissemination strategies. Those documents have been elaborated in order to facilitate and guide the dissemination of change package from first phase of collaborative approach for improving quality of PMTCT services focused on HIV counseling and testing and documentation.

- **Organized a PMTCT experts' meeting for validation of final change package of phase 1 and dissemination strategies** (Gitega City, Dec 10-12, 2014)**.** One purpose of this meeting was to explain to national PMTCT experts the content of the final change package of phase 1, and to offer the opportunity to make any necessary amendments. In addition, it was an occasion for participants to analyze if each change is in line with National Health Policy or HIV National Guideline. Fifty-seven participants took part in this meeting, including PMTCT experts coming from various departments of the MOH, USAID's partners, local non-governmental organization (NGO) representatives, and district and provincial health managers.
- **Conducted an orientation meeting for extension agents on change package of phase 1 and its dissemination strategies, Ngozi Province** (March 5-6, 2015). To accelerate the spreading of change package phase 1 in new sites of the previous provinces, ASSIST Burundi, along with the National HIV/AIDS Program, identified 29 extension agents who will be responsible of facilitating implementation of the change package in new sites. These extension agents participated in the orientation meeting in order to obtain the same comprehension of the contents of the package of change and its strategies of dissemination. The meeting was organized by PNLS and ASSIST Burundi with technical assistance from the ASSIST Francophone Regional Office.
- **Conducted an orientation meeting for new coaches and managers from four new provinces, Bujumbura, Bujumbura Urban, Gitega, and Ngozi** (Ngozi city, March 9-12, 2015). During FY15, ASSIST will cover four new PEPFAR provinces in Burundi: Bujumbura, Bujumbura Urban, Gitega and Ngozi. In order to prepare the scale-up of QI activities based on the final change package of phase 1, PNLS and ASSIST, with technical assistance of Regional Office, organized an orientation meeting for new coaches and managers from four new provinces. The purpose of this orientation meeting was to give them more information about QI activities in general, share what ASSIST is doing in Burundi and provide the opportunity for discussion on what will be the responsibilities of each level in order to conduct this scaling up very well. Sixty new coaches and managers took part in this orientation meeting.
- **Conducted coaching visits of the community QI teams in the pilot project in Giteranyi Health district** (Oct 2014 – March 2015). During this reporting period, the community coaches continued coaching visits to all the 24 community QI teams formed in 24 sub-Collins in Giteranyi Health District. ASSIST staff continued to provide technical support for coaching visits in mixed teams (community coaches "TPS" and MOH or ASSIST technical staff), which were carried out to 11 community teams. The coaching visits were focused on the data collection tools, the process to be followed for identifying change ideas, how to guide change idea testing, and to explain the advantage of providing linkages between health facility and community levels.

Improvement in Key Indicators

Activity	Indicators	Baseline (July 2012)	Last value (Feb 2015)
Implementing a PMTCT improvement intervention in eight provinces	Proportion of pregnant women tested during ANC visits	47% (69 sites)	98% (69 sites)
	Proportion of partners tested (husbands or partners of enrolled women in PMTCT services)	0% (69 sites)	55% (69 sites)
	Number of exposed children tested at 18 months	9 (70 sites)	123 (70 sites) Oct 2014 until Feb 2015

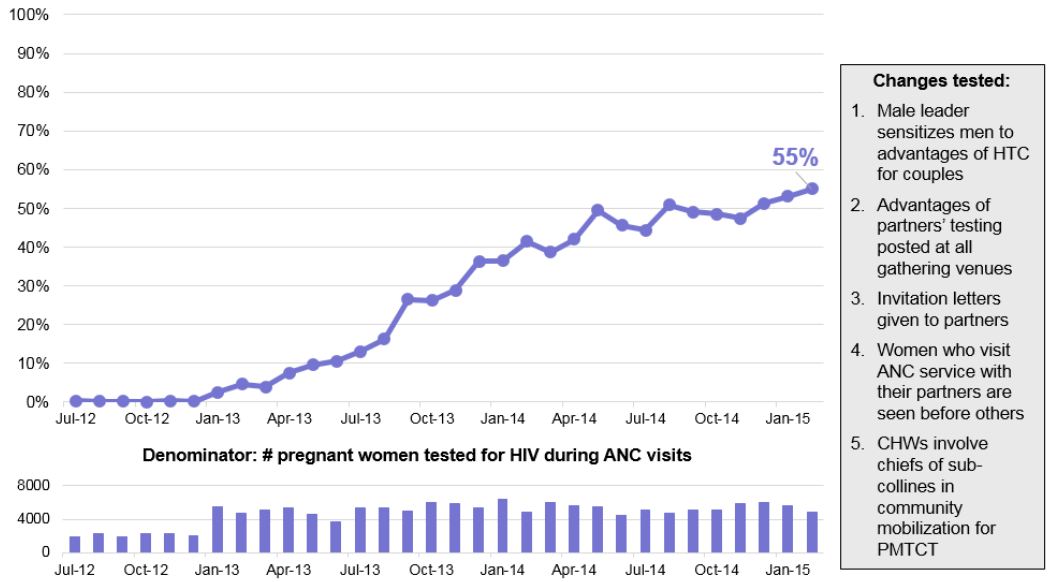
Challenges and Remedies

The main challenge we faced is related to the stock-out of dried blood spot kits for exposed infant diagnosis using polymerase chain reaction (PCR) machine. This concern affects all levels of PMTCT services including national, provincial, and health facility. During coordination meetings, ASSIST advocated with other partners and MOH departments that are involved in the supply of reagents for a solution be found.

Improving Equity

In Burundi, a baseline assessment conducted by HCI in 2012 found low participation of pregnant women's partners; only 6% of pregnant women enrolled in the ANC who were tested for HIV had a partner tested for HIV. To respond to this gap, ASSIST Burundi tested a number of changes over the previous two quarters to increase male partner participation at ANC visits and testing rates. A few of the changes they tested include: posting the advantages of partners' testing at all gathering venues, sending invitation letters to partners, prioritizing couples who come in for ANC services, and involving chiefs of sub-collines in community mobilization for PMTCT. As a result of these changes, the proportion of women in ANC whose partners are tested for HIV increased from 0 in July 2012 to 55% in February 2015 (see **Figure 12**).

Figure 12. Burundi: Percentage of women in ANC whose partners are tested for HIV in 12 districts, 4 provinces (July 2012-Feb 2015)



To conduct additional research related to low levels of male participation in maternal health services in Burundi, ASSIST conducted a study related to the factors influencing HIV testing among partners of pregnant women attending first ANC visits. The findings of this study show gender-related obstacles associated with partner testing. A report on the findings is currently being finalized, and ASSIST is working to address the issues identified to improve health outcomes for mother-baby pairs and male partners.

Knowledge Management Products and Activities

- From October to December 2014, ASSIST staff in Burundi, with the technical assistance of the regional office and in close collaboration with the MOH through HIV/AIDS National Program, developed the final change package of phase 1 and its dissemination strategy. Those documents have been developed in order to facilitate and guide dissemination of best practices from phase 1 of

the collaborative approach in new sites within the eight provinces. Both documents are already validated are now in use.

- ASSIST, with technical assistance from ASSIST headquarters (HQ), conducted a study on the factors influencing HIV testing among partners of pregnant women attending First ANC. During this reporting period, the analysis of qualitative data was carried out. The final report of the study is in review.
- In order to improve the quality assurance of data, ASSIST designed a tool for checking and quality control of data transmitted by the sites. The tool has been pre-tested on selected sites during this reporting period and has been shared with other ASSIST countries in order to harmonize our strategy of checking and quality control of data.
- During October 2014, based on the tool created, ASSIST organized a training session for HIS managers and coaches on the use of the tool which will be regularly used for checking and quality control of data transmitted by the sites**.**
- During this reporting period, ASSIST staff and PNLS conducted specific sites visit for checking and control the quality of data collected and transmitted by the sites. Those kind of visits were carried out to nine sites.

Planned Activities Next Quarter: April - June 2015

QI at health facility level:

- Continue coaching visits to all sites, including sites in both the new and initial provinces
- Continue and finalize dissemination meeting on change package phase 1 in all four initial provinces
- Organize provincial orientation meeting on change package phase 1 in all new provinces
- Conduct site orientation for health workers in targeted sites
- Set QI teams at all targeted sites including those located in new and initial provinces
- Collect initial data in new sites
- Conduct exchange learning workshop at provincial level
- Organize an experts meeting to validate the initial change package of phase 2
- Hold a provincial orientation session in the four provinces to disseminate the initial change package of phase 2
- Collect initial data in targeted sites for initial change package of phase 2
- Conduct specific sites visit for checking and quality control of data transmitted by the sites
- Finalize report of the study of factors influencing HIV testing among partners of pregnant women attending first ANC

Community and HR performance:

- Continue coaching visits to all community sites.
- Organize the second learning session for community QI teams and a community coaches' training
- Organize a coaches' meeting for sharing experiences
- Elaborate HR performance collaborative aims indicator and content plan and subsequent activities to be integrated in FY15
- Validate and orient key stakeholders on the HR performance collaborative plan

COTE D'IVOIRE

Background

With funding from the U.S. PEPFAR, the USAID ASSIST Project is working in Cote d'Ivoire in collaboration with the MOH to:

1) Provide technical expertise to implementing partners (IPs) in the implementation of their HIV and AIDS improvement activities at PEPFAR-supported facilities.

2) Build the capacity of a newly established MOH QI unit (*Direction Medecine Hospitaliere - DMH*) within the General Health Directorate (DGS) to strengthen the capacity for improving care at the central level.

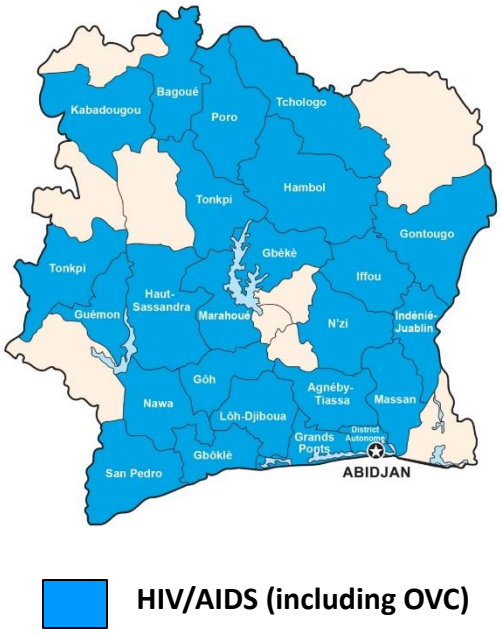
3) Establish a QI system in the four university hospitals.

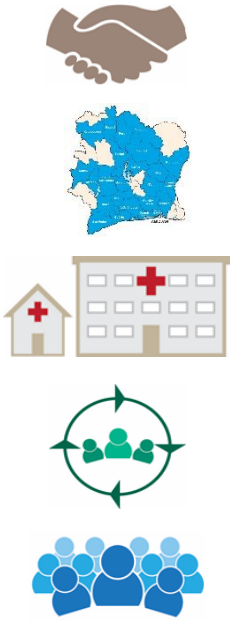
Specifically, ASSIST is working towards building a QI approach into the health system in Cote d'Ivoire. Currently, there is no infrastructure to provide orientation and guidance to managers, or to manage QI in the health system. ASSIST is also working to improve health care service delivery to HIV-infected patients in health facilities and increase the 12-month retention rate for patients on antiretroviral therapy (ART). ASSIST is providing technical assistance to the six PEPFAR clinical partners (ACONDA, ICAP, HAI, ARIEL, EGPAF, SEV-CI) to support the Cote d'Ivoire MOH in delivering high quality HIV care and treatment services. Since 2013, the new USAID instruction to the USAID ASSIST Project approach is to work above-site while the six PEPFAR clinical partners provide direct support to health facilities. The role of ASSIST is to provide adequate technical assistance to PEPFAR partners so that they are able to support health facilities in producing quality health services and care.

Institutionalization/Sustainability Strategy

The USAID ASSIST Project is building the capacity in QI methods and principles of key MOH staff and QI units: Department of Medical Practice (DMH), PNLS, and the National Health Information System (DIPE). ASSIST is helping to create a critical mass of competent health providers using QI concepts at the health facility level; helping to develop a network of QI experts to allow experience and best practice sharing; and promoting the transfer of QI competencies to PEPFAR IPs and health facility staff. ASSIST is also participating in building a QI system by engaging the MOH in the development of national policy documents on QI and standard operating procedures for HIV care and service delivery.

Scale of USAID ASSIST's Work in Côte d'Ivoire





MOH, SPAQS, DIPE, PNPEC, 6 IPs

23 out of 30 regions

60 facilities

60 QI teams

6 million out of 23 million

Program Overview

What are we trying to accomplish?	At what scale?
1. Improve the quality of HIV and AIDS care and treatment services	
• Improve timeliness, continuity, effectiveness, efficiency, and patient- centeredness of provided services and their consistency with clinical guidelines through the improvement collaborative approach • Strengthen capacity of medical providers to provide safe, timely, continuous, effective and efficient medical care • Improve awareness on quality improvement experiences countrywide • Strengthen health information system to support development of evidence-based decisions on improvement quality of medical care • Ensure equitable access to priority "best-buy" high impact medical services in demonstration regions	Health Regions: 23 out of 30 Districts: 43 out of 82 districts in 23 Health Regions Facilities in selected districts: 11% (60 out of 529) Catchment population facilities/communities served: 6 million out of 23 million people served
2. Health systems strengthening	
• Strengthen leadership, management and planning of MOH quality improvement unit in coordinating quality improvement activity design and implementation • Establish QA/QI system in the four University Hospitals • Support development of national standard documents	Central Level University Hospitals (District Abidjan South, East and North; and Bouake) 6 primary health care facilities (in 4 health districts and 4 health regions) 10 Quality improvement teams

Improvement Activity

Cross-cutting Activity

Accomplishments and Results by Activity (October 2014 – March 2015)

Activity 1. Improve the quality of HIV and AIDS care and treatment services

Overview: ASSIST is working to improve health care service delivery to HIV-infected patients in health facilities and to increase the 12-month retention rate for patients on ART. The project is providing technical assistance to the six PEPFAR implementing partners to improve their capacity to support the Cote d'Ivoire MOH in delivering high quality HIV care and treatment services.

Accomplishments and Results:

- **ASSIST conducted the second series of one-day coaching visits on health facilities with PEPFAR partners** (Oct and Nov 2014). The 10 sites of HAI were visited while only six sites were visited for ACONDA. The ACONDA regional office duplicated the coaching visits for their remaining four health facilities. ASSIST was represented in all the coaching visits by at least one staff. As a result, the 16 QI teams developed a better understanding of the monthly performance assessment process and the drafting of the improvement plan. Finally, all PEPFAR partners except one (ARIEL GLASER) have organized their second coaching visits.
- **ASSIST was invited by Health Alliance International (HAI) to support testing of changes in three of their sites** (Nov 2014). During these sessions, assistance was provided to the QI teams on change testing through PDSAs and the changes surrounding documentation and respecting scheduled appointment visits.
- **ASSIST invited Dr. Maina Boucar to participate in the first workshop with all the counterparts of ongoing QI initiatives with PEPFAR** (Jan 2015). This was an opportunity to clarify the roles and accountability of each partner. USAID emphasized that ASSIST work should be above-site while

CDC partners work is direct site support according to PEPFAR's vision of the partner's interventions in the country. Through technical assistance, ASSIST will build capacity among six PEPFAR clinical partners who have direct contact with facilities and are able to provide the necessary support required to implement QI activities. During the workshop, challenges related to this approach were discussed and ASSIST was asked to make sure that the collaborative QI approach is being used by PEPFAR partners in the field to improve sites' performances on the defined indicators.

- **ASSIST organized a quarterly QI technical meeting with the six QI focal contacts of the PEPFAR partners** (Jan 27, 2015). The main goal was to update the partners on activities that had been implemented and plan upcoming activities. Presently, the current QI initiative is being jeopardized by IPs who are not complying with their own plans and commitments. While sites are supposed to be testing changes, they are still developing their improvement plans and are not receiving the necessary guidance and assistance required from their partners. Sites are requesting support to move forward with the current QI initiative but the support is slow. Due to delays in allocating obligated funds, some partners are reorienting priorities to contracted activities reported in the MERS.
- **ASSIST organized a series of coaching visits through mixed teams (ASSIST and PEPFAR partners) at seven health facilities throughout five health districts** (Feb 2015). HG Tanda et HG Kounfao (HAI), HG Anyama (EGPAF), HG Avocatier (ICAP), CHR Bouaflé, PMI Bouaflé and HG Zuénoula (SEV-CI). The aim of these sessions was to finalize the improvement plans and initiate testing of changes. As a result, ASSIST and the IPs received the changes planned for five health facilities coming from different partners.
- **Organized the first learning sessions for the two partners: EGPAF and ICAP** (March 2015). The goal of these learning session was to monitor the level of implementation of planned changes and the results that were obtained. At the end of these sessions, the 20 health facilities (from 14 health district departments of the country) finalized their improvement plans and developed change ideas and action plans.
- **ASSIST organized a series of site visits for data verification in 15 health facilities in seven health districts** (Jan – March 2015). The aim of this activity was to ensure the quality of the data ASSIST received from health facilities. After the verification, the results were presented to the QI teams so a review of mistakes could be performed. Corrections were done on the data, and refresher training was provided to local QI teams for a better understanding of indicators computation for the coming months. The reporting process was again explained to the local staff, as the reporting data has proven to be a challenge.

Activity 2. Health Systems Strengthening

Overview: One mandate of ASSIST is to support the MOH to build a QI approach within the current health system. During a policy meeting held in February 2014, it became apparent that there was little engagement on QI in health care settings in the country. In addition, there was no infrastructure to lead the QI process and develop the QI system so that it could be integrated to the national health system. In November 2014, the former QI department, Service de la Promotion de l'Assurance Qualité en Santé (SPAQS), dissolved after being operational for five years. In February 2015, a new MOH department, which will hold the QI infrastructure with new leaders and a new organizational structure, was put into place.

Accomplishments and Results:

- **ASSIST participated in the editing and review of the National HIV AIDS Standard Operating Procedure document for health facilities and communities** (Oct – Dec 2014). The documents are the first of their kind, which will serve as reference documents for the provision of quality of HIV care and services to patients in Cote d'Ivoire.
- **ASSIST participated in a series of meetings with MOH representatives to look into the best infrastructure to put in place to lead and build QI approach within the current health system** (Jan – March 2015). As of result, the new infrastructure has been approved by the MOH and the heads of departments are appointed. ASSIST and this new department agreed on the following activities to be completed during FY15: Development of a policy document for quality improvement in Cote d'Ivoire; development of National Quality Improvement Strategic Plan 2015 – 2020; organization

of meetings to sensitize health managers on building QI systems and initiating QI activities in health care settings; and capacity building of new QI unit staff on QI methods and performance monitoring

- **ASSIST participated in a MOH-led initiative to collect baseline information on the national infrastructure to support quality assurance for care and health services and patient safety** (March 2015). This assessment was supported and performed by the African Health Organization through the Cote d'Ivoire MOH. This will be an opportunity for ASSIST and MOH to announce the development of the national QI policy document.

Improvement in Key Indicators

Activity	Indicators	Baseline (January-March, 2014)	June 2014	Last value
Improve Quality HIV/AIDS care and treatment services in Cote d'Ivoire	% of client records with all items filled % of HIV positive patients eligible to ART and initiated on ART	6% (58 sites)	3% (13 sites)	TBD
	% of HIV positive patients eligible to ART and initiated on ART	98% (50 sites)	100% (13 sites)	TBD
	% of HIV positive patients who are screened for tuberculosis during clinic visit	50% (50 sites)	68% (13 sites)	TBD
	% of HIV positive patients on ART seen in the review period	51% (47 sites)	75% (13 sites)	TBD
	% of infants born to HIV positive mothers tested by PCR prior two months and with PCR result	53% (24 sites)	29% (13 sites)	TBD
	% of HIV positive pregnant women with baseline CD4 test performed in the first month of diagnosis	50% (52 sites)	66% (13 sites)	TBD
	% of infants born to HIV-positive mothers who are still in care in the review period	42% (30 sites)	4% (13 sites)	TBD

Challenges and Remedies

- QI activities are not high-level activities in the country, and there is a low level of engagement from PEPFAR partners in the process. In addition, QI was the first activity left behind once the partners faced delays in the allocation of their obligated FY15 funds.
- ASSIST does not have power to ask PEPFAR partners to do certain activities, but can only make suggestions. ASSIST cannot influence whether they comply or not.
- Coaching visits were not conducted by the PEPFAR partners. The instruction for ASSIST to stay above-site and have facility contact only through PEPFAR partners' visits is a true constraint to ASSIST, its ability to report data, and support real improvement. Partners need to be better organized in order to have ASSIST provide support to them and the health facilities. However, technical assistance requests are not being submitted by partners. Only two partners have organized their planned learning sessions since the January 2015 PEPFAR partner meeting. To address this challenge, ASSIST conducts frequent communication with partners about the activities to be performed and sessions to be organized, as well as develops templates for coaching visits and learning sessions for PEPFAR partners. In addition, evaluation of quarterly achievements and reports are developed by ASSIST and shared with partners.

Planned Activities Next Quarter: April - June 2015

Activity 1: Improve the quality of HIV and AIDS care and treatment services

- Organization of coaching visits with partners to finalize improvement plans
- Organization of first learning sessions of the remaining four partners (ARIEL GLASER, ACONDA, HAI and SEVCI)
- Organization of coaching visits to support facilities in testing changes and monitoring interventions

Activity 2: Health Systems Strengthening

- Organize the development of the national QI policy document (May June July 2015)
- Participate in organizing the sensitization sessions to health managers on QI methods, building QI system and implementing QI activities in their health facilities

Activity 3: Improve the strategic information system

- Continuation of the data verification sessions
- Collection and compilation of health facilities data to produce graphs.

DEMOCRATIC REPUBLIC OF CONGO

Background

Since FY14, the USAID ASSIST Project has been supporting the MOH in the Democratic Republic of Congo (DRC) to improve nutrition services for HIV clients through the integration of nutritional assessment, counseling, and support (NACS) into HIV care and treatment, in coordination with other implementing partners. This intervention, led by ASSIST, follows a successful partnership from 2012-2013 with the ProVIC Project on improving the quality of PMTCT services in four health facilities in Kinshasa.

For FY15, USAID/PEPFAR in the DRC is asking the USAID ASSIST Project to:

- Improve nutrition services for HIV clients through strengthening gains in NACS and scale up best practices to new sites in partnership with the Food and Nutrition Technical Assistance Project (FANTA) and the Livelihoods and Food Security Technical Assistance Project (LIFT) in Kinshasa and Katanga provinces
- Improve PMTCT services and retention in care and assure good adherence to therapy for persons living with HIV (PLHIV), including children and key populations in target facilities in collaboration with ProVIC and PROSANI in Orientale and Katanga provinces

The specific type of service to focus on will be district based in accordance with each IP's technical content. ASSIST will be fully responsible for all improvement activities in targeted facilities and management structures. ASSIST hopes to focus on high-impact interventions in order to maximize epidemic impact through quality management of prevention and care, targeted groups with high burden of disease, and support to strengthen health systems.

Institutionalization/Sustainability Strategy

ASSIST's focus is on the MOH at all levels and adapts its contents and activities to the needs of each level:

- For the policy and strategic level, improvement will work on conceptualization of improvement strategies, like analysis of systems and processes to identify quality gaps. This will be done on the basis of evidence-based packages or standards that are aligned with the macro objectives. This exercise, among others, will help the central MOH to self-evaluate if it is up-to-date on norms, if quality gaps exist, and if gaps exist, to target them for an improvement process. In DRC, ASSIST will work very closely with the central MOH, the AIDS control program at all levels, as well as the decentralized structures.
- For the decentralized levels, ASSIST will focus on barriers and change concepts and support providers to adapt change ideas to their own setting to overcome barriers through their own ideas.

ASSIST will work closely with national and decentralized MOH representatives to ensure that improvement work reflects and is well integrated into routine MOH functions, including processes related to routine care and health management, reporting, in-service education, and supervision. All coaches are national, regional and district supervisors or reproductive health (RH)/family planning (FP) trainers.

Scale of USAID ASSIST's work in Democratic Republic of Congo

HIV/AIDS

MOH, 5 IPs

3 out of 11 provinces

51 facilities

16 QI teams

597,000 out of 19,900,000 (NACS)
1,689,798 out of 16,897,975 (HIV)

Program Overview

What are we trying to accomplish?	At what scale?
1. Quality improvement technical assistance for integrating NACS into HIV care and treatment services	
Improve management and nutritional status of malnourished HIV clients by: • Integrating NACS into facility-based ART, PMTCT and maternal, newborn, and child health (MNCH) services • Strengthening the capacities of district health managers and care providers to apply improvement skills	Provinces: 2 out of 11 (Kinshasa and Katanga) Districts: 6 out of 13 in 2 provinces Facilities in selected districts: 16 out of 494 (3%) Catchment population: 597,000 out of 19,900,000
2. Quality improvement technical assistance to HIV care and treatment activities	
• Improve retention in care for PLHIV in target facilities in Orientale and Katanga provinces in close partnership with key IP's • Improve adherence to therapy for PLHIV in target facilities in Oriental and Katanga provinces in close partnership with key IPs	Provinces: 2 out of 11 (Orientale and Katanga) Districts: 5 out of 17 in 2 provinces Facilities in selected districts: 35 out of 335 (10%) Catchment population: 1,689,798 out of 16,897,975
3. Building capacities at all levels in QI and related health system strengthening	
• Strengthen the capacities of national, provincial and district health managers and care providers to apply improvement skills	Reinforce capacities in QI and institutionalization of QI among managers and providers at PNLS, provincial and district levels

Improvement Activity Cross-cutting Activity

Accomplishments and Results by Activity (October 2014 – March 2015)

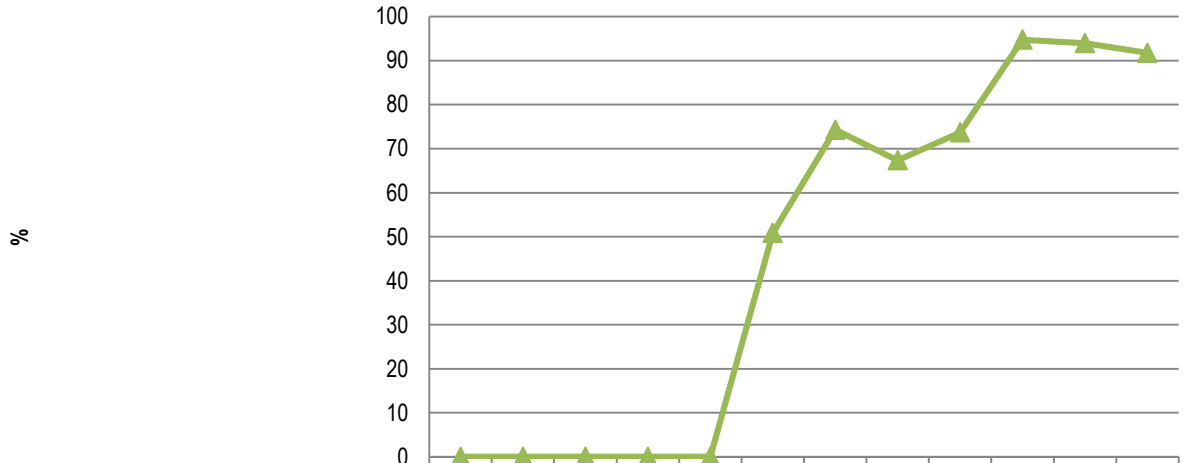
Activity 1. Integrating NACS into HIV care and treatment services

Overview: Nutritional status can influence the health status of PLHIV on ART. In HIV case management in health facilities, nutritional assessment and care are often forgotten by providers. In rare cases where the nutritional assessment is made, the quality of services is poor due to a lack of skills or equipment or poor organization of services. The partnership of FANTA, LIFT and ASSIST in NACS has helped raise awareness and improve outcomes for systematically ensuring that every PLHIV receives evaluation and classification of nutritional status, counseling and suitable support according to his or her nutritional status. Best practices will be identified at the end of the initial phase of the collaborative improvement approach, which will then be used for spread on a larger scale.

Accomplishments and Results:

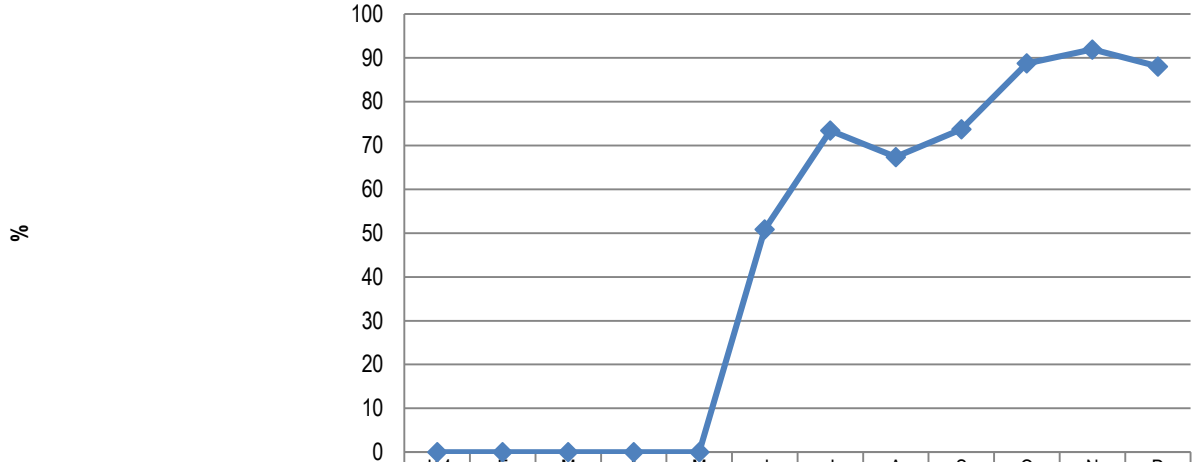
- **ASSIST facilitated a training of providers and coaches in NACS and quality improvement**, which helped develop a coaching program (June 2014).
- **District and Health Zones coaches alone conducted coaching visits** (Oct – Dec 2014).
- **Jointly with FANTA and LIFT, ASSIST conducted a supervisory coaching in some sites in Kinshasa and Lubumbashi** (Dec 2014).
- **ASSIST organized the first coaches' meeting in Kinshasa and Lubumbashi** (Dec 2014). Discussions were on their coaching experience, functionality of QI teams, ideas tested and changes implemented, and challenges and constraints faced by QI teams. The opportunity was used to strengthen their capacity in QI, data validity, performance analysis, and documentation of changes.
- **ASSIST organized the first Learning Session in Kinshasa and Lubumbashi** (Dec 2014). Representatives from sites shared their work including changes implemented, the level of their performance, and challenges encountered.
- **ASSIST helped reformulate the aims of the project** based on the SMART process in conjunction with the MOH and the two main PEPFAR partners (FANTA and LIFT) (Dec 2014).
- **Figure 13, Figure 14, and Figure 15 show improved nutritional assessment and classification of PLHIV.** To accomplish this, many changes were implemented including:
  - Reorganization of teamwork to comply with the NACS process
  - Availability of essential inputs for anthropometric measures (scales, height rods, mid-upper arm circumference tape) for adults and children at the point of contact with NACS target groups
  - Job aids on anthropometric measurements and nutritional classification
  - Modification of registers to add columns to document weight and other anthropometric measures to encourage providers to systematically consider these items
  - Gradual integration of nutritional assessment in NACS target services
  - Integration of arm circumference in the anthropometric parameters

Figure 13. Democratic Republic of Congo: Percent of PLHIV who received a nutritional assessment according to norms, 4 sites, Lubumbashi (Jan – Dec 2014)



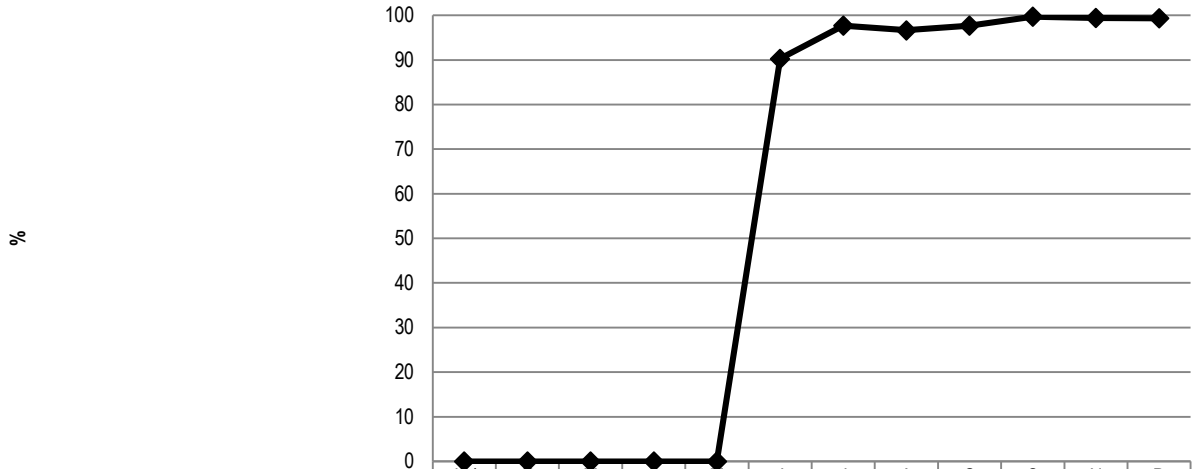
	J14	F	M	A	M	J	J	A	S	O	N	D
Number of PLHIV who received a nutritional assessment according to norms	0	0	0	0	0	292	575	570	652	672	684	745
Total number of PLHIV for the period	492	497	552	559	565	574	774	846	885	709	728	812
% PLHIV who received an nutritional assessment according to norms	0	0	0	0	0	51	74	67	74	95	94	92
No. of facilities reporting	4	4	4	4	4	4	4	4	4	4	4	4

Figure 14. Democratic Republic of Congo: Percent of PLHIV with correct classification of nutritional status, 4 sites, Lubumbashi (Jan – Dec 2014)



	J14	F	M	A	M	J	J	A	S	O	N	D
Number of PLHIV assessed with correct classification of nutritional status	0	0	0	0	0	292	568	570	652	629	669	715
Total number of PLHIV for the period	463	468	519	514	535	574	774	846	885	709	728	812
% of PLHIV with correct classification of nutritional status	0	0	0	0	0	51	73	67	74	89	92	88
No. of facilities reporting	4	4	4	4	4	4	4	4	4	4	4	4

Figure 15. Democratic Republic of Congo: Percent of PLHIV assessed on nutrition who received appropriate nutritional counseling according to their nutritional status, 4 sites, Lubumbashi (Jan – Dec 2014)



	J14	F	M	A	M	J	J	A	S	O	N	D
Number of PLHVI who received appropriate nutritional counselling according to their nutritional status	0	0	0	0	0	288	555	551	637	672	684	775
Total PVVIH évalués	17	13	16	22	23	319	568	570	652	674	688	780
% of PLHIV assessed on nutrition who received appropriate nutritional counselling according to theit nutritional status	0	0	0	0	0	90	98	97	98	100	99	99
No. of facilities reporting	3	3	3	3	3	4	4	4	4	4	4	4

Activity 2: HIV care and treatment activities

Overview: ASSIST will work with ProVIC in Katanga and Orientale provinces in 25 sites (11 in Katanga and14 in Orientale) and with PROSANI in the Kolwezi District of Katanga Province in 10 sites.

Accomplishments and Results:

- **Built consensus with USAID/PEPFAR in DRC, key IPs and MOH on ASSIST target content, provinces, and sites** (Dec 2014).
- **Drafted the FY15 work plan to be finalized with the MOH AIDS Control Program (PNLS) and at decentralized levels** (Q1-2 FY15).

Activity 3: Building capacities at all levels in QI and related health system strengthening

Overview: ASSIST will actively continue to engage national policy makers, provincial and district health managers in all phases of the improvement work. Building their capacity will have many effects:

- They own the system and should doing any intervention to improve it
- They live within the system so they understand more clearly the barriers
- They should assume sustainability for planning, mobilizing resources, and creating partnerships

Once ASSIST is fully established in the DRC, local managers and coaches, with support from ASSIST, will be responsible for implementing plans for improving quality of all of the target services. Each team will be provided with sufficient support so that they will be able to conduct improvement activities independently of ASSIST staff members to address ongoing technical and systems level gaps. Building capacity from lessons learned and from the institutionalization of these practices will strengthen the health system at all levels and will provide information and evidence to inform strategic planning at the district, provincial, and central levels.

Accomplishments and Results: Yet to start

Challenges and Remedies

At this stage, the main temporary challenge is lack of presence in country, which hinders obtaining sufficient continuous information on sites' activities, results, and constraints. This challenge has been addressed by accelerating local staff hiring process and using neighboring Burundi ASSIST staff to provide technical assistance.

Improving Equity

Women and men face differing levels of HIV and vulnerability to malnutrition in DRC, and ASSIST is working to identify and to respond to the specific issues affecting males and females, which can make them less able to access NACS services or to experience improved nutrition. ASSIST DRC collected sex-disaggregated data over the previous quarter and identified that women are more likely to be seen at the clinic monthly, but the percentage of females whose nutrition status was accurately calculated was lower than the percentage for males. Further analysis will be done to identify additional issues, underlying causes and changes to test to achieve possible solutions.

Planned Activities Next Quarter: April - June 2015

Activity 1: Strengthen and scale up NACS activities

- Conduct coaching visits to target sites
- Organize learning sessions in target provinces
- Conduct QI training for district, provincial, and national staff
- Document changes tested and results
- Participate in partners' meetings

Activity 2: HIV care and treatment

- Discuss collaboration with key USAID/PEPFAR implementing partners
- Finalize ASSIST's work plan for FY15
- Conduct a rapid assessment to determine key quality gaps in target interventions
- Finalize an improvement change package including improvement aims, indicators, and technical content
- Train key partners at MOH, ASSIST local staff, and IP staff in QI, coaching, and mentoring for quality improvement

Activity 3: Build improvement capacity at all levels

- Initiate improvement effort at management levels (PNLS, province and district managers, and HIV focal persons) to pave the way for integration and build ownership
- Conduct coaching visits to QI teams
- Organize learning sessions
- Support continuous and frequent ongoing monitoring of data for validity
- Document continuously best practices and lessons learnt for future scale up
- Initiate in collaboration with the MOH and IP operational research activities to feed the improvement efforts

Administration

- Make all administrative and logistics arrangements to operationalize local staff and support project activities in DRC

EAST AFRICA REGION

Background

In October 2011, stakeholders from 13 African countries took formative steps towards the development of a quality improvement competency framework at the Regional Consultative Workshop for Health Care Improvement in Kampala, Uganda. This forum was convened by the Regional Center for Quality in Health Care (RCQHC) with the support of USAID/East Africa, USAID Washington, the Centers for Disease Control and Prevention (CDC), and HCI. In 2012, the RCQHC requested technical assistance from USAID/East Africa and the USAID ASSIST Project to further develop, refine, and validate the competency framework. In early 2013, ASSIST, with funding from the former USAID/East Africa Mission, began to provide technical assistance and mentorship to the RCQHC in developing a competency framework using a Delphi process.

The PEPFAR 3.0 Human Resources for Health strategy emphasizes strengthening of pre-service training institutions and the use of quality improvement as a performance improvement strategy. The development of a competency framework for improvement provides a common understanding of what is meant by improvement competencies, which can inform pre-service and in-service training (IST), workforce strategy planning, and performance review, among other things. A workforce that is more competent in improvement can identify problems with care and improve them, leading to better outcomes.

Institutionalization/Sustainability Strategy

The sustainability strategy is two-fold: 1) to build the capacity of RCQHC in developing competency frameworks so they can provide assistance to MOHs or other groups in the region; and 2) to develop an improvement competency framework that can be utilized by MOHs, medical training institutions, implementing partners and others to assess and address competency gaps in health workers.

Program Overview

What are we trying to accomplish?	At what scale?
1. Technical assistance and support to the RCQHC to develop and validate a Health Quality Improvement Core Competency Framework	
• Build RCQHC capacity in methodologies to develop, validate, and apply competency frameworks • Provide technical guidance at each stage of the development and validation process	East Africa Region

Cross-cutting Activity

Accomplishments and Results by Activity (October 2014 – March 2015)

Activity 1. Technical assistance and support to the RCQHC to develop and validate a Health Quality Improvement Core Competency Framework

Accomplishments and Results:

ASSIST supported the RCQHC to conduct an initial workshop to develop a framework and first round of expert reviews and revisions in 2013 and 2014. RCQHC's funded has ended, so ASSIST has taken over managing the second round of expert reviews, revisions, and a face validity review.

- **The second round of expert review took place from January to February 2015. Comments were compiled in March 2015.**

Planned Activities Next Quarter: April - June 2015

- Complete compilation of results from the second round of the Delphi process expert review.
- Conduct rapid face validity review to make sure that language is clear to non-experts
- Finalize document for electronic publication.

KENYA

Background

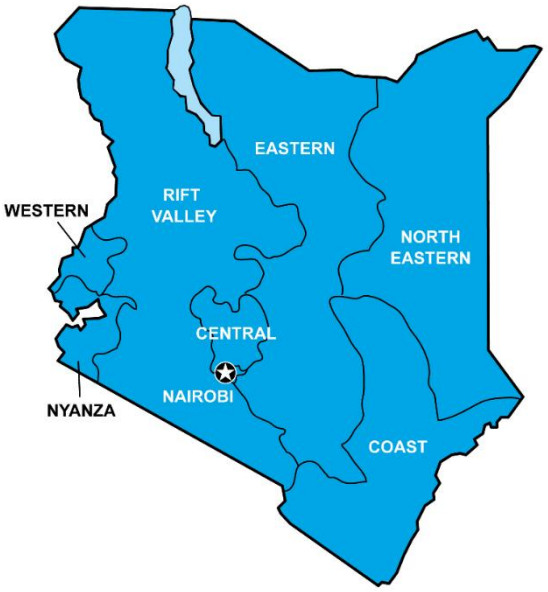
ASSIST began working in Kenya in October 2012, building on the work of HCI. In Kenya, ASSIST supports the MOH, the Ministry of Labor, Social Security and Services (MLSS&S), the National AIDS and STI Control Program (NASCOP), United States Government (USG) implementing partners, and county governments to design, develop, and implement strategies that will enhance the quality of health service delivery. ASSIST works to improve MNCH and reproductive health services to reduce maternal and neonatal deaths; malaria to improve case management and strengthen the national program; HIV care and treatment, and the care of orphans and vulnerable children (OVC) in the country in order to support PEPFAR 3.0 goals.

The project design for the ASSIST Kenya is divided into two phases; Phase 1 (January 2013- March 2014) involved the development of national frameworks to support institutionalization of QI as well developing change packages through the centers of excellence (COEs) in order to harvest change ideas that can be scaled up across Kenya. Starting in April 2014, during Phase 2, ASSIST began the scale up of QI as well as completion of the national frameworks for institutionalizing improvement.

Institutionalization/Sustainability Strategy

All of ASSIST's technical assistance (TA) in Kenya has been purposefully designed to institutionalize the capacity for continuous improvement in national, county, and facility structures for health care delivery. ASSIST works closely with all relevant MOH units to ensure that the project's support for facility-level improvement work and engagement with county and sub-county structures is fully aligned with national policies and strategies.

Scale of USAID ASSIST's Work in Kenya



HIV/AIDS (including OVC)

MOH, MLSS&S, NASCOP, 9 IPs

34 out of 49 counties for Health service delivery and 43 out of 47 counties for OVC

530 facilities

387 communities

800 QI teams

600,000 out of 2.4 million for OVC

Program Overview

What are we trying to accomplish?	At what scale?
1. Ownership and Institutionalization of Quality Improvement (QI) at the national level	
• Support development of a national QI policy, standards and syllabus in collaboration with NACSOP, Family Health , Primary Health and Directorate of Health Standards, Quality Assurance and Regulations and other key stakeholders to institutionalize QI in healthcare • Strengthen national systems that support application of QI techniques to improve integrated health outcomes, especially HIV/AIDS care and treatment, HIV/AIDS care and support, including OVC, elimination of mother-to-child transmission of HIV (eMTCT), and MNCH/FP/RH.	National & County
2. Capacity Development in QI	
• Provide training on the science of improvement and developing quality improvement team (QITs) and WITs in facilities from high volume sites in collaboration with the USAID Kenya service delivery partners including Aids, and Population Health Integrated Assistance (APHIA +s), AMPATH Plus and COGRI to drive the scale-up of QI	County level reaching 33 counties
3. HIV Care and Treatment	
• Provide QI TA to county governments and the USAID Kenya service delivery partners including APHIA +, AMPATH Plus and COGRI to strengthen and improve the HIV chronic care model and to bring and retain more adults and children in HIV care and treatment	National -33 counties -At least 6 USG partners (APHIA+ partners)
4. OVC and Child Protection	
• Strengthen systems at national and county government levels to support the institutionalization of QI in child protection and OVC programmes to improve the welfare of children • Provide TA to county governments, the USAID Kenya service delivery partners including APHIA +, AMPATH Plus and COGRI to apply QI techniques to strengthen care for OVC and their households	National: 43 of 47 counties sites and 9 USG partner by USG partners and MLSS&S
5. Maternal and Neonatal Child Health (MNCH) and Reproductive health (RH)	
• Provide QI TA to county governments and the USAID Kenya service delivery partners including APHIA +s, and AMPATH Plus to improve and strengthen MNCH and RH services in Kenya	National, facility and country levels
6. Malaria	
• Apply QI techniques and, in collaboration with county governments and USG implementing partners, strengthen capacity in programme management to achieve malaria programme objectives at all levels of the health care system	National, county and service delivery levels

Improvement Activity

Cross-cutting Activity

Accomplishments and Results by Activity (October 2014 – March 2015)

Activity 1: Country ownership and institutionalization of QI at the national level

Overview: The Kenya 2010 Constitution enshrined health as a right of every Kenyan, including the attainment of the highest standard of health for all. In addition, devolution of healthcare services and staff has strengthened the role of the national Government in leading policy development, driving its implementation and keeping performance under constant review. In view of this, and to ensure institutionalization and sustainability of QI, the ASSIST Project has been supporting the MOH and the Department of Children Services (DCS) to develop national frameworks (National QI policy, clinical practice portal, national QI indicators, county workplans) that have an overall aim of providing strategic guidance, support and coordination for system-level improvement efforts.

Accomplishments and Results:

- **National policy development:** Draft health QI policy and health QI standards were developed with the assistance of ASSIST through a policy validation meeting held in October 2014 and a draft policy review meeting held in February 2015.
- **Clinical practice guidelines:** a web-Portal containing clinical practice guidelines has been developed that will host all clinical practice guidelines after they are reviewed (Feb 2015). Portal awaiting launch.
- **Supported the national Emergency obstetric and neonatal care (EmoNC) technical working group in formulating the QI process indicators** (Feb 2015)**.** These have been adopted and form part of core assessment in the ongoing USAID driven EmoNC scaleup in Kenya across 18 counties with the highest maternal mortality rate.
- **Finalized the Kenya HIV QI framework for NASCOP and training package** (March 2015).

Activity 2: Capacity development in QI

Overview: ASSIST has been offering improvement TA to county government, APHIAs, to address the following issues:

- Capacity building of county, partners and facility teams on how to actively apply the science and model of QI to address quality gaps in HIV and AIDS care and treatment
- Scaling up tested change packages that address quality of care gaps which will include
- Integration of HIV testing and counseling (HTC) to the routine care of clients
- Establishing linkage systems at various HTC points for active HIV-positive clients referral
- Integrating HIV services in health open days-facility outreach strategies for retention to care of clients in Comprehensive Care Centers (CCCs)

To do so, ASSIST is building on the FY13 strategy of selecting and developing COEs through which the QI model was applied to generate change ideas that can be scaled up across the system. In the 3rd quarter of FY14 and the 1st and 2nd quarters of FY15, ASSIST supported the APHIAs and county governments to:

- Offer QI training to the APHIAs technical officers and CHMTs and ongoing mentorship and support
- Develop a QI scale-up strategy
- Develop work improvement teams (WITs) in each of the selected facilities
- Train the WITs
- Undertake a gaps analysis and match the gaps with the change ideas tested and documented from the COEs and scale-up QI in the selected facilities

Accomplishments and Results:

- **ASSIST supported NASCOP PMTCT program with facilitation of one PMTCT master Training of Trainer (TOT) training** (Jan 26-30, 2015). Forty-eight master trainers (from various counties and implementing partners) were taken through the newly developed bridged PMTCT training curriculum with emphasis on monitoring PMTCT performance at the facility level.
- **ASSIST conducted sensitization meeting for county, sub-county health managers, and facility in-charges from select high volume facilities**, in Uasin Gishu County supported by AMPATH on February 13, 2015.

- **ASSIST Trained Lea Toto a COGRI (March 23-26, 2015) supported pediatric HIV care targeting staff from the eight clinics in Nairobi.** Forty participants (7 clinicians, 9 nurses, 1 counsellor, 1 social worker, 7 nutritionists, 4 pharmaceutical technologists, 2 M&E officers and 8 administrators) were trained.
- **ASSIST trained Health right and Elgeyo Marakwet County on QI.** Health care workers from nine facilities and five staff of Health right International were trained in QI (Feb 23 -27, 2015).

Activity 3. HIV care and treatment

Overview: ASSIST has been supporting issues surrounding HIV care and treatment that entail strengthening the HIV chronic care model. Beyond HIV care and treatment, ASSIST has also been supporting the eMTCT through the Partnership for HIV-Free Survival (PHFS).

Under HIV care and treatment, ASSIST has been working with the USG implementing partners to apply tested change packages to improve the HIV chronic care model in order to enroll and retain more adults and children in HIV care and treatment.

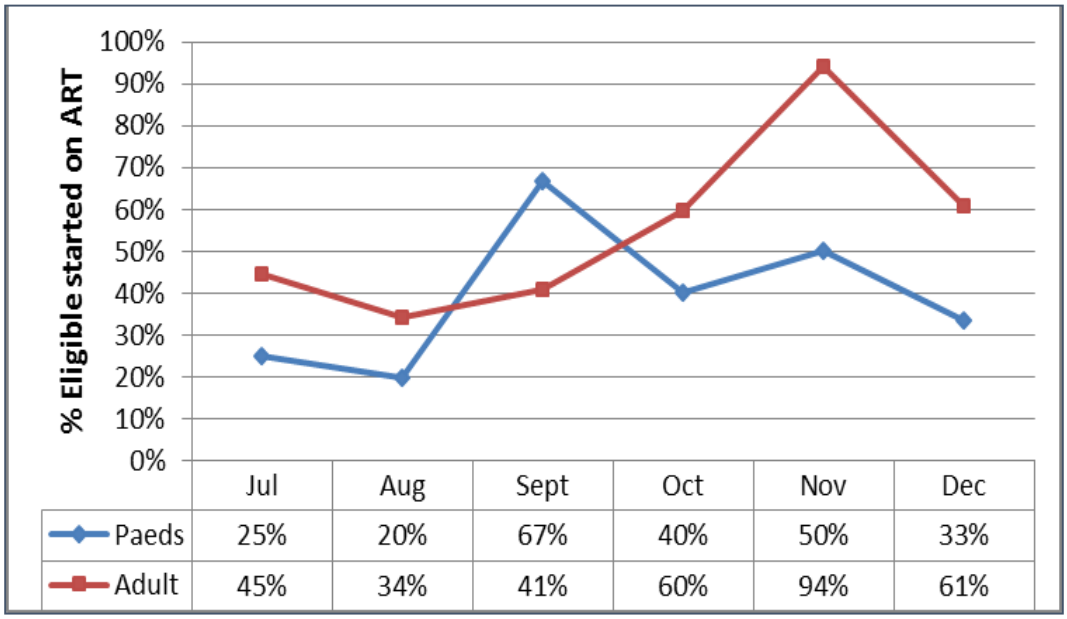
For PHFS, ASSIST has been supporting sites to actively apply the science and model of improvement to: address quality gaps in eMTCT; encourage mother-baby pairs to begin treatment immediately after the mother tests positive at ANC, with targeted follow-up for such clients from then onward; open and managing a joint file for each mother-baby pair; integrate HIV CCCs & PMTCT at MCH clinics, and psychosocial support through mentor-mothers (expert patients with additional training); and encourage mothers to support active screening for HIV-exposed mother-baby pairs at all entry points (outpatients department, labor and delivery, MCH, CCC) and linking them back into to care.

Accomplishments and Results:

APHIA Plus Nairobi

- **ASSIST continued to support the county QI coordinators by holding monthly meeting to follow up on work plans developed during the QI training held in September 2014.**
- **ASSIST conducted monthly facility level mentorship at Mbagathi District Hospital (high HIV caseload facility) to follow up on the HIV care and treatment and EMTCT baseline assessment conducted after the QI training held in September 2014.**
- **ASSIST supported the WIT conduct a process flow analysis of clients within the CCC and developed a more efficient client flow to ensure that all clients seen are triaged and that the filtering of patients is done** (Jan 2015).
- **ASSIST further helped the CCC WIT conduct a baseline assessment and select the key indicators for improvement.**
- **A root cause analysis was conducted showing that there was a delay in filing of CD4 results in the patients' files and delayed treatment preparation sessions.** The following change ideas were suggested: CD4 results were filed by data clerks immediately after being received from the lab; structured treatment preparation sessions were introduced; line list of all clients eligible for ART was to be produced at the end of the week to allow flagging of files.
- **These changes resulted in an increase in pediatrics started on ART from 20% at baseline to 33% over six months and adult ART initiation from 45 to 61% over 6 months (Figure 16).**

Figure 16. Kenya: Percent eligible for ART, started on ART, Mbagathi Hospital (July 2014 – Dec 2014)



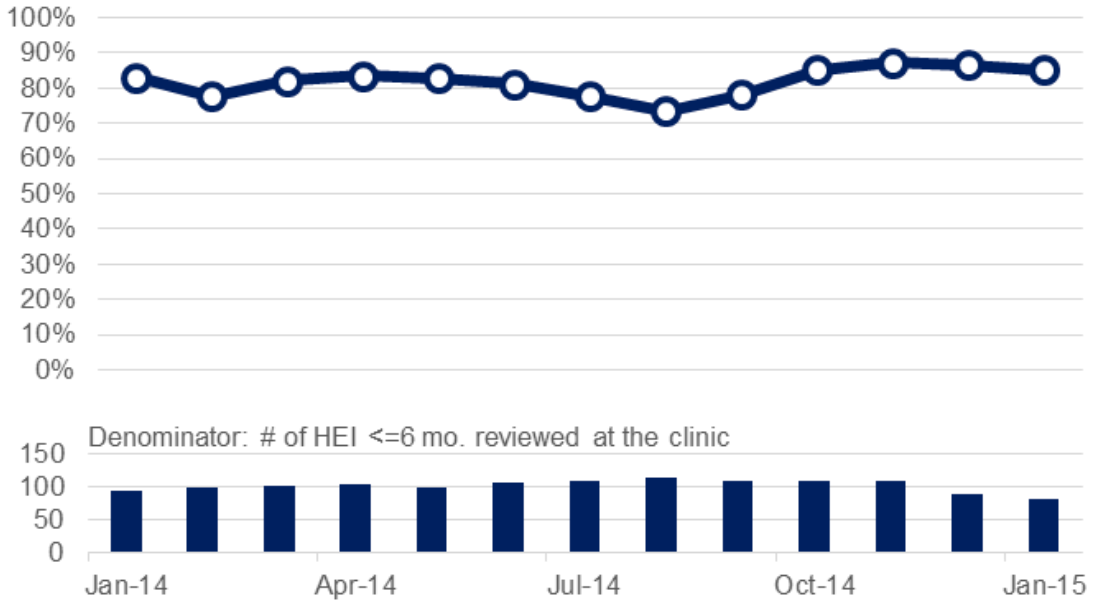
APHIA Plus Western

- **Throughout the reporting period and through monthly QI mentorship meetings, ASSIST supported the APHIA plus Western in implementing QI activities in 14 high caseload facilities in six counties.**
- **ASSIST provided QI mentorship visits to seven facilities, in order to enhance use of improvement methods by the counties HMTs, sub county HMTs, and health providers in the facilities and to follow up from the CQI training done in the previous quarter** (Q2 FY15). In addition, ASSIST aimed to foster the integration of NACS as a core component in critical healthcare service delivery areas especially HIV/AIDS care and treatment. During the mentorship, a number of challenges were addressed, including poor use of partographs; poor documentation on tuberculosis (TB) screening and use of TB intensified case finding cards; documentation or no accurate records for HIV-exposed infant (HEI) mortality and gaps in Loss to follow up and defaulter tracing.

APHIA Plus Coast - PHFS

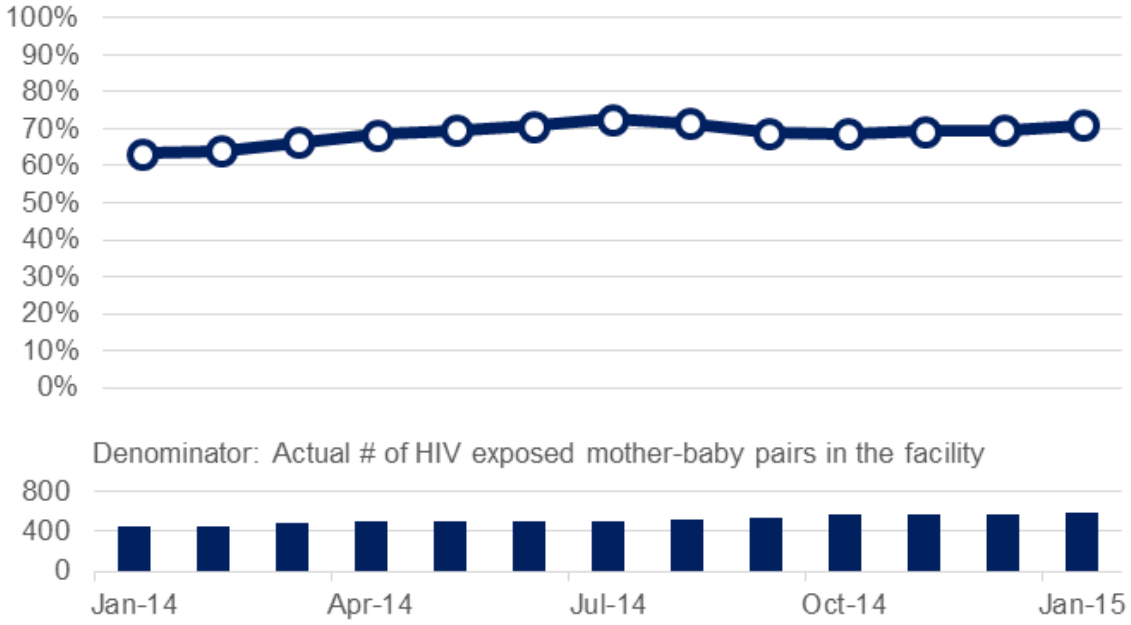
- **ASSIST supported the implementing partner in improving documentation and supporting QI activities at the 13 facilities, supported a PHFS learning session; and conducting QI data validation in 11 of the 13 facilities** (Q1-2FY15). ASSIST conducted a DQA of PHFS data by going to the source documents (i.e. HEI register, patient files and mother-baby pair register). The HEI register and patient files were up to date in only three of 11 facilities visited. The mother baby- pair register was in use in 10 of the 11 facilities. It was up to date and accurately used in six of the 11 facilities, was reported to be easy to use than the HEI register. On the job training was done to those who had difficulty in using any of the three tools.
- **ASSIST supported PHFS learning sessions in Kwale County** (Feb 16-17, 2015). Sharing and learning of change ideas took place and a package of ideas was suggested to be implemented across all facilities in the County. Fifty-seven participants from the 16 participating facilities developed work plans which they were to share and validate with the rest of their team members. The results are shown in **Figure 17 and Figure 18**.

Figure 17. Kenya: Percent of HIV-exposed <=6 mo. exclusively breastfed, 12 PHFS sites, Kwale County (Jan 2014 – Jan 2015)



.

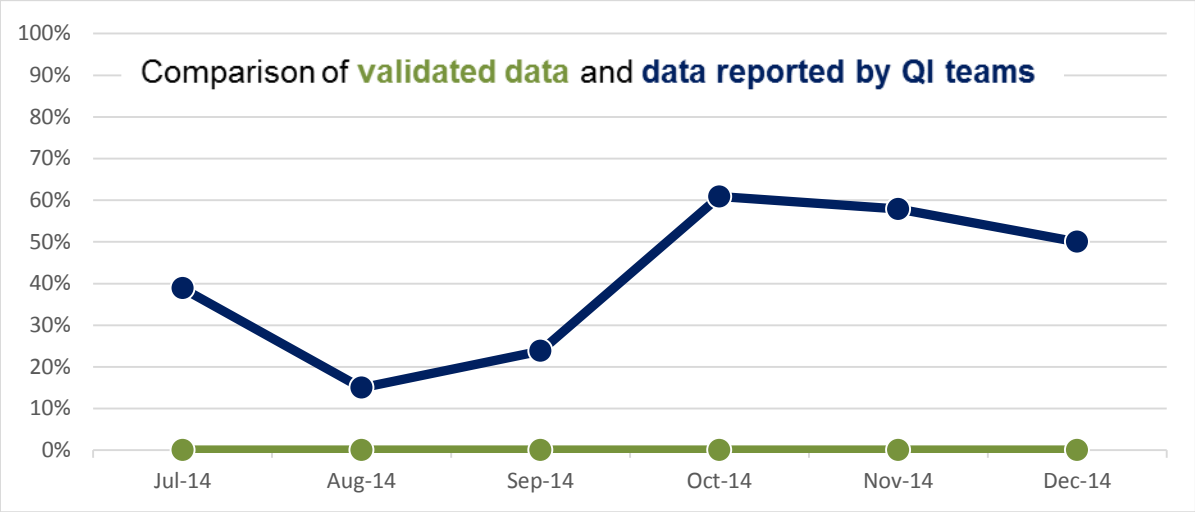
Figure 18. Kenya: Percent of HIV-exposed mother-baby (0-24 months) pairs in active care, 11 PHFS sites, Kwale County (Jan 2014 – Jan 2015)



APHIA Plus Imarisha

- **ASSIST conducted QI data validation to the only facility in Isiolo County that is implementing HIV QI process focusing in 5 out of the 11 HIV QI indicators** (Jan 2015). **Figure 19 - 21** provide a summary of the findings.

Figure 19. Kenya: Percent CD4 baseline testing at enrolment into care, Isiolo County (Jan 2014 – Dec 2014)



Validation of data continues to be useful in collecting data errors in summary tools that are used to populate the national health Information summary data.

- **ASSIST supported USG implementing partners (*APHIA Plus Western, APHIA Plus Imarisha and APHIA Plus Coast)* in implementing and tracking NACS QI indicators** (Q2 FY15).
  - ASSIST supported a NACS mentorship meeting in Migori County under APHIA Plus Western (Jan 2015)
  - ASSIST conducted a NACS QI data validation exercise for Isiolo County Referral Hospital, Garbatula Sub district hospital and the comprehensive care clinic (Feb 2015)**.**
  - ASSIST noted that the Daily Activity Register (DAR) improvised black book at triage does not capture any anthropometric measurements for NACS, hence an assumption is made on the NACS data presented that all who go through the triage and have their names recorded in the black book must have received anthropometric assessment. ASSIST is working with the teams to find others ways of collecting the NACS data and see how this can inform register reviews
  - Some of the patients categorized as moderate acute malnutrition (MAM) and severe acute malnutrition (SAM) at triage and referred for management at the nutrition room did not reach the nutrition room, as seen in the validated data presented in **Error! Reference source not found. 2 0** and **Figure 21**.

Figure 20. Kenya: Percent HIV-positive MAM and SAM receiving food by prescription (both therapeutic and supplementary), Isiolo County (Jan 2014 – Dec 2014)

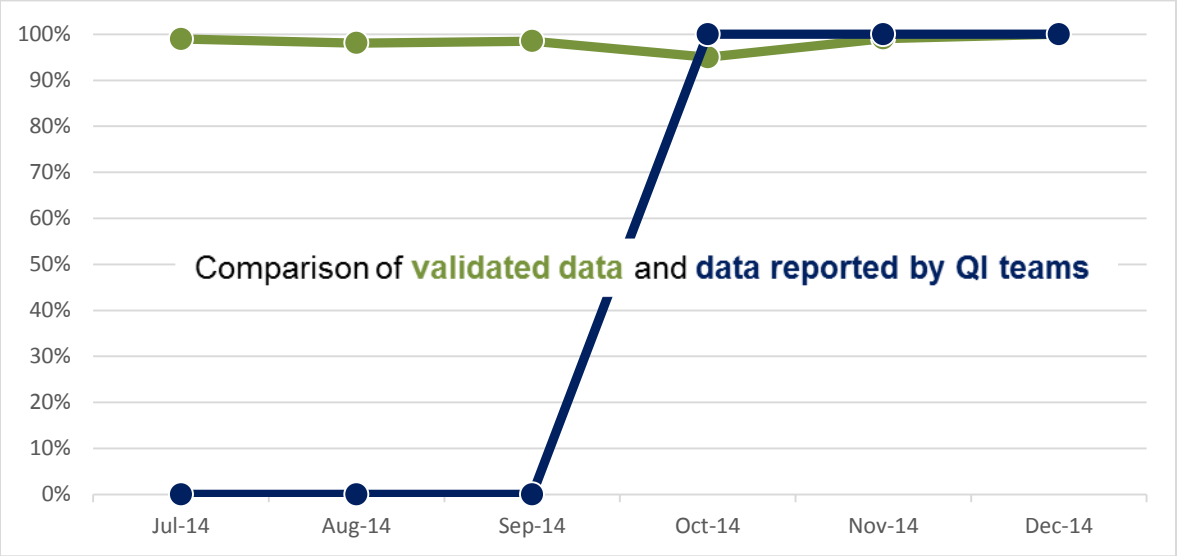
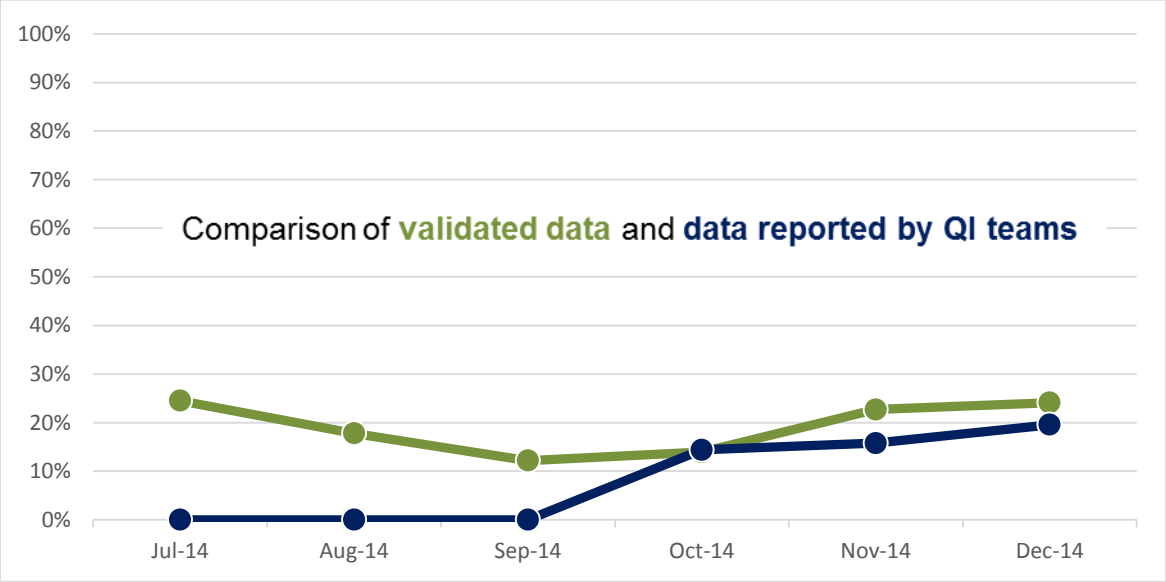


Figure 21. Kenya: Percent MAM and SAM at the CCC during the month, Isiolo County (Jan 2014 – Dec 2014)



- **During the PHFS learning session (Feb 16 – 17, 2015), ASSIST supported Kwale County to address:** HIV-exposed mother baby pairs receive appropriate nutrition assessment counseling and support at each visit; establish the HIV status of every pregnant women and every child under two years; improve retention of HIV-exposed mother baby pairs from ANC until 2 years of postnatal age; ensure HIV-exposed babies receive appropriate quality care at each stage as per guidelines.

Activity 4. OVC and child protection

Overview: ASSIST supports the MLSS&S through the DCS and the National Council for Children Services (NCCS) in strengthening the child protection system for improved service delivery. Key activities are the development and finalization of a national directory of child protection service providers, development and finalization of a referral tool for child protection service providers, finalization of the National Plan of Action

(NPA) for children, development and finalization of psychosocial support guidelines for vulnerable children, the review of Area Advisory Council (AAC) guidelines and manual, and finalization of child sector strategic plan.

The Kenya child protection system has had gaps, including the fact that Kenya has operated without a NPA for children since the last one lapsed in 2012. A national plan of action for children ensures interagency collaboration in planning, implementing and monitoring activities for children in line with the national vision 2030. The NPA is informed by 4 pillars (i.e., survival pillar which covers health indicators for children, the development pillar that focuses on education gains and overall child development, the participation pillar that enhances the child's capacity to participate at all levels of the project cycle to inform interventions that target them and the protection pillar whose indicators inform evidence of reducing violence against children and overall reduction of cases of exploitation, neglect , abuse and legal protection). The ministry is working on a child protection management information system that will provide a national framework for reporting on the four pillars. Secondly, Kenya does not have national psychosocial support (PSS) guidelines for vulnerable children and families. With PSS being the cross-cutting service in OVC programs, the development and institutionalization of PSS guidelines at the point of service delivery will ensure holistic child development and with thus promote child wellbeing. Thirdly, the AAC plays the crucial role of coordinating child protection and welfare programs within the government structure. The current AAC guidelines need to be reviewed to respond to the new governance structure in Kenya so that they can ensure counties are able to coordinate child protection activities at their level.

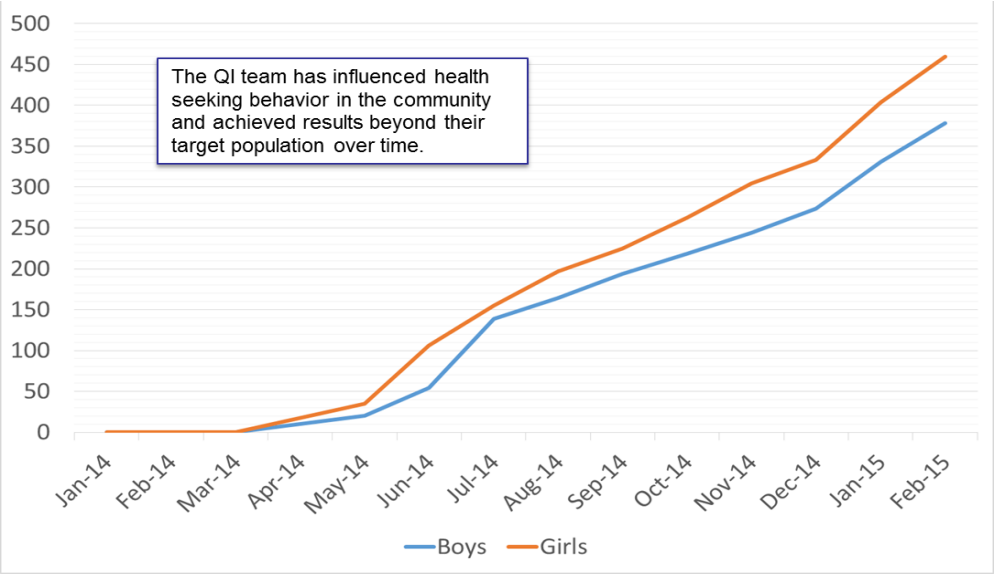
The existence of the NPA, AAC manuals and PSS guidelines will support the strengthening of the overall child protection system in the country, ensure better stakeholder engagement in service delivery for vulnerable children and enhance the role of government as the lead coordinating agency.

Accomplishments and Results:

- **Development and finalization of child protection directory.** ASSIST supported the development of the mapping tool, roll out of mapping in 45 counties. The stakeholder mapping was finalized in February 2015 and data entry is ongoing
- **Development and finalization of national referral tool for child protection finalized and disseminated** (Nov 2014). ASSIST supported the national council for children services (NCCS) and the Department of children services to develop and finalize the national referral tool for child protection. The tool was disseminated and distributed to the 47 counties.
- **Finalization of the National Plan of Action for Children***:* Conducted a stakeholder review on the draft NPA was held in February and March 2014, awaiting validation that will be done in May 2015.
- **Development and finalization of national psychosocial support guidelines.** ASSIST supported the Ministry to review draft PSS guidelines and prepare pre- test protocols for the guidelines**.** The review meetings were held in September and November 2014 and the final pretest draft shared with the ministry in January 2015.
- **Finalization of the child sector strategic plan:** ASSIST supported the Ministry to conduct a validation of the national child sector strategic plan (Dec 2015.
- **Two learning sessions were held for AMPATH plus, APHIA Plus Western Kenya and ICOP projects.** QI teams from Migori, Siaya, and Homa Bay counties participated in the learning session. The learning sessions were supported by ASSIST and held in March 2015. The ASSIST team provided technical support to the teams and coaches on core principles of QI including data management, documentation and QI principles.
- **ASSIST conducted a harvest meeting was held for QI teams in Coast Region** (Feb 2015). Twenty QI teams from Mombasa, Lamu, Taita Taveta, Kwale and Kilifi counties were represented. The essence of the harvest was to prepare the teams for APHIA project close out and document key lessons and best practices emerging from the QI teams experience. ASSIST also was able to transition the QI teams to the government in preparation for site takeover by the project that will replace APHIA Plus. Savings and Internal Lending Communities (SILC) and Village Saving and Loaning (VS&L) are scalable approaches to house hold economic strengthening, most QI teams reported seeing significant changes in household where the caregivers were members of these groups.

- **ASSIST teams conducted coaching and mentorship to the eight projects during the reporting period.** A lot of effort was implemented to ensure the partners adopt QI methodologies in OVC care and provided support to build their capacity to sustain the gains of their interventions over time. The coaching visits are jointly done with the partner level leadership and QI team coaches for each county. The AMPATH plus team in Uasin Gishu received two coaching visits in November 2014 and January 2015. The four QI teams in the county have made a lot of progress in their ability to respond to the needs of all children in the community. The involvement of the government community leaders in the QI teams have enhanced community participation in responding to the needs of vulnerable children.
- **At APHIA Plus Kamili, the Hope Valley QI team has been working with the community to promote community facility linkages.** The team had initially focused on 500 children supported by the project but has over time expanded their scope to reach out to all the children in the community. The change ideas include: Sensitizing caregivers in importance of health seeking behaviour, linking caregivers to National Health Insurance, negotiating with health facilities for fee waivers for needy cases and monitoring community facility linkages. Results are shown in **Figure 22**.

Figure 22. Kenya: Number of children linked to health services, HVFI - Nyandarua County (Jan 2014 – Feb 2015)



Activity 5. Maternal, newborn, and child health and reproductive health

Overview: Millennium Development Goals (MDGs) 4 and 5, concerning child and maternal mortality, are the two goals with the least progress made globally and in Kenya. While global, regional and national policies and strategies to improve MNCH exist and interventions to prevent maternal, neonatal and child deaths are available in Kenya, MNCH indicators remain unacceptably poor. Progress has been hindered by poor policy implementation and weak health systems, which do not engage with, or respond to, community needs. This results in poor access and utilization of preventive and curative health services. ASSIST aims to support low-cost, effective QI approaches that can address these challenges and provides QI TA to county governments and APHIAs to improve and strengthen maternal, neonatal, child health and reproductive health services in Kenya.

ASSIST's strategy is to apply a system approach to QI. The strategy focuses on a sample of sub-counties with a spectrum of facilities selected and developed as COE through which the QI is applied to generate change ideas that can be scaled up across the system.

Accomplishments and Results:

APHIA Plus Nairobi, APHIA Plus Imarisha

- **Monthly facility level mentorship was conducted at Mbagathi District Hospital to follow up on the MNCH and EMONC baseline assessment conducted after the QI training held in October 2014**
- **ASSIST conducted a QI orientation meeting with DANIDA supported facilities.** Following a request from the Isiolo County government ASSIST gave a brief orientation on the Model for Improvement and steps in QI to a group representing 10 healthcare facilities supported by Amref-DANIDA MNCH Project (Jan 13 -14, 2015).
- **Conducted orientation of refined QI indicators to selected facilities in January, 2015**. The eight selected coaches have been taken through the expectation of the QI coaching and the expected capacity support to be provided by Aphiaplus Imarisha and ASSIST.
- **Supported four CMEs for the QI coaches on setting up an improvement aim and situational analysis** (Feb – March 2015).
- **Initial data from all the seven facilities was collected and handed to ASSIST and APHIA Plus Imarisha through an agreed structure** (March 2015). Data validation was conducted for all MNH QI indicators and feedback given for three of the seven facilities in March.

Activity 6. Malaria

Overview: Malaria is the leading cause of morbidity and mortality in Kenya, with 25 million out of a population of 34 million at risk. The disease accounts for 30-50% of all outpatient attendance and 20% of all admissions to health facilities. An estimated 170 million working days are lost to the disease each year (MOH, 2001). Malaria is also estimated to cause 20% of all deaths in children under five (MOH 2006). The group most vulnerable to malaria infections are pregnant women and children under 5 years of age. ASSIST's improvement aims is to effectively support select high malaria burden counties to develop, test and adopt change ideas to improve the supply chain for malaria diagnostics and anti-malaria drugs.

The counties selected for malaria QI implementation are Busia, Siaya and Kakamega to apply QI principles to continuously identify and address performance gaps. The gaps identified with malaria distribution and usage included: mapping out and redistribution of county actors/stakeholders-equity of support, formation of robust malaria technical working groups (TWGs) at county level-pulling together of core partners with regular meetings, develop, test and adopt change ideas to improve the supply chain & case management, test and Implement QI approaches in selected high load facilities in the various counties. Some of the change ideas adopted by the malaria quality improvement teams in these select counties include, decentralization of distribution systems.

Accomplishments and Results:

- **County TWG in Siaya constituted and ready to conduct malaria improvement CMEs in the coming month.**
- **Six monthly Quality Improvement CMEs were held for high malaria caseload health facilities in Kakamega and Busia counties to promote peer learning and share progress of improvement projects** (Oct 2014 – March 2015).
- **Supported counties to hold monthly TWG meetings in Kakamega, Siaya and Busia** (Oct 2014 and March 2015)**.** Due to the TWG meetings, county governments have taken control of the malaria quality improvement activities and are now providing leadership among stakeholders.
- **ASSIST applied QI techniques in collaboration with Busia, Siaya and Kakamega counties and APHIA plus Western to improve the supply chain for malaria diagnostics and anti-malaria drugs within health facilities.** Overall, improvement was noted (**Figure 23** and **Figure 24**).

Figure 23. Kenya: Clinical malaria cases, Busia County (Jan 2014 – Dec 2014)

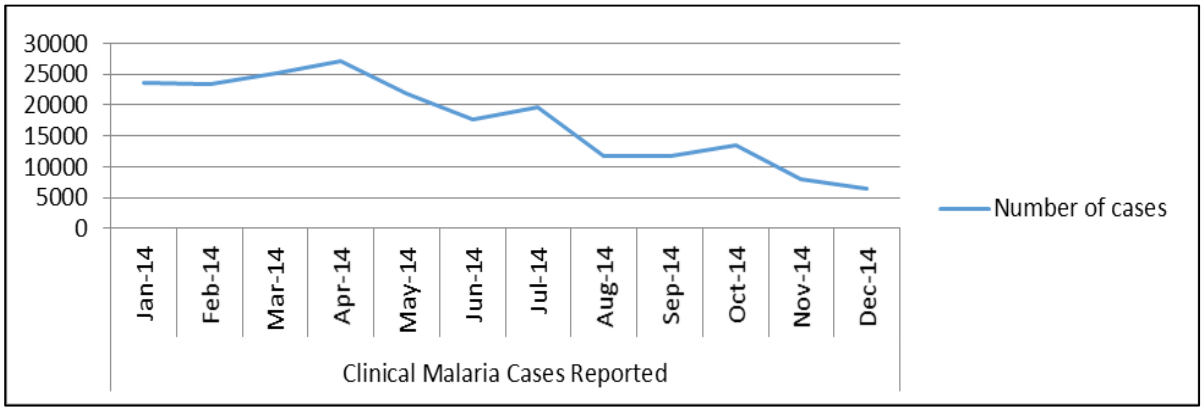
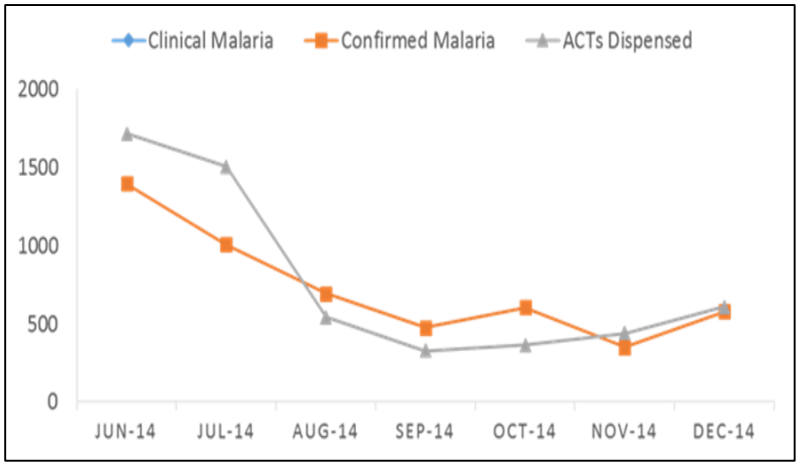


Figure 24. Kenya: Clinical and confirmed malaria cases, Teso North District Hospital (Jun – Dec 2014)



Change ideas

- Mapping out and redistribution of county actors/stakeholders- equity of support
- Formation of robust malaria TWGs at county level-pulling together of core partners with regular meetings
- Develop, test and adopt change ideas to improve the supply chain & case management
- Decentralization of distribution systems

Challenges and Remedies

- In APHIA Plus Imarisha, logistical limitations were a big issue. APHIA plus Imarisha is only supporting essential travel to the field.
- The accuracy of the data ASSIST has been receiving from the QI teams is wanting. Less than 50% had accurate data for retention. Most facilities had problems getting data for the retention indicator, this has to be done monthly to make it easy and less cumbersome. To address this, ASSIST has instituted quarterly data validation. We are also recruiting one additional personnel (part-time staff) to increase our M&E capacity.
- Some counties now have a requirement that all partners in the county must have a Memorandum of Understanding signed with them before conducting any activities in the county. A Memorandum of Understanding has been drafted and is awaiting approval and assent by the County Partnerships Committee.
- Redeployment of Sub-county Health management team who had been trained as coaches for the 14 facilities have been redeployed in Nairobi County. There is need to rapidly train the new sub-county health managers to facilitate coaching of the facilities. To address this, ASSIST has had to have carry out multiple one-day orientations of the new teams across the counties. Furthermore, after training the 32 counties as requested by the mission, we have been allowed to focus on fewer (8) for closer improvement mentoring. Sixty percent of our field QI advisors are spending time on focus counties, with 40% allocated to above-site mentorship of the implementing partners supporting the other counties. Our advisors can thus dedicated more time to the coaches.

- Facility staff rotation has also taken place disrupting Work Improvement Team functionality. To bring new members on board, intensified facility level mentorship will be conducted once the MOU with county is signed, facilities are conducting facility-based Continuing Medical Education (CMEs), and two county QI CMEs are planned for by end of the quarter.
- APHIA plus Nairobi-Coast with whom QI coaching was being done, is currently in the close-out phase, hence faces budgetary constraints and has now prioritized only key activities. They are, however, providing transport to facilities for mentorship visits if needed.

Improving Equity

ASSIST is striving to address gender imbalances and promote equity. Through the collection and analysis of sex-disaggregated data in the OVC program, the team has identified that boys' education performance in secondary school surpasses girls, and is currently conducting a root cause analysis to identify the underlying factors contributing to poorer performance among girls to further develop a targeted strategy to close gaps between girls and boys. Examples of specific actions that ASSIST took in Q1 and Q2 included identifying the lack of sanitary pads for girls as an issues thwarting improved education outcomes, and ASSIST responded by working with implementing partners to provide sanitary pads to girls. ASSIST also worked with local communities to respond to child marriage and female genital mutilation/cutting (FGM/C), which were identified in specific communities as issues leading to poorer outcomes among girls.

ASSIST supported improvement teams to work with the provincial administration and school management committees to reintegrate girls who had undergone FGM/C back into school and worked to get them scholarships. One quality improvement team also created a system to link girl students to female role models in the community, which has been very successful. To respond to the education issues affecting girls, improvement teams initiated kids clubs in schools that specifically work with girls and boys to respond to their needs and provide a supportive atmosphere for them. One improvement team also created a program in which school fees would be paid for the rescued girls, and there was a model adopted to ensure the community would be able to pay school fees on their own in the future.

Within VMMC improvement activities, the ASSIST Kenya team identified that boys who had undergone VMMC had dropped out in high rates in part due to the cultural norm that they were now men. The ASSIST Kenya team responded to this issue by working with community leaders and creating a mentoring program between male college students and boys undergoing circumcision, which contributed to a decrease in the dropout rates of boys.

Knowledge Management Products and Activities

- Blog on the gender strategies in addressing children's access to education and protection in Samburu County (see https://www.usaidassist.org/blog/supporting-communities-develop-sustainable-solutions-improve-welfare-girls-and-boys-kenya)
- Blog entitled "There is no end to education" (https://www.usaidassist.org/blog/there-no-end-education)
- ASSIST finalized the Community Health Quality Standards for Kenya for the Ministry of Health

Planned Activities Next Quarter: April - June 2015

Health: Follow up with intense QI support for high-volume facilities

Malaria: Busia County Malaria TWG meeting; Kakamega county sub-county based CMEs on malaria quality improvement; Siaya county Sub-county based CMEs on malaria quality improvement; continued monitoring of indicators to assess improvement at all levels

OVC: Finalize and launch the national plan of action for children; roll out pretest of draft PSS guidelines; support NCCS to review Area Advisory Council Manuals; provide support to USAID partners in mainstreaming QI in child protection and OVC programs

LESOTHO

Background

The Government of Lesotho (GOL) launched its National ART Program in November 2004. Since the national program was launched, the GOL's efforts to provide ART have been hampered by chronic shortages of staff due to high staff attrition rates and historically high costs of drugs used in ART. In recent years, the country has made significant progress in scaling up treatment for HIV and AIDS. The number of people on treatment has risen steadily since the onset of the national program in spite of service delivery gaps. A key problem still being encountered is that only a few of the children requiring therapy receive it.

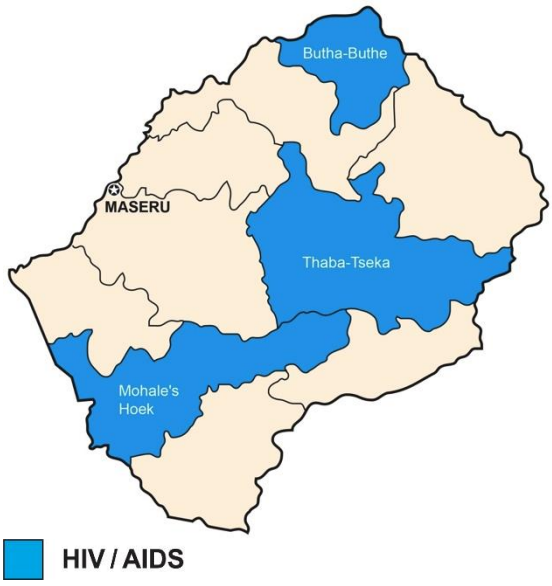
Since November 2013, the GOL has worked with the USAID ASSIST Project on the following areas:

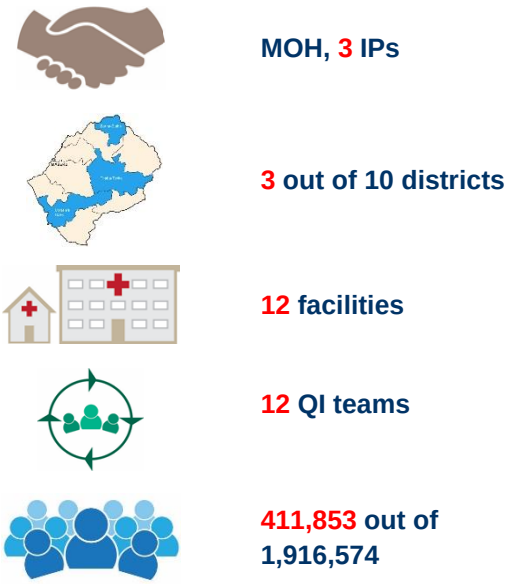
1. Development of a National Strategy for improving the quality of clinical services. This strategy is to be consistent with the PEPFAR Quality Framework
2. Strengthening of linkages between HIV testing and counseling (HTC), ANC, MNCH, HIV care and treatment, PMTCT, and home-based care (HBC) services
3. Improving the quality, uptake, and retention of services along the continuum of PMTCT care; and
4. Scaling up of quality improvement within integrated clinical services

Institutionalization/Sustainability Strategy

During the demonstration and the scale up phases of the project, ASSIST intends to develop District Health Management Team (DHMT) members to serve as district level improvement coaches who will be able to support national scale-up and sustain improvements. ASSIST will transition in 2016 to a reduced support-mode to allow the MOH, DHMTs and implementing partners to lead improvement efforts. With a national quality improvement strategy in place, and improvement coaches at each level of the health system, ASSIST anticipates creating a sustainable environment for implementing quality improvement approaches to eliminate new infections among children and reduce AIDS-related maternal deaths.

Scale of USAID ASSIST's Work in Lesotho





Program Overview

What are we trying to accomplish?	At what scale?
1. Strengthening linkages and retention to improve clinical services	
• Eliminate new infections among children through implementation of evidence-based high impact interventions • Reduce AIDS-related maternal deaths through implementation of evidence-based high-impact interventions • Increase ART coverage by establishing linkages to ART programs, and home-based care • Improve patient knowledge, skills, and self-confidence to manage their HIV as a chronic condition through implementation of the Chronic Care Model	• Districts: 3 out of 10 • Facilities in selected districts: 4 facilities in each of the 3 pilot districts (12 facilities in total, 27% of all facilities in the 3 districts) • Population served: 411,853 (Population of 3 districts)

Improvement Activity

Accomplishments and Results by Activity (October 2014 – March 2015)

Activity 1. Strengthening linkages and retention to improve clinical services

Overview: A key constraint to the MOH being able to effectively and efficiently provide HIV care and treatment services has been the vertical manner in which these services are rendered, despite policies and strategies to do so otherwise. Given the limited resources the MOH has, it would be good to enhance linkages between the MOH and other Government departments in its attempts to provide health care services, particularly in the remote parts of the country.

The PHFS program is a prime example of the need to have linkages strengthened as a means of ensuring that the objective of “keeping mothers and babies alive” is met. Collaboration is needed between PMTCT program management, nutrition program management, laboratory services, pharmaceutical services, transport department, DHMTs, facility staff, and the MOH transport office to ensure that services are provided in a proper and equitable manner.

During the current phase of program implementation, the role of ASSIST is mainly to provide TA for capacity development for quality improvement within the MOH. The entry point for this role is the PHFS program. It is expected that ASSIST’s role shall expand to include a more intensive involvement in providing quality improvement TA to the general HIV and AIDS Program.

Retaining exposed infants and their mothers in care enables HIV-free infant survival and enables systems to keep mothers alive, even in the face of infection. This is made possible by enabling mothers and babies to access the services which contribute directly to survival, such as ARVs for the mother and infant and young child feeding for the baby, and ensuring that mothers and babies are seen together in the same clinic and therefore have their care linked together.

ASSIST’s work will provide numerous benefits to the non-ASSIST system in terms of its ability to improve care on a large scale as a consequence of successful implementation of the PHFS retention strategy (as defined/described in the preceding paragraph). Firstly, the QI principles and processes being employed in the program are applicable across the entirety of the functions of the MOH. Secondly, the establishment of QI teams within the various facilities within which the program is being implemented will have the effect of creating a core group of QI practitioners that the MOH will have as a resource.

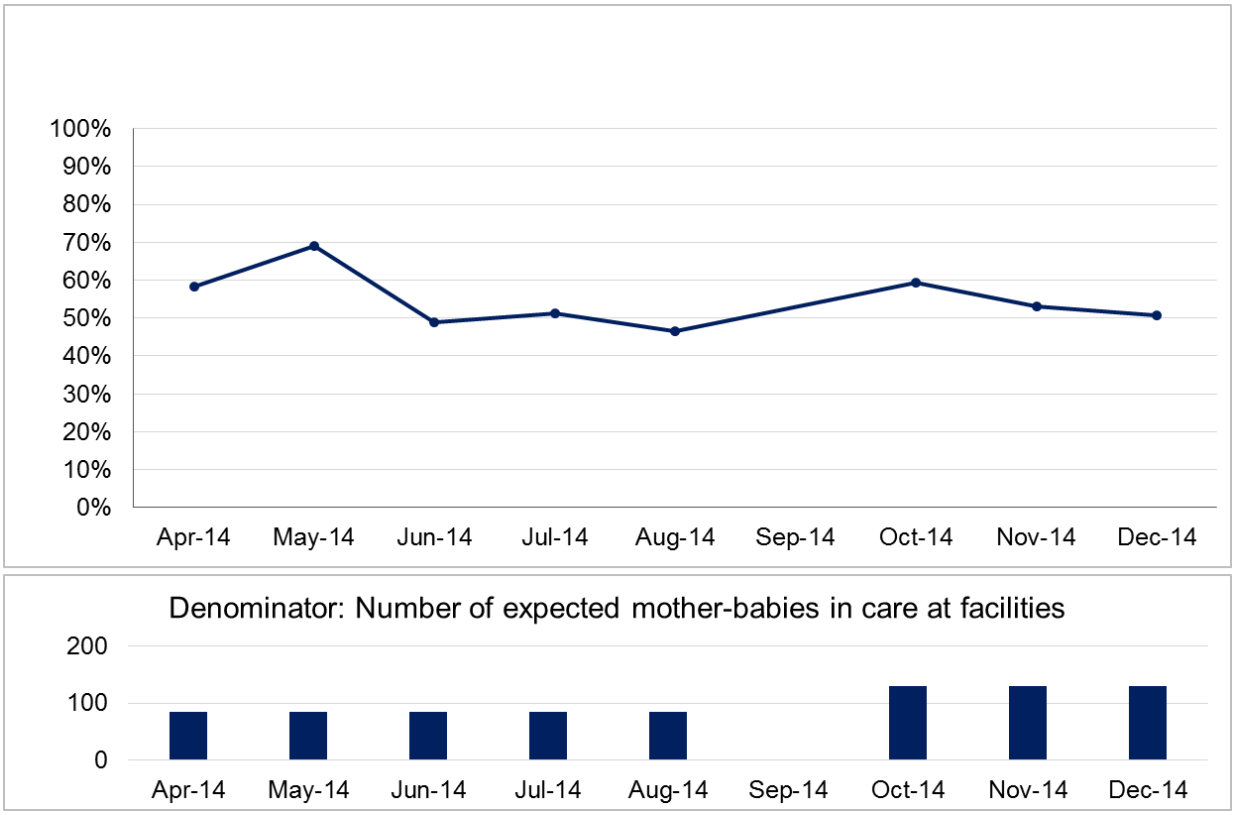
Accomplishments and Results:

- **To improve the retention of mother-baby pairs in care, ASSIST continued to provide technical support to district coaches to ensure that the standard package for mother-baby pairs is being implemented at all 12 health facilities (which includes ART for the mother, Cotrimoxazole or Nevirapine for her baby, infant and young child feeding counseling, nutrition assessment, and an appointment for the next visit)** (Nov 2014 – March 2015). The ASSIST Chief-of-Party was an

integral part of assigning the coaching and mentoring teams. In addition, he provided valuable input to the coaching visits, particularly regarding data quality and the development of data quality tools. The QI teams in the facilities managed by the Christian Health Association of Lesotho are much more motivated than are those in the GOL facilities.

- **The results in Figure 25 show the retention of mother-baby pairs in four facilities of Thaba-Tseka District.** Although there has not been continuous improvement, ASSIST-supported coaches have ensured that improvement teams in these facilities have received training in using registers in these facilities to collect data. Furthermore, staff who are part of improvement teams in Thaba-Tseka's facilities are the only ones implementing changes in facilities and while they are away from the facility, remaining staff were not trained to sustain changes to improve mother-baby pair retention.

Figure 25. Lesotho: Percentage of eligible mother-baby pairs who receive ART and under 5 care each month, 4 sites, Thaba-Tseka District (April 2014-Dec 2014)



.

- **Improvement in quality of data:** Improvement of data quality is one of the main improvement aims defined for Lesotho in the context of the PHFS program. As a way of improving upon the quality of the data collected by the different PHFS pilot sites ASSIST is working to ensure that data quality is being addressed in detail during all coaching visits. Site improvement teams have been trained on the proper use of registers in the MCH, ANC, and ART clinics at every quarterly learning session.

Improvement in Key Indicators

Activity	Indicators	Facility	Baseline	Date	Last Value	Date
Retention of mother-baby pairs	**% of eligible mother-baby pairs who receive ART and under 5 care each month**	**MOHALE'S HOEK DISTRICT**				
		Nts'ekhe Hospital	No Data	No Data	Validating Data	Dec-14

Activity	Indicators	Facility	Baseline	Date	Last Value	Date
	under 5 care each month					14
		Morifi Health Center	58%	Apr-14	Validating Data	Dec-14
		Lithipeng Health Center	58%	Apr-14	Validating Data	Dec-14
		Mofumahali-Oa-Rosari Health Center	89%	Apr-14	83%	Dec-14
		BUTHA-BUTHE DISTRICT				
		Butha-Buthe Hospital	No Data	Apr-14	9%	Dec-14
		Linakeng Health Center	74%	Apr-14	9%	Dec-14
		Motete Health Center	89%	Apr-14	6%	Dec-14
		St. Paul Health Center	79%	Apr-14	95%	Dec-14
		THABA-TSEKA DISTRICT				
		Health Division	71%	Apr-14	59%	Dec-14
		Mohlanapeng	100%	Apr-14	60%	Dec-14
		Paray	44%	Apr-14	77%	Dec-14
		Linakeng	75%	Apr-14	5%	Dec-14
Data quality	**% of mothers and babies whose data are accurately and completely filled by the end of the month**	**MOHALE'S HOEK DISTRICT**				
		Nts'ekhe Hospital	No Data*	No Data*	Validating Data	Dec-14
		Morifi Health Center	No Data*	No Data*	Validating Data	Dec-14
		Lithipeng Health Center	No Data*	No Data*	Validating Data	Dec-14
		Mofumahali-Oa-Rosari Health Center	No Data*	No Data*	49%	Dec-14
		BUTHA BUTHE DISTRICT				
		Butha-Buthe Hospital	No Data*	No Data*	100%	Dec-14

Activity	Indicators	Facility	Baseline	Date	Last Value	Date
		Linakeng Health Center	No Data*	No Data*	100%	Dec-14
		Motete Health Center	No Data*	No Data*	100%	Dec-14
		St. Paul Health Center	No Data*	No Data*	82%	Dec-14
		THABA-TSEKA DISTRICT				
		Health Division	No Data*	No Data*	55%	Dec-14
		Mohlanapeng	No Data*	No Data*	9%	Dec-14
		Paray	No Data*	No Data*	89%	Dec-14
		Linakeng	No Data*	No Data*	Validating Data	Dec-14
Routine Visits	**% of mother-baby pairs who attend under 5 and ART clinics and receive the standard package of services**	**MOHALE'S HOEK DISTRICT**				
		Nts'ekhe Hospital	No Data*	No Data*	Validating Data	Dec-14
		Morifi Health Center	No Data*	No Data*	Validating Data	Dec-14
		Lithipeng Health Center	No Data*	No Data*	Validating Data	Dec-14
		Mofumahali-Oa-Rosari Health Center	No Data*	No Data*	100%	Dec-14
		BUTHA BUTHE DISTRICT				
		Butha-Buthe Hospital	No Data*	No Data*	100%	Dec-14
		Linakeng Health Center	No Data*	No Data*	100%	Dec-14
		Motete Health Center	No Data*	No Data*	100%	Dec-14
		St. Paul Health Center	No Data*	No Data*	82%	Dec-14
		THABA-TSEKA DISTRICT				
		Health Division	No Data*	No Data*	88%	Dec-14
		Mohlanapeng	No Data*	No Data*	92%	Dec-

Activity	Indicators	Facility	Baseline	Date	Last Value	Date
						14
		Paray	No Data*	No Data*	93%	Dec-14
		Linakeng	No Data*	No Data*	100%	Dec-14

Challenges and Remedies

- The period under review coincided with the advent of preparations for the national elections in Lesotho. This impacted the project's ability to attain its objectives given that the schedule for coaching and mentoring could not be adhered to because transport was not always available when required (under the implementation arrangements agreed to, MOH was to provide transport for all site visits).
- In addition, there was still the notion of limited access to so-called "Reform Districts" (e.g., Botha-Buthe and Mohale's Hoek) where Partners in Health is running the pilot of the MOH reform program.
- Given the shortage of human resources persistently plaguing the MOH, program managers are regularly away in meetings, trainings, or on official trips and are therefore not always able to participate as expected in ASSIST activities. ASSIST tried to address this problem by agreeing with the head of the Quality Assurance/Quality Improvement Unit that ASSIST would go ahead with project activities where possible and then brief program managers on the progress.
- Recently a new Minster of Health has been appointed in Lesotho, who is very supportive of quality improvement, which bodes well for the ASSIST work going forward.

Improving Equity

ASSIST has identified gender-related issues affecting PHFS health outcomes including high rates of adolescent pregnancy and its negative impacts on girls who then have to drop out of school. The team has also identified the potential for involving male partners and mothers-in-law in the services related to the retention of mother-baby pairs in treatment.

Knowledge Management Products and Activities

- PHFS knowledge exchange visit to Uganda (Feb 7-14, 2015)

Planned Activities Next Quarter: April - June 2015

- Develop a detailed plan-of-action for the institution of a QI program for the HIV and AIDS Department of the MOH
- Undertake first learning and sharing session under the auspices of the ART QI Program
- Initiate capacity building program for the quality assurance (QA)/QI Unit in the MOH
- Continue quarterly coaching visits for PHFS
- Finalize appointment of two Quality Improvement Advisors
- Finalize project vehicle purchase

MALAWI

Background

Malawi's HIV prevalence rate is 10.6%, translating into one million people in the country living with HIV. More than half (58%) of those infected are girls and women. The pandemic continues to infect 10,000 people a year, and approximately 46% of new infections occur among young people aged 15-24 years. The disease impacts thousands of families, leaving a growing number of children affected by HIV and AIDS.

In recent years, there has been rapid expansion of efforts to provide services for OVC. At times, the increase in funding for orphans and vulnerable children has resulted in a focus on high coverage and outputs, with insufficient attention to the outcomes. Recently, stakeholders have realized that more attention should be given to desired outcomes and recognized the need to provide quality services that make a difference in the lives of vulnerable children.

In 2009 HCI, with support from the USAID Mission in Malawi and PEPFAR, supported the Ministry of Gender, Children, Disability, and Social Welfare (MOGCDSW) to develop quality standards to guide the delivery of services provided to vulnerable children in Malawi. The Ministry endorsed the standards and recommended their scale-up. Starting in FY13, with support from the USAID ASSIST Project, the MOGCDSW has mobilized 151 villages through 10 community QI teams to be involved in improvement work in two districts, Balaka and Mangochi. The teams developed specific improvement aims and changes to test to improve the prevailing situation and child outcomes.

ASSIST Malawi's work supports the five PEPFAR agendas, particularly the agenda of promotion and protection of human rights for all and other vulnerable populations. The project is promoting sustainable changes to be introduced in existing local government structures to support the welfare of children. In FY15, USAID ASSIST's activities are aligned to the Country Development Cooperation Strategy (CDCS, 2013-2018) Development Objective 1: Improving social development and increasing sustainable livelihoods. ASSIST's activities are also aligned to the Malawi National Strategic Plan (2011-2016) that endorses Voluntary Medical Male Circumcision (VMMC) as an important HIV prevention strategy for the country to avert new HIV infections.

Institutionalization/Sustainability Strategy

At the national level, the MOGCDSW has ensured that improvement and use of the OVC standards is incorporated in the OVC NPA for the scale-up and spread of its use among various social service providers in the country. ASSIST regularly provides updates on improvement work and shares results and lessons observed in the two districts. ASSIST also supports the Ministry to conduct coaching and peer-to-peer learning sessions of the teams implementing improvement work.

At district and community levels, ASSIST has mentored District Social Welfare Offices, Child Protection Workers, Health Surveillance Assistants, Agriculture Extension Officers, primary school teachers, Group Village Heads, and Area and Village Development Committee representatives in continuous quality improvement processes to enhance their capacity to lead and manage improvement work at community and district levels.

At the household level, the project is empowering teams to identify vulnerable households in their catchment area and facilitate available linkages to existing government-led programs such as subsidized fertilizer and farm inputs program (FISP), cash transfer programs for the poorest households, Village Savings and Loans, communal irrigation farming, kitchen gardens, and public works activities. These linkages are being done to support the household economic wellbeing of vulnerable families in the two districts.

Scale of USAID ASSIST's Work in Malawi

MOGCSW, MOH, 3 USG partners (VMMC)

9 out of 28 districts

151 communities

10 QI Teams (OVC)

HIV/AIDS (including OVC)

30,000 out of 13.6 million

Program Overview

What are we trying to accomplish?	At what scale?
1. Improve quality of services for vulnerable children and their families	
• Improve the percentage of vulnerable children aged 6-17 years with improved school performance by strengthening family and community support and involvement in children's education in Balaka and Mangochi districts in Malawi • Increase the percentage of vulnerable families engaged in household economic strengthening activities that are linked to existing community support systems • Build the capacity of 10 communities to identify evidence-based, effective changes for spreading to new communities • Build the capacity of District Social Welfare Officers in selected districts as a core team to facilitate subsequent OVC program improvements • Build the capacity of the newly identified USG awardee in quality improvement to expand quality social services in selected districts	Southern Region: Balaka and Mangochi districts 5/9 Traditional Authorities in Mangochi and 2/8 Traditional Authorities in Balaka Communities: 5 old and 5 new rural communities Catchment population: 173,399 out of 316,748 total population of Balaka District 155,912 people out of 803,602 total population of Mangochi District
2. **Improve the quality and safety of Voluntary Medical Male Circumcision (VMMC)**	
• Build the capacity of PEPFAR partners and facilities to implement continuous quality improvement in VMMC service delivery	Districts: 7/28 districts Blantyre, Thyolo, Chiradzulu, Mulanje, Phalombe, Zomba, and Chikwawa districts

Improvement Activity

Accomplishments and Results by Activity (October 2014 – March 2015)

Activity 1: Improve quality of services for vulnerable children and their families

Overview: HIV and AIDS is affecting many families, particularly children, due to either death of parents or chronic illnesses within the families. Without parental protection, vulnerable children are exposed to neglect, abuse, and exploitation, and lack access to basic necessities and services such as education. Due to numerous challenges facing vulnerable children in communities, schools, and households, evidence has shown that while the enrolment rate in the first two grades is high for both girls and boys, only 20-26% of the children complete the entire primary school cycle (UNICEF, 2010). Children leave school for a myriad of reasons, including poverty, failure to pass from one class to the next, long distances to school, early pregnancies, poor quality of education, the school environment, overcrowded classrooms, and absence of sports and play areas in school. The MOGCDSW with support from ASSIST is coaching 10 community teams in two districts to identify barriers for vulnerable children to access quality education services. The results in education performance of children in the targeted schools are continually shared with OVC implementing partners at national as well as district levels to ensure that other organizations working with vulnerable children in the district and at national levels would emulate some of the effective changes leading to improvement. At the national level, organizations that usually participate in the meetings include Save the Children, UNICEF, and REPSSI.

Accomplishments and Results:

- **Facilitated an integrated QI and gender training for five new communities from the targeted districts** (March 3-6, 2015). A total of 39 (29 male and 10 female) community members, government extension workers, volunteers, and local leaders were trained in the use of the OVC standards using QI techniques**.** Participants were drawn from three community-based organizations (CBOs) in Mangochi and two CBOs in Balaka. The five communities (Malembo, Mpeya, Chapola, Kadyalunda and Chanthunya) were trained to use quality improvement techniques to improve the quality of life for vulnerable children and their households. ASSIST and the District Social Welfare Officer for Balaka District facilitated the training.
- **Facilitated coaching sessions for five community teams in two districts** (Dec 10-12, 2014). To ensure that the community teams continue to support vulnerable children in schools to improve their performance, the MOGCDSW and ASSIST conducted joint coaching sessions to five community teams to follow up on the progress of the following key activities:
  - Progress on development of child protection policies for the CBOs
  - Ensuring that teams start collecting data on OVC household economic wellbeing
  - Compiling some effective changes for improving school performance for vulnerable children
  - Introduce a format to manage cases of vulnerable children at community level to ensure that all cases identified follow proper channels to resolve them and that the team tracks their progress.
- **Conducted two quarterly learning sessions** (Nov 3-6, 2014 and March 9-13, 2015). In the first quarter of FY15, ASSIST and the MOGCDSW facilitated a learning session bringing together primary school teachers, school heads, and agriculture extension workers**.** During the learning session, teams were taught some of the evidence-based changes that could lead to improvement in education performance among vulnerable children in schools. Objectives of the learning sessions included to review baseline information collected for the second improvement aim on household economic strengthening, review progress, and share lessons from the targeted schools. During these learning sessions, ASSIST and the MOGCDSW started compiling all the changes that were reported to be effective in leading to improvements in education performance among vulnerable children. **Table 1** summarizes some of the changes tested in the first five communities. The teams were also taken through a gender integration training to build their capacity to integrate gender in improvement work. Twenty-nine males and nine females participated in the November 2014 learning session, and 26 males and 11 females participated in the March 2015 learning session.
- **Five teams supported 740 vulnerable households with various services** (Oct 2014 – March 2015). USAID ASSIST supported the

and Loans (VSLs), public works programs, and other non-governmental organizations' supporting farmers in the targeted communities.

Table 1. Malawi: Changes tested by the Community QI teams to address the identified challenges in 14 targeted primary schools

Improvement aim: Improve the percentage of vulnerable children passing end-of-term examinations in 14 primary schools in Balaka and Mangochi districts		
Primary Drivers	**Secondary Drivers**	**Changes tested**
High absenteeism among pupils and teachers	Lack of interest for school among guardians and children	**Using volunteer mothers:** Toleza and Kabango primary schools used volunteer mothers to follow pupils that are absent during the week in the community and have discussions with their parents and the children. The women created a link between the school head and guardians. They followed up with guardians to encourage the guardians to give more time to the children for studying, encouraging children to go to school all the time and to have interest in the child's education. **Supervision and monitoring attendance of teachers by school heads-Mpapa Primary School:** The head teacher, deputy head teacher and mentor teacher supervised the teachers as they were teaching. Before the supervision change, all teachers were notified of the supervision initiative and a schedule was produced allocating the supervisors to classes every week. School staff meetings were held every Friday. During the meetings, challenges were discussed, where hard working teachers were praised and the others were encouraged. This was tested from January- September 2014. At another school, the class teachers were allocated to other classes to supervise their colleagues
Inadequate infrastructure	Lack of community involvement in school activities and progress	**Improvising teaching guides for teachers:** It took the teachers' initiative to make available school teaching materials for all teachers. The school had no materials for teaching and their efforts to get materials from their division were futile as they were only given one teaching book. The teachers then called for a meeting with the guardians where challenges were discussed and they agreed to contribute to school materials. All guardians contributed, and the amount was used to photocopy teaching materials borrowed from other schools. **Introducing class competitions:** From September to December 2014, standards 5-8 pupils first competed in classes on spelling, English language, and arithmetic. Best performers were then selected to compete with pupils from other classes. **Introducing math clubs:** From October – December 2014, mathematics clubs were introduced at the school for pupils from standards 3-8. They were divided into two groups the junior group (3-4) and the senior group (5-7). The club met every Friday for two hours where the pupils were engaged in different activities such as math completions, math exercises, solving mathematical problems. **Biweekly tests and revisions:** Kankao Primary School and the QI team agreed that the school will be giving pupils bi-weekly tests and revise the tests afterwards to ensure pupils were ready for end-of-term examinations.
Cultural norms,	Negative cultural beliefs, norms and	**Reward system:** Children were given weekly tests and were promised rewards if they performed well in the tests. The results were announced

Improvement aim: Improve the percentage of vulnerable children passing end-of-term examinations in 14 primary schools in Balaka and Mangochi districts		
Primary Drivers	**Secondary Drivers**	**Changes tested**
beliefs and practices	practices at household and community level influencing attitudes towards education	during assembly sessions, and the best performers were rewarded in front of all pupils. **Using female role models to encourage girl children:** Female professionals working in key government positions or holding key positions in private sector organizations were asked to provide motivational talks to pupils from standard 5-8, every term. They invited the in-charge of Namwela Health Centre, the manager for Chipiku, and a well-educated prominent businessman from Jan-Sept 2014. **Using children's corner centres:** The QI team revived four already existing Children's Corners and established nine new children's corners in five villages (Budu, Nkwalula, Matupa, Kachiuma and Mase villages). They identified four caregivers per Children's Corners and oriented them on their roles and how to manage sessions at the centers. They also linked them with primary school head teachers, and guardians to create a link of the child activities at school and at home. Some of the activities the caregivers facilitated included playing games, performing drama, discussions on sexual reproductive health topics, child protection, child rights, quiz competitions, and reviews of school work.

Results:

- Each of the five community QI teams presented their progress results for the improvement aim they were working on that quarter which was improving education performance for vulnerable children. The teams were able to share results across four academic terms for children passing end of term exams. **Seven of fifteen primary schools recorded improvements in performance of pupils at the end of fourth term exams**. The seven primary schools tested the following changes to improve the performance of children in end of term exams: Using mother groups to follow children's attendance in school every week; introducing school competitions linked to a reward system for children that competed well in science and math quizzes; forming clubs such as math and science clubs in schools; establishing children's corner centers; and introducing biweekly tests and revisions in school. **Figure 26** shows the seven primary schools that have shown improved average pass rates in at least two terms (Term 1, October-December 2013; Term 2, January-March 2014; Term 3, April-July 2014 and Term 4, which is the first term in the academic calendar of October –December 2014).
- One of the community teams, the Nkata QI team, had three of their four primary schools showing improvement in performance of end-of-term exams in at least two terms (April-July 2014 and October-December 2014). At Lusalumwe school, the passing rate for term 1 (October-December 2013) was 31%, and by term 4 (October-December 2014), it was 50%. In Nakanyanja school, in term 1 the passing rate was 56%, and by term 4 it was 55%. At Mpapa school, the passing rate was 46%, and by term 4 it was 73%. **Figure 27** shows the percentage of pupils passing over the four terms in these three schools.

Figure 26. Malawi: Average percentage of pupils passing exams, 7 primary schools in 4 terms, Balaka and Mangochi Districts (Dec 2013 – Dec 2014)

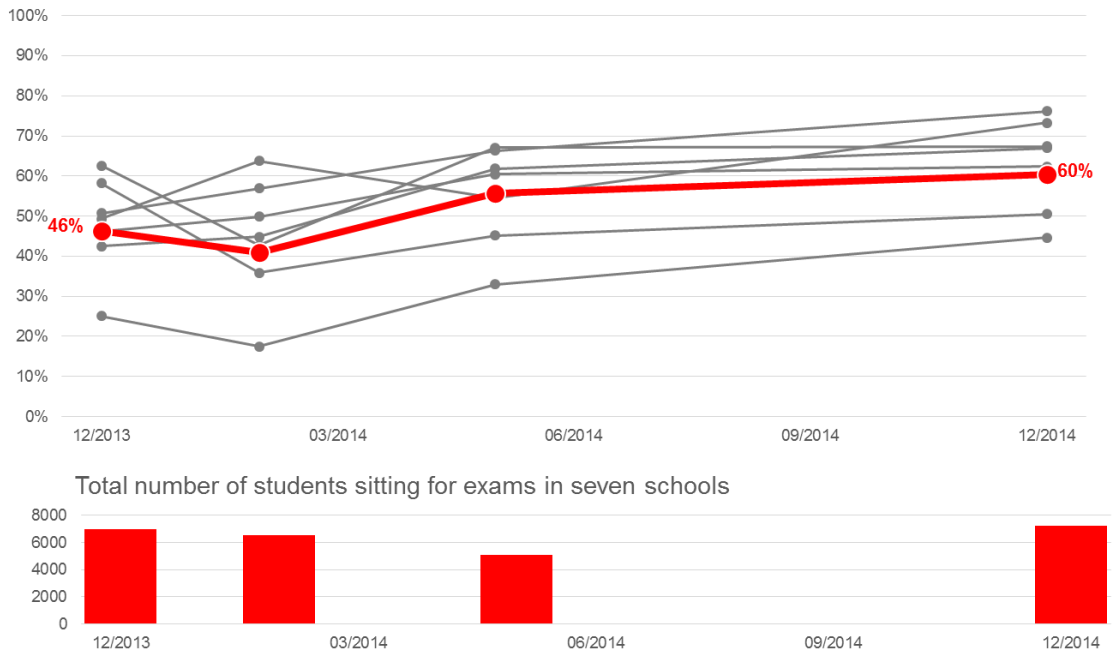
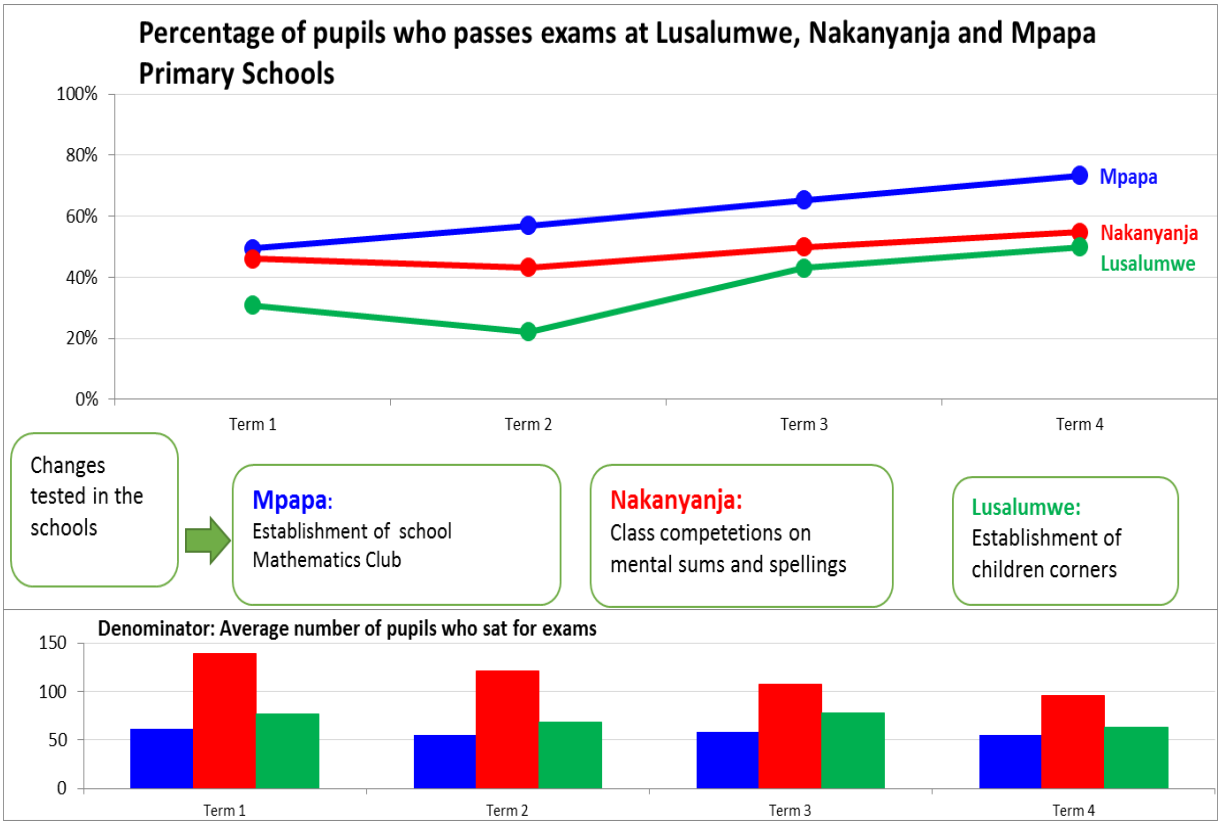


Figure 27. Malawi: Percentage of pupils passing exams on 4 terms, 3 primary schools under Nkata QI team (Dec 2013 – Dec 2014)



- **Additional results:**
  - 25 vulnerable households are participating in livestock production in Mangochi District
  - 253 vulnerable guardians have been linked to VS&L groups
  - In the two districts, 20 VS&L groups have been formed, supported by the targeted five teams
  - 7 vulnerable families have been linked to the existing government social cash transfer program for support of educational needs of vulnerable children in their families
  - 171 vulnerable families were linked by the community improvement teams to the Farm Income Diversification Program (EU funded program to support food security and natural resources)
  - 64 vulnerable families were oriented on the importance of having a kitchen garden for the nutritional support for vulnerable children, and the families established the gardens in their homesteads
  - 29 OVC households participated in cash-for-work activities
  - 59 vulnerable families were sensitized by the QI teams to use the available wetland areas in their communities, and they established the gardens to complement their annual harvests
  - 49 vulnerable guardians were oriented on the importance of participating in income generation activities, and these guardians started some small-scale businesses such as selling clothing, food stuff and firewood
  - 24 OVC guardians were linked to other NGOs/CBOs
  - 5 women were linked through the QI team to family planning services through the Health Surveillance Assistant in the team
  - 89 OVC guardians that are HIV-positive were identified and linked to existing support groups in the area and also linked to other household economic strengthening activities
  - 2 children were identified as HIV-positive by one QI team through interviews and discussions with guardians to find out the status of vulnerable children in the communities. The two children were identified as already on ART and the team counselled the guardians on timely collection of antiretroviral virus (ARV) drugs and importance of adhering to treatment. These children are also followed up by volunteers from the area to assess their health wellbeing.
  - 30 OVC guardians were trained in nutrition at the community level through linkages with the Community Health Surveillance Assistants to boost the dietary intake of vulnerable children at the household level

Activity 2: Improve the quality and safety of VMMC services, processes and systems in targeted facilities in 7 districts

Overview: The USAID ASSIST Project is supporting the MOH at various levels to build the capacity of VMMC service providers in quality improvement methodologies to sustain the quality and safety of VMMC services. ASSIST is working with the MOH at national, district, and facility levels to ensure that service providers have competencies at all levels to facilitate continuous quality improvement efforts thereby maintaining and sustaining quality and safe VMMC services in Malawi. ASSIST will also support the MOH to facilitate capacity building of national trainers to integrate QI methods into the VMMC training so that all service providers not only learn about the technical skills related to VMMC but also how to change processes to ensure quality VMMC care is delivered. ASSIST, supported by VMMC partners, will provide three- and five-day QI trainings for coaches and providers, respectively. An estimated number of 25-30 participants will be trained in each QI training session. The purpose of the training is to introduce key QI concepts, teach participants in formulating improvement aims, system analysis and defining quality gaps, identifying quality measures, processes for regular data collection, data presentation and interpretation, and planning and implementing changes. The training will be facilitated by several USAID ASSIST personnel. The PEPFAR partners will cater for the trainees' per diems, transportation, and venue and accommodation costs.

Accomplishments and Results:

- **USAID ASSIST participated in a USAID External Quality Assessment exercise** led by USAID to the seven VMMC districts being supported by Jhpiego, PSI, and BLM in the Southern Region (Feb 10-19, 2015).

- **ASSIST presented the FY15 work plan to the Director of the MOH HIV and AIDS Department and to the National VMMC Technical Working Group to update them on the upcoming improvement activities.**
- **Presented the baseline CQI assessment tool at the Technical Working Group in Lilongwe** (Feb 25, 2015).

Challenges and Remedies

- Even though teams are working to improve some service areas, there are other interventions that need service delivery partners to work in collaboration with ASSIST to solve some of the challenges. These include infrastructure in schools (which also is influencing poor quality of education, skills, and knowledge), psychosocial support, and agricultural extension services to reach the targeted villages. Due the inadequate number of agriculture extension workers and services, some of the targeted villages are not reached because an agriculture extension worker is responsible for a large catchment area. ASSIST is planning to collaborate with new USAID service delivery awardee (s) to support us in supporting the community QI teams with some of these challenges. We are also helping teams to identify local resources and incorporate some schools in the District Development projects budgets.
- During this reporting period, Malawi experienced devastating flooding in 17 out of 28 districts of the country. ASSIST targeted districts of Balaka and Mangochi were also heavily affected and were declared disaster districts by the President of Malawi. The project observed that some targeted schools were being used as emergency camps for flood victims, which disturbed classes during the rainy season. Some schools experienced drops in numbers of children attending school because the school was geographically located on the other side of a big river whose bridges were washed away, and parents were stopping their children from going to school until it was safe for children to cross such rivers. As a result, the general performance of children in seven out of the 14 primary schools showed a decline. ASSIST is working with agriculture extension officers as part of the QI teams to help vulnerable families understand the importance of planting trees in their gardens to ensure there is ground cover to reduce the impact of flooding in the two districts.

Improving Equity

The USAID ASSIST Project provided mentoring and training in how community teams can assess the gender differences in targeted interventions during a learning session. USAID ASSIST Project partner Women Influencing Health Education and Rule of Law., LLC (WI-HER)'s Improvement Specialist, Elizabeth Romanoff Silva, supported the Malawi team to integrate gender into improvement work. Ms. Silva led a gender integration session and a gender integration training during the learning session and built the capacity of the teams to integrate gender in improvement PDSA cycles. ASSIST shared the sex-disaggregated data for all the targeted 14 primary schools, and reviewed gender differences in performance, attendance, and completion of primary education in upper primary school classes. Teams were encouraged to analyze the gender differences in the areas identified and brainstorm the causes and look for solutions to improve the situation. There are many cultural influences in these two districts, particularly the cultural belief that girls are not meant to go further in their education. As a result, girls are not encouraged to work hard, and when they fail a number of times in one class, they become frustrated and tend to drop out.

The QI teams have responded to these issues, including by linking with volunteer mother groups who follow up girl children who are absent from school every week to have discussions with the parents on the importance of school and share some stories about some girls who have excelled in school and are doing very well. ASSIST will continue to identify and respond to gender issues to improve education and health outcomes for vulnerable girls and vulnerable boys.

Knowledge Management Products and Activities

- Two case studies on improving education performance at Kankao and Nkata Primary schools were developed and are being edited.

Planned Activities Next Quarter: April – June 2015

OVC:

- Train coaches and selected District Social Welfare Offices in partnership with the new OVC awardee
- Provide coaching support to the communities targeted by the USAID awardee
- Enhance the capacity of coaches in new targeted communities through collaboration with the new awardee on OVC and community care and prevention to facilitate the spread of OVC improvement work
- Enhance the competence of teachers in selected communities through collaboration with other USG awardees in education

VMMC:

- Conduct baseline assessment of VMMC sites in 7 districts
- Conduct QI training of partners and sites providing VMMC services
- Conduct quarterly learning session

MALI

Background

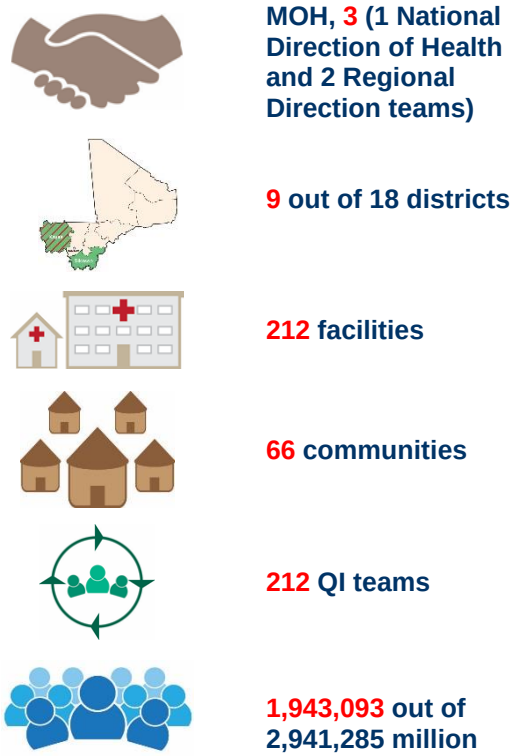
The USAID ASSIST Project began working in Mali in May 2013 building on the work of HCI. Upon the request of the MOH to USAID Mali, ASSIST is working to: 1) improve evidence-based maternal and newborn care and post-partum family planning services at facility and community levels in eight target districts in the Kayes Region; and 2) improve delivery of evidence-based interventions to reduce anemia among pregnant women and infants at facility and community levels in the Bougouni District of Sikasso Region. The project is also supporting implementation of the World Health Organization (WHO) Safe Childbirth Checklist (SCC), including postpartum family planning, in a sample of maternities.

The project activities are significantly contributing to USAID Mali call for "Ending Preventable Child and Maternal Deaths" by improving quality of services offered, promoting compliance to norms and standards for MNCH services locally, and building the capacity of stakeholders at national and regional levels for sustainability and institutionalization of quality improvement.

Institutionalization/Sustainability Strategy

ASSIST Mali works strategically at the country level by working in partnership with the MOH and other partners on the implementation and scale-up of integrated MNCH and nutrition intervention packages that are centered on the needs of patients and their families and communities (i.e., "people-centered care"). ASSIST Mali is committed to ensure that all proposed activities be designed and implemented in collaboration with key in-country partners, in particular USAID-funded implementing partners working on MNCH and nutrition/water and sanitation (WASH). Along these lines, the project has achieved two major results: 1) the integration of the post-partum family planning (PPFP) parameters into local information system registers; and 2) the elaboration and validation at the regional level of a technical note to allow other skilled providers to administer MgSO4 for the prevention of eclampsia before referring the women to the next level of care.

Scale of USAID ASSIST's Work in Mali



Program Overview

What are we trying to accomplish?	At what scale?
1. Improvement of essential obstetric and newborn care (EONC) intervention at facility and community levels in Kayes Region	
• Improve delivery of high-impact evidence based maternal and newborn care and post-partum family planning services at facility and community levels in target districts (Kayes Region)	• Regions: 1 out of 9 • Districts: 8 out of 8 in 1 region • Facilities in selected districts: 87% (202 out of 233) • Catchment population in facilities served: 1,858,319 out of 2,373,968
2. Improvement of anemia prevention and control activities in Bougouni District (Sikasso Region)	
• Improve delivery of evidence based interventions to reduce anemia among pregnant and infant at facility and community levels in Bougouni District (Sikasso Region)	• Regions: 1 out of 9 • Districts: 1 out of 10 in 1 region • Facilities in selected districts: 100% (42 out of 42) • Communities: 56 out of 506 • Catchment population facilities served (42 health areas): 567,317 out of 567,317 • Catchment population communities served (4 health areas): 84,774 out of 567,317

Improvement Activity

Accomplishments and Results by Activity (October 2014 – March 2015)

Activity 1. Improvement of EONC intervention at facility and community levels in Kayes Region

Overview: In Mali, while the maternal mortality ratio (MMR) has declined modestly over the past ten years, it remains unacceptably high at 368 deaths/100,000 live births (DHS 2012-2013). Obstetric hemorrhage is still one of the main causes of maternal death. Skilled birth attendance reported at 59% can significantly reduce maternal mortality due to hemorrhage, with the application of evidence-based interventions such as AMTSL. In the country, ANC is being provided to only 74% of women (at least one visit), only 47% pregnant women receive tetanus toxoid vaccines, and 41% are informed on danger signs during pregnancy and delivery (DHS 2012-2013). The improved ANC validated at national level is facing a lot of challenge for implementation. USAID ASSIST will contribute to improve the implementation in the project impact areas.

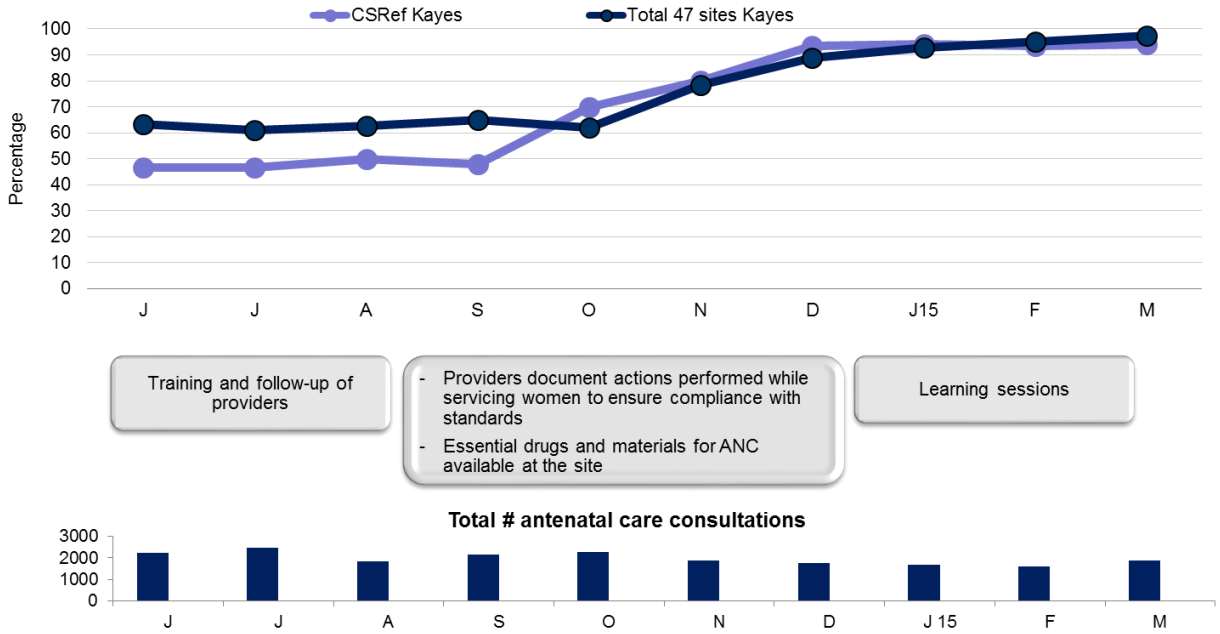
Mali has a high total fertility rate (TFR) of 6.1 and a low contraceptive prevalence rate (CPR) of 10 percent for modern methods (DHS 2012-2013). The unmet need for FP in Mali is 26% among all women of reproductive age (DHS 2012-2013). While postpartum family planning with Healthy Timing and Spacing of Pregnancies (HTSP), lactational amenorrhea method (LAM) and transition to other modern FP methods is included in Mali's Policies, Norms, and Protocols (PNPs), there is still need to emphasize on the role of longer-acting methods in helping women to achieve appropriate pregnancy spacing.

The roll-out of the essential newborn care (ENC) package is yet to reach expected results in terms of quality of services provided for newborn after delivery. Newborn resuscitation remains a big challenge for providers besides the training received and the need for improving this service is critical. USAID ASSIST will work with the National Direction of Health and partners to improve the competence of providers on newborn resuscitation at facility level and contribute to refine the package.

Accomplishments and Results:

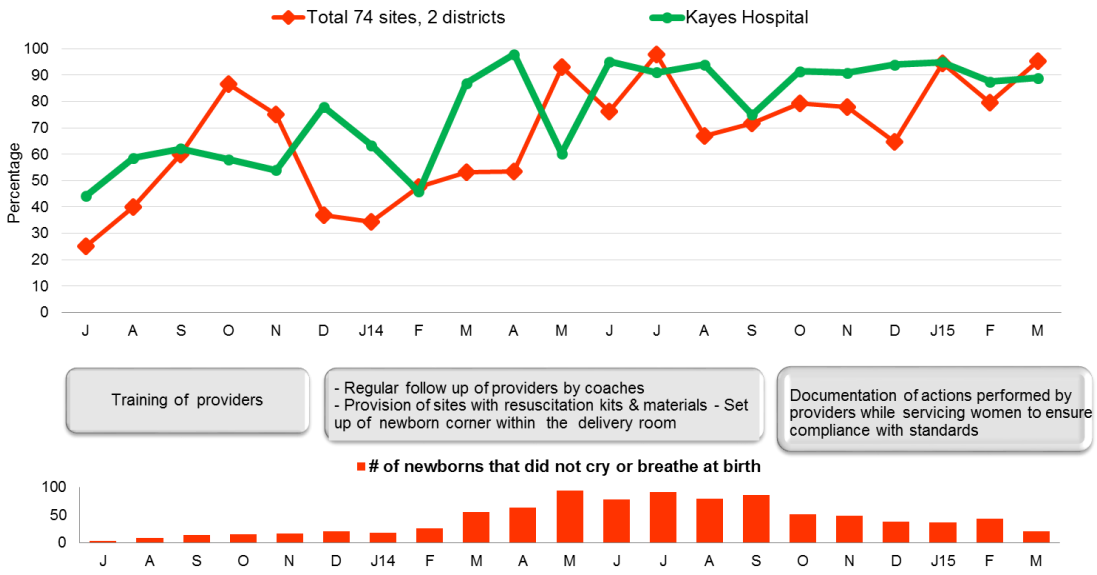
- **Provided technical support to strengthen and scaled up EONC best practices and spread package (AMTSL, ENC, PEE, HBB, ANC, and PPFP) in 187 facilities in 7 out of 8 districts of Kayes** (Oct-Dec 2014). To maintain provider compliance norms for appropriate life-saving maternity care at the facility level, USAID ASSIST continued to build the capacity of 18 district coaches/trainers and 599 health providers to ensure that deliveries, newborn care, and postpartum care are implemented and met the requirements in all targeted facilities. MOH regional trainers and ASSIST facilitated the training sessions.
- **Provided support for coaching visits in 155 facilities of 6 out of 8 districts of Kayes** (Nov – Dec 2014). To increase delivery of appropriate lifesaving maternity care within facilities, USAID ASSIST continued to provide support to QI teams to ensure that standard care during the antenatal period (birth preparedness, ITP, iron folic acid, danger signs), delivery (using AMTSL and ENC), and immediate postpartum counseling and or services (post-natal care within two days of child birth; offering family planning) are implemented at all sites. Ten regional and 18 district coaches in addition to project technical staff were involved in these visits. In three districts (Kayes, Diema, Yelimane) 91QI teams were coached and follow-up visits were conducted with 178 providers to make sure they were using the skills obtaining during the training on improved ANC. Sixty two QI teams were followed on AMSTL/ENC, PE E and PPFP in the Nioro, Bafoulabe, Oussoubidiagna districts.
- **Provided TA for the learning sessions and identification of best practices on ANC and HBB for 133 sites in 5 out of 8 districts** (Jan-March 2015). To increase the number of pregnant women in the targeted sites benefiting from preventive, screening, and curative care during antenatal visits, ASSIST provided TA to 133 QI teams to implement changes and learn lessons that will allow the scale up of best practices in the region. Learning sessions were facilitated by the ASSIST team and regional coaches. Both are helping QI teams to evaluate the implementation of proposed changes and determine lessons to be included into the best practices list. Providers (279) participated in the learning session on ANC and Helping Babies Breathe (HBB) during this period.
- **Result: Increase in delivery of preventive care systematically by providers during ANC by March 2015** (**Figure 28**).

Figure 28. Mali: Compliance rate for preventive care during antenatal period, 47 sites, Kayes District (June 2014 – March 2015)



- **Result:** Increase compliance to essential newborn care at facility level from July 2013 to March 2015 (**Figure 29**).

Figure 29. Mali: Percentage of newborns successfully resuscitated, 74 sites, 2 districts (July 2013 – March 2015)



Activity 2. Improvement of anemia prevention and control activities in Bougouni District (Sikasso Region)

Overview: Mali's under-five mortality rate remains high at 95 deaths per 1000 live births (DHS 2012-2013). With 38% of Malian children under five stunted and 26% under-weight (DHS 2012-2013), under-nutrition is a key underlying cause of death that needs to be addressed. Currently, nutrition and nutrition sensitive activities are national priorities for the country and nutrition issues are being addressed by different actors primarily focused on case management, promotion, and prevention. The current nutrition national guideline is promoting an integrated nutrition/WASH package of services, but few anemia prevention and control activities are being implemented. Eight out of ten (85%) children suffer from anemia in Mali, a condition which increases child mortality, impairs physical and cognitive development, and has long term impacts on individual and even national economies. USAID ASSIST is providing technical assistance to the MOH Division of Nutrition and its partners to develop and implement a package of services regarding anemia control and prevention at both facility and community levels.

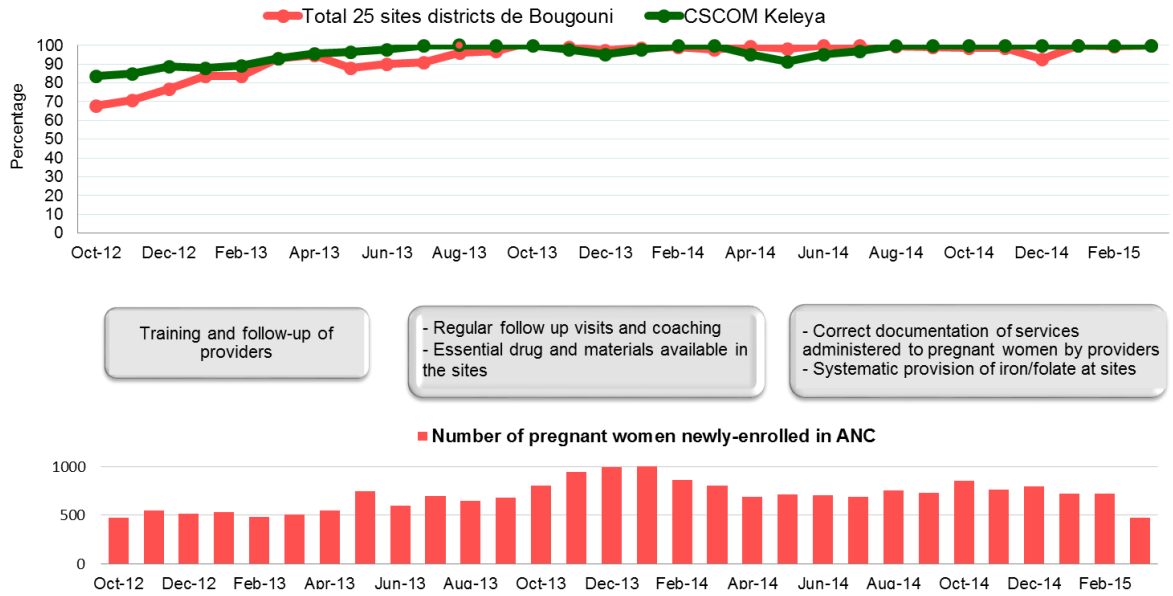
Accomplishments and Results:

- **Provided technical support to strengthen and scaled up anemia prevention and management best practices in 25 facilities in one of 10 districts in the Sikasso Region** (Oct-Dec 2014). To maintain compliance to anemia prevention and management standards by providers at the facility level, ASSIST continued to build the capacity of district coaches/trainers and health providers to ensure that pregnant women and children under five from the targeted zones are reached with the provision of iron, deworming and Vitamin A as well as counseling for appropriate diet, hygiene and sanitation. The MOH district trainers and the ASSIST team were the facilitators of the sessions at the district level. Forty-eight community health workers were trained in November 2014 on anemia prevention messages, screening of pregnant women and children under five at the community level, and referral to the health center. With the scale-up of the intervention in 20 new communities, an additional 512 members were trained in the anemia prevention package.
- **Provided support for coaching visits in 25 facilities of one of 10 districts of Sikasso Region** (Nov 2014 - March 2015). To increase the quality of anemia prevention and case management services within facilities and communities, USAID ASSIST continued to provide support for QI teams and community committees to ensure that standard care is being implemented in all sites during the antenatal period and immediate postpartum period. Two regional coaches and 15 district coaches in

addition to project technical staff were involved in these visits. Coaching visits at the community level involved 100 of 128 committees.

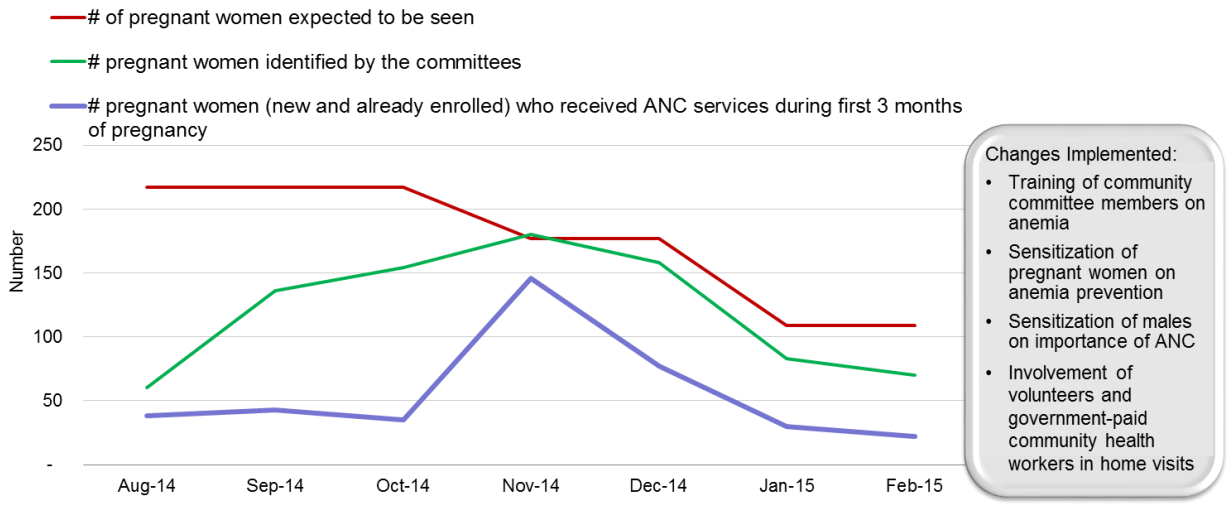
- **Provided TA for learning sessions and identification of best practices on anemia prevention and management in 25 sites in one district and 24 community committees** (Dec 2014 – Jan 2015). To increase the number of pregnant women in the targeted sites benefiting from preventive, screening and curative care during their antenatal visit and to improve delivery outcomes, ASSIST provided technical assistance to 24 community committees to implement changes and learn lessons that will allow the scale-up of best practices in the district. Learning sessions were facilitated by the USAID ASSIST team and district coaches who are helping committees to evaluate the implementation of proposed changes and determine lessons to be included into the best practices list. Three learning sessions were implemented with 279 participants to identify lessons learned and validate best practices to scale up in new sites.
- **Result: Increased the proportion of pregnant women in ANC receiving iron supplements/folic acid** (**Figure 30**)

Figure 30. Mali: Percentage of new pregnant women enrolled in antenatal care who received iron/folate, 25 sites (Oct 2012 – March 2015)



- **Result: Increased the proportion of pregnant women identified by the community committees that have the first ANC visit in the 1St quarter of pregnancy by February 2015 (Figure 31).**

Figure 31. Mali: Results from community committees in 24 villages in Bougouni (Aug 2014 – Feb 2015)



- Community committees in villages contribute to the recruitment of women and their awareness to get antenatal care at health centers in their first trimester.
- Because of this contribution, the number of women who had access to antenatal care increased in the health centers.

Improvement in Key Indicators

Activity	Indicator	Baseline (Nov 2009)	Last value (March 2015)
Improvement of EONC intervention at facility level in Kayes Region	Provider compliance to 3 key AMTSL norms	0% 17 sites	99% 165 sites
	PPH rate	1.2% 17 sites	0.18% 165 sites
	Provider compliance to ENC norms	39% 17 sites	98% 165 sites
	Provider compliance to PEE diagnostic standards by providers	25% 17 sites	95% 38 sites
	Provider compliance to PEE treatment standards	0% 17 sites	90% 38 sites
	Percentage newborns with successful resuscitation	25% (June 2013) 17 sites	89% 74 sites
	Provider compliance to antenatal care standards	40% (June 2014) 17 sites	95% 93 sites
Improvement of EONC intervention at community level in Diema district (Kayes Region)	Number of new pregnant women enrolled this quarter	0 10 sites	173 (July 2014) 26 villages
	Number of women who received at least 1 home visit	0 10 sites	310 (July 2014) 26 villages
	Number of women who adopted at least elements of birth preparedness	0 10 sites	147 (July 2014) 26 villages
Improvement of anemia prevention and control activities in	% pregnant women for whom pallor and/or hemoglobin are checked at ANC visits	0% (Jan 2013)	98% 25 sites

Activity	Indicator	Baseline (Nov 2009)	Last value (March 2015)
Bougouni District ((Sikasso Region - Mali)	Percentage of pregnant women who received good counseling on how to prevent anemia during ANC visits	0% (Jan 2013)	99% 25 sites
	Percentage of new mothers who immediately breastfeed after birth	27% (Jan 2013)	95% 25 sites
	Percentage of new pregnant enrolled in antenatal care received iron / folate	68% (Jan 2013)	99% 25 sites
Increasing access to ante natal care for pregnant women thanks to community members	Number of pregnant women identified by committee members	0 (Oct 2013)	841 (Aug 2014 - March 2015) 24 villages
	Number of pregnant women receiving ANC visit during the first quarter of their pregnancy	0 (Oct 2013)	391 (Aug 2014 – March 2015) 24 villages

Indicators requested from USAID ASSIST by the USAID Mali Mission

N	Indicators	Target	Achievement	Comments
	MATERNAL AND CHILD HEALTH			
1	**Number of USG-supported facilities that provide appropriate life-saving maternity care**	**270**	**208**	ASSIST is working in 8/8 districts of Kayes region implementing MNCH/FP activities and 1/10 districts in Sikasso for nutrition. The district of Kita which is new will be included with MNCH activities and more health centers will be covered by the end of the year to achieve this target.
2	**Percent of deliveries in health facilities using AMTSL and ENC**	**100%**	**99%**	ASSIST is working in 6 districts on the integrated AMTSL/ENC package in Kayes since 2009, the mature technical content has been expanded in 2 others districts so the target for the project became high to achieve quality results
	Numerator: number of deliveries in health facilities using AMSTL and ENC in the 6 districts		**7052**	
	Denominator: Total number of deliveries in health facilities in the 6 districts		**7089**	
3	**Number of babies who receive post-natal care within two days of child birth in USG-supported programs**	**6420**	**5944**	Through the ENC and HBB works in the 6 districts of Kayes ASSIST is collecting this data from health centers for deliveries which followed the quality criteria based on national norms and standards. Data is a compile per health center through the existing health management information system (HMIS)
	Number of boys		2913	
	Number of girls		3031	

N	Indicators	Target	Achievement	Comments
4	**Number of newborns not breathing at birth who were resuscitated in USG-supported programs**	**90**	190	For HBB ASSIST has worked in 2 districts since 2014 and achieved the target higher. The project is scaling up the intervention in 6 others districts this year.
	FAMILY PLANNING AND REPRODUCTIVE HEALTH			
5	**Percentage of USG-assisted service delivery sites offering FP counseling and or services**	**100%**	**100%**	All facilities covered by the project in Kayes are offering post-partum FP counseling as recommended by the norms and standards
	Numerator: number of USG assisted service delivery sites providing FP information and /or services		**183**	
	Denominator: number of SDPs planned to receive USG assistance over life of project		**183**	
6	**Number of new users of modern family planning methods among women between 15-49 years age**	**2285**	6392	These data are taking into account only women in postpartum period which is the focus of the project for quality improvement
7	**Number of additional USG-assisted CHWs providing FP information and/or services during the year**	**NA**	88	The project is working in partnership with MCSP project to include ASCs into the follow up activities for FP uptake at community level
	NUTRITION			
8	**Number of households with soap and water at a hand washing station used by family members in USG supported programs**	**NA**		The project has integrated WASH activities only in FY15 in addition to nutrition anemia program. The data for this indicator will be reported in Q2. The project is working with PHN and others partners in order to define the data to be reported and avoid duplication.
9	**Number of children under five who received vitamin A from USG-supported programs**	**6850**	**6894**	All children received for preventive and cases management activities at the 25 health center (CSCOMs) and CSREF benefit from systematic Vit A supplementation.
	Number of boys		3413	
	Number of girls		3481	
10	**Number of people trained in child health and nutrition under USG supported program**	**175**	**201**	ASSIT is organizing training and refresher sessions for providers on anemia prevention and management.
	Number of Men		82	
	Number of Women		119	
11	**Number of children under five reached by USG supported nutrition programs (anemia prevention and management)**	**16838**	**20487**	Children under five and their mothers are receiving counseling and cases management on anemia in the 25 sites.

N	Indicators	Target	Achievement	Comments
	Number of boys		10142	
	Number of girls		10345	
			HEALTH	
12	**"Number of policies and guideline documents developed or updated with USG assistance"**	**NA**	**1**	Advocacy tools for nutrition "Profiles Mali" updated to include new data for nutrition and priorities through the SUN activities.
13	**Percentage of providers complying with national guidelines/standards for labor and delivery visits at USG-supported facilities**	**100%**	**98%**	Within the 208 facilities working with the project 98% of all providers are complying with the norms and standards regarding labor and delivery visits.
	Numerator: Average number of task completed in compliance with national guidelines/standards for labor and delivery visits		360	
	Denominator: The total number of task in the national guidelines/standards for labor and delivery visits		368	

Challenges and Remedies

- **Lack of systematic provision of MgSO4 by trained providers within the system**. ASSIST is continuing advocacy activities and negotiation with the Division of Reproductive Health for the revision of the national standard to allow the provision of first dose of Mg SO4 by trained providers before transferring the women to the upper level for eclampsia management.
- **Frequent turnover of key personnel at the Kayes Regional Health Directorate**. Train all new key personnel (supervisors, managers and responsible for planning) on QI approaches to facilitate the management of activities by Kayes regional team.
- **Acquisition of missing equipment at health center level for quality implementation**. Continue advocacy activities with ASACOs and partners to facilitate the procurement of missing equipment for health centers in order to be in compliance with norms and standards.
- **Difficulties in the implementation of key recommendations from partners meetings.** Continue work with regional team members to include these recommendations into different partners' scopes of work in order to facilitate their implementation.
- **Some of the district coaches in Kayes are less motivated to participate in improvement activities**. Work with head of district health team to find out local solution for this issue and integrate as much as possible team work within the districts.
- **Conflict of agenda with national level activities (Immunization days, Ebola, others campaigns).** Integrate the project activities into regional planning process and use regional road map for follow-up of implementation at district level.
- **Lack of equipment for Hemoglobin measure in health center**: Work with UNICEF and others partners to seek funding for procurement of hemoglobin for health centers and continue to advocate with ASACOs to also contribute to this investment.
- **Insufficient learning capacity of some providers (matrons, ASCs).** Some of the providers did not have the capacity to assimilate the training module, so the project will try to simplify the tools for this level and provide more practical training for these cases.
- **No data collected from private clinic and rural maternities in Bougouni**. The project will discuss this issue with the head of the district health team in Bougouni if these structures are under their supervision and if the existing staff in these structures are trained and can be included into project activities.

Improving Equity

The project is continuing to collect sex-disaggregated data during training and service provision at the facility and community levels (see USAID indicators table), and also sex-disaggregated child health indicators. In Q3 a training of project staff on gender will be organized to strengthen staff capacity for gender analysis and inclusion into project activities. Analysis conducted in Q1 and Q2 identified no significant difference between men and women or boys and girls regarding access to services. Upcoming activities in Q3 will help with the identification of gender-related gaps and to promote equity.

Knowledge Management Products and Activities

A dedicated staff person was hired in December 2014 for the project to facilitate the documentation of project activities and identification of KM products per technical content. A draft of KM activities and products has been developed and shared among the team in March 2015. Training on KM is planned in May 2015 with technical assistance of HQ and regional teams. In addition, the development of complementary messages on anemia prevention and management is in process to help communities and health centers with the sensitization activities and increase their knowledge of anemia.

ASSIST is planning on producing the following products:

- Set of counseling cards in French and local language on anemia prevention
- Additional job aids on anemia management for health providers
- Radio messages in French and local language to sensitize communities on anemia prevention and care-seeking for anemia for pregnant women and children under five

Planned Activities Next Quarter: April - June 2015

Bamako:

- Organize a national workshop on improvement of health care quality (approaches and practices in Mali)
- Participate into national working groups on MNCH and nutrition to facilitate integration of key QI activities within existing mechanisms or processes at national and regional levels
- Participate in evaluation and/or assessment organized under the national working groups on nutrition/WASH or MNCH for strategies or policies' review

Bougouni:

- Continue capacity building and follow up of providers of the health centers and community committees members in Bougouni (refresher training, coaching visits, work environment, etc.)
- Organize the second validation meeting of data of health centers and community committees in Bougouni and Sikasso
- Organize regional meeting for data validation for all health facilities every six months with the SISR
- Organize learning and best practices sessions for QIT teams of facilities and community groups
- Participate in nutrition coordination activities at regional level in Sikasso Region

Kayes:

- Continue follow up and integrated coaching visits in the six districts regarding AMSTL/ENC, PEE, HBB, PPFP and ANC practices in collaboration with districts health teams and regional team.
- Organize best practices sessions for PE/E, HBB, PPFP and ANC at district and regional level
- Organize refreshment training session on PEE, PPFP, for all providers in the 6 target districts (Kayes, Yelimane, Diema, Nioro, Bafoulabe, Oussoubidiagnan)
- Train CHW (RC ASC ATR) and community leaders on behavior change communication (BCC) techniques and community ANC package in Diéma
- Organize a quarterly capacity building and monitoring meeting with district and regional managers
- Implement Safe Childbirth Checklist activities in Kayes

MOZAMBIQUE

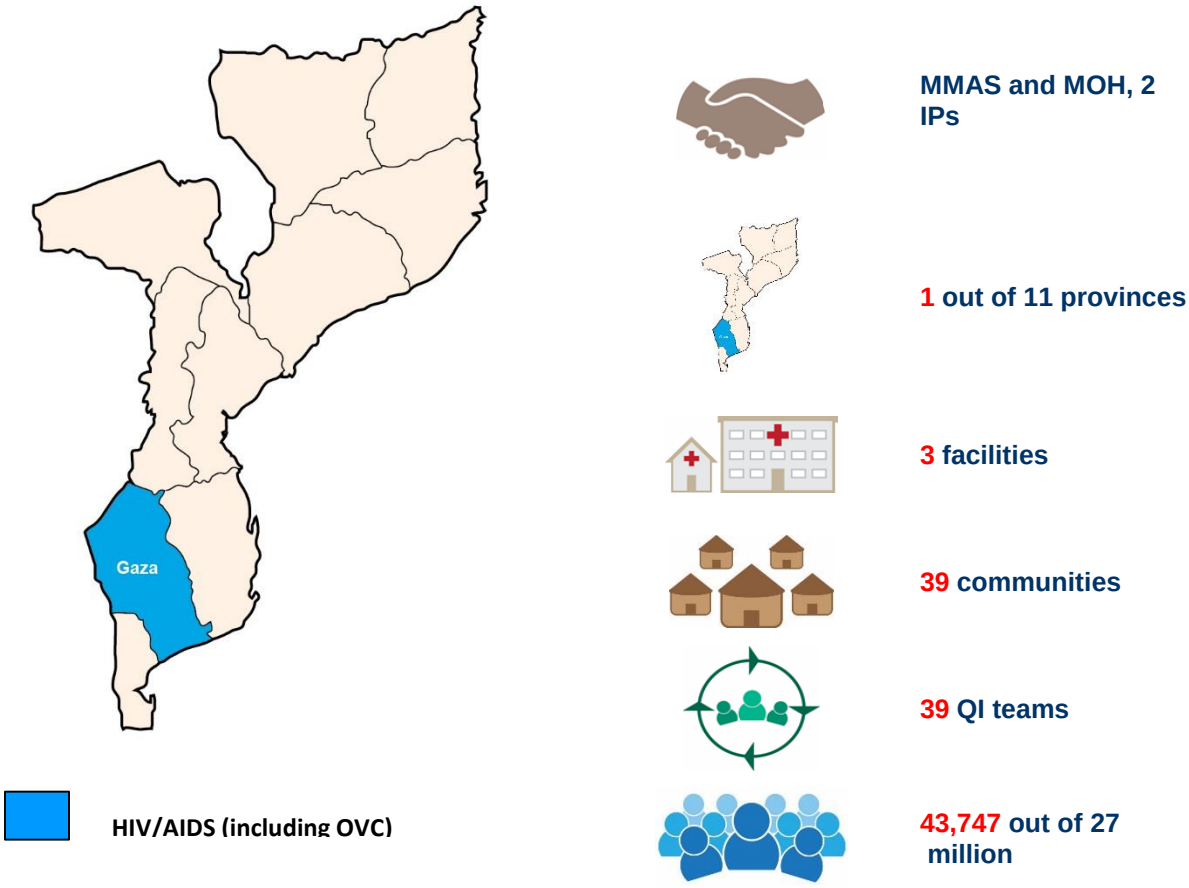
Background

Starting in June 2013, the USAID ASSIST Project began providing technical assistance to the Government of Mozambique and its IPs to improve the quality of services offered to vulnerable children and families affected by HIV and to implement approved standards. This work built on previous OVC work implemented in Mozambique through HCI since 2010. ASSIST also supported the MOH to draft standards for home-based care in early 2014. ASSIST has been supporting PHFS activities at the community level since December 2013. All of these efforts contributed to PEPFAR 3.0 goals by increasing the linkages between communities and facilities to create partnerships and more efficient care since increased community involvement leads to more people-centered care. The relationship between the community and facility is critical for ensuring that clients reach care in a timely manner and receive supporting ongoing treatment.

Institutionalization/Sustainability Strategy

ASSIST's work aimed to institutionalize OVC standards, which had been developed together with all the key stakeholders, within the policies of the Government of Mozambique to guide future OVC programming, budgeting, and evaluation. The PHFS community system work created a sustainable platform, as it was centered on involving existing formal and informal community groups and networks in supporting pregnant women and connecting them to the health facility.

Scale of USAID ASSIST's Work in Mozambique



Program Overview

What are we trying to accomplish?	At what scale?
1. Improve care and support of vulnerable children and their families	
• Improve the quality of orphans and vulnerable children services through distribution of national service standards in 11 provinces • Identify and address critical barriers in scaling up and sustaining effective, high-impact interventions for vulnerable children and their families	Distribution of standards to 11 provinces 80 implementing partners adopting and integrating the standards into their work plans One district in each of two provinces, sites to be determined in collaboration with Ministry of Women and Social Action and USAID
2. Partnership for HIV-Free Survival (PHFS)	
• Quality improvement technical assistance for community-level activities to improve uptake of PMTCT and retention in care	Provinces: 1 out of 11 Districts: 1 (Bilene) out of 11 in 1 province Facilities in selected district: 3 health centers (Licilo, Chissano, and Incaia) Communities: 39 Catchment population facilities/communities served: 43,747

Improvement Activity

Cross-cutting Activity

Accomplishments and Results by Activity (October 2014 – March 2015)

Activity 1. Improve care and support of vulnerable children and their families

No additional funds were provided by the USAID/Mozambique Mission for additional activities to provide technical assistance to the Ministry of Women and Social Action (MMAS) or apply the standards in two districts. ASSIST facilitated the printing of the OVC standards by providing three competitive printing bids to the mission, which printed the standards directly.

Activity 2. Partnership for HIV-Free Survival (PHFS)

Overview: ASSIST received initial funding from PEPFAR in 2013 and additional funds from USAID Mozambique in 2015 to support community-level improvement activities in the catchment area of facilities participating in the PHFS initiative, to improve postnatal PMTCT care for HIV-infected mothers and their infants to maximize HIV-free survival of infants. In December 2013, ASSIST began to provide technical support for community-level improvement to the Ministry of Health of Mozambique. The goal of the PHFS Community Demonstration Project was to contribute to the elimination of mother-to-child transmission through increased community awareness, improved community-facility linkages, and increased access to services for pregnant women. ASSIST provided limited training to PHFS partners in Sofala and Zambezia provinces in the community health systems strengthening model, quality improvement, and coaching. In Gaza Province, ASSIST provided direct technical support to Bilene District and Chissano, Incaia and Licilo health centers and their respective catchment areas totaling 39 communities.

In the ASSIST-supported sites, communities focused on organizing the community system by engaging and educating community groups in supporting pregnant women and developing a process for information and data exchange with the facility nurse coach. The communities then began to promote care for pregnant women, seeking to increase the number of pregnant women identified by the

community; increase the percent of women who were accessing ANC services; increase the percent of pregnant women tested for HIV; and increase the percent of HIV-positive pregnant women who are put on treatment. These improvement areas are not comprehensive PMTCT activities, but represent the first steps in getting pregnant women connected to and comfortable with facility-level care as early as possible. Given the funding and short timeframe for implementation, these were realistic initial aims. The community plays a critical role in influencing care-seeking behavior.

Accomplishments and Results:

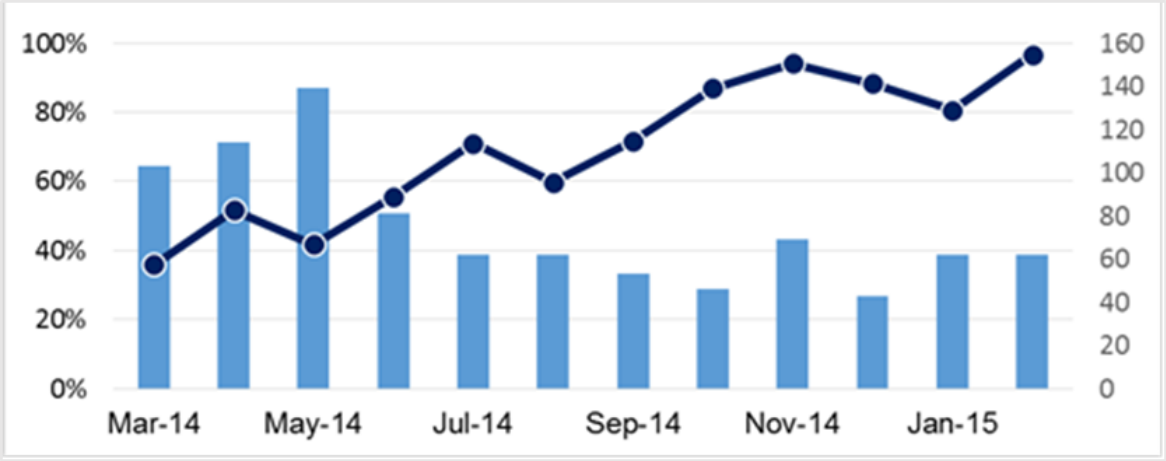
ASSIST received its final obligation for this activity from USAID/Mozambique, and March 2015 marked the end of the ASSIST activities in country. ASSIST closed out its activities and office in Mozambique in March 2015.

- **Provided coaching visits monthly to all 39 communities and 3 health facilities participating in the activity** (Oct 2014 – March 2015). Coaching was conducted primarily at the health facility level to the health committees, which consisted of representatives from each of the communities. However, intensive coaching was conducted in Chissano and Incaia to find additional community groups interested in participating in the community system to support pregnant women. This coaching was successful, resulting in 95 community groups participating in Licilo, 68 in Chissano, and 77 in Incaia. Technical assistance focused not only on identifying community groups, but supporting the community-based committees that functioned as QI teams to review their data on who was identified and who had been to ANC, the gap, and how to address the gap in care.
- **Provided technical assistance to Sofala PHFS partner** (Dec 1-4, 2015).The ASSIST community advisor consultant traveled to Dondo, Sofalo to provide technical support to FHI 360, another PHFS partner in Mozambique. The community advisor worked with FHI 360 staff and CHWs whom they support on organizing a community system using existing community groups.
- **Conducted final harvest meeting** (March 5, 2015). ASSIST staff conducted a harvest meeting with 55 participants, including representatives from each of the 39 communities, CHWs, nurse coaches, and district level officials. The harvest meeting focused on how the community system was organized and the processes that were created to identify pregnant women, encourage them to go to ANC, and follow up with those who did not attend. The results of this meeting will be compiled into a final technical report detailing the experience and learning from this activity.
- **Documented the process design that occurred at the community level** (March 2015). The primary change that took place in each of these communities was the design or creation of a new system for information and data exchange and review between existing community groups and the health facility. In each *bairro* (village), community groups were invited to participate in supporting health workers and pregnant women. A *bairro*-level committee served as the village QI team, consisting of a representative from each of the active community groups. Since the nurses at the health center were unable to travel to each *bairro* due to workload, a second tier of a QI team was created at the health facility, called the Health Committee, to review the pregnant women identified in each community, compare the list of identified women with those who went to ANC, and discuss strategies or changes to encourage pregnant women to come to ANC. The Health Committee also served as the mechanism for the nurse to share critical health messages, which needed to be passed on to community members. The nurse at each health center, district staff, and ASSIST staff provided training on key health messages around the importance of ANC for pregnant women and treatment for HIV-positive pregnant women to prevent transmission to their children. Health Committee members brought this information to *bairro* committee members who in turn brought it to their respective community group members and their families. Each community group agreed to set aside time during their regular meetings to discuss health issues. The community groups gathered the names of their family and neighbors who were pregnant and brought that information to the *bairro* committee, which subsequently passed it to the Health Committee and nurse. The nurse would review who had and had not been to ANC with the Health Committee members, and they would discuss the gaps and strategies for encouraging women to come to the facility. Health Committee members would share this information back down the chain, and *bairro* committees would determine strategies to encourage women to go to ANC. They found that one of the most effective strategies was targeting messages to mothers-in-law, since many of the men were working in mines in South Africa. They also used different strategies for following up with women who did not attend ANC based

on the particular family, including asking the CHW, religious leaders, community leaders, or other community group members to meet with her.

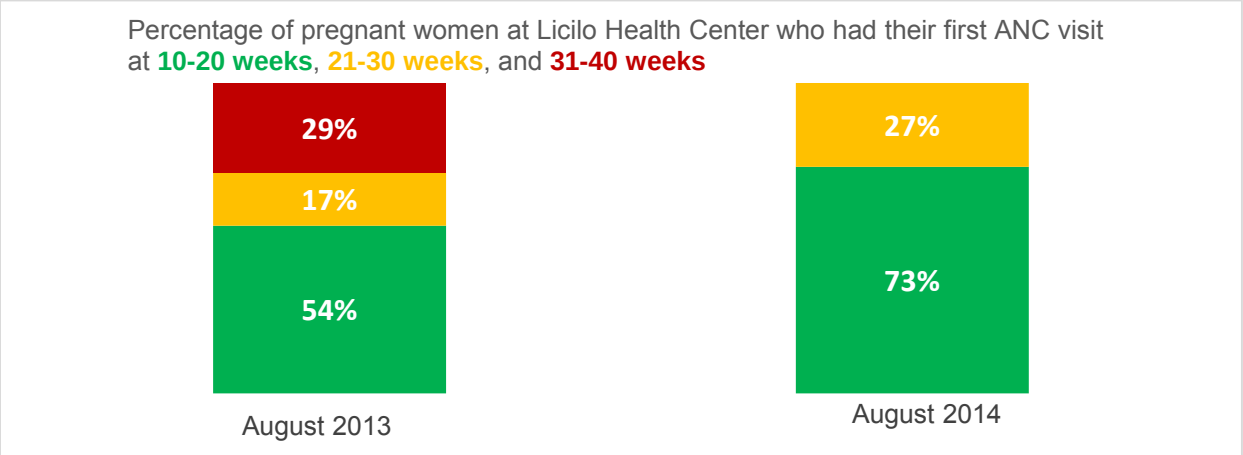
- **Results from Licilo Health Center.** Licilo Health Center had the largest catchment area of the three sites and had the most success of the three health centers. Licilo Health Center and its associated *bairros* were the most receptive to the PHFS activity and interested in the community health systems model. In total, 95 community groups in the 15 *bairros* were identified and actively participating in supporting pregnant women. When community groups began identifying pregnant women in Licilo, we saw an initial spike of pregnant women, as the community identified all of the currently pregnant women who may be at any gestational age. As time went on, the numbers identified leveled off to be a steady stream of newly pregnant women in their first and early second trimesters. In total, the community groups in the catchment area of Licilo Health Center identified a total of 896 pregnant women between March 2014 and February 2015 (**Figure 32**).
- **The work of the Licilo Health Committee and the *bairro* committees resulted in an increase from 36% to 97% (March 2014 – February 2015) of community-identified pregnant women who had their first ANC visit in the same month** (**Figure 32**). Over 12 months, the cumulative percent of women who went to ANC was 64%.

Figure 32. Mozambique: Number of pregnant women identified by all community groups and percent of community-identified pregnant women who received first ANC in the same month, 15 *bairros*, Licilo Health Center (March 2014 - Feb 2015)



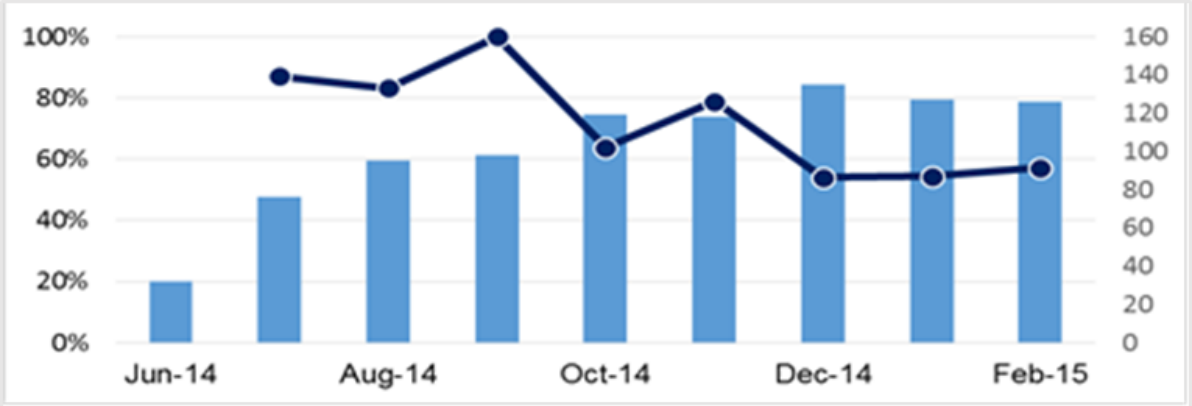
  - Anecdotal reports from the nurse and Health Committee members that women were coming in earlier for care led to a record review of the gestational age for first ANC, comparing charts from August 2013 and August 2014. This chart review reflected a shift in women appearing for earlier ANC (**Figure 33**).

Figure 33. Pregnant women attending first ANC by weeks of gestation, Licilo Health Center (Aug 2013 and Aug 2014)



- Throughout the activity, the health center nurse was also tracking the percent of women tested for HIV out of those who received ANC and the percent of pregnant women found to be HIV-positive who were put on treatment. The median percent tested for HIV was 97%, and the median of HIV- positive women put on treatment was 100%. Therefore, the conclusion can be made in Licilo that if women are connected with ANC services, they will receive the appropriate initial care to prevent HIV transmission to their baby.
- **Results from Chissano Health Center**. The Chissano Health Center and the associated *bairros* were slow in getting on board because they were not interested in the volunteer nature of the activity. As of June 2014, Chissano only had three active community groups for the whole area. Intensive support and discussions with this community led to the involvement of 68 community groups, and to additional coverage of the communities and more identification of pregnant women. In total, the Chissano community groups identified 715 pregnant women (**Figure 34**). Between October 2014 and February 2015, the community groups appear to have reached a consistent level of identification of new cases of pregnant women. The ANC coverage, however, declined with the increase in identified pregnant women. Both Health Committees and the nurse from the health center said that increased workload from increased demand had led to longer wait times. **Figure 34** shows that there was demand created but that there was not similar work within the facility to address the supply side.

Figure 34. Mozambique: Number of pregnant women identified by community groups per month and percent of community-identified pregnant women who received first ANC in the same month, Chissano Health Center (11 *bairros*) (June 2014 - Feb 2015)



  - The Chissano Health Center had a median of 92% coverage of HIV testing for the period of June 2014 to February 2015, ranging from 86 to 100%, and 100% of women found to be HIV-positive were put on treatment. The intervention does not appear to have impacted the testing and treatment rates, as these were already high.

- **Results from Incaia Health Center.** Like Chissano, the 13 *bairros* under the Incaia Health Center catchment area took time to begin implementing the activities around supporting pregnant women. Over time, they were able to successfully engage 77 community groups to participate and identify 409 women. Between September 2014 and February 2015, the percent of community-identified pregnant coming for ANC in the same month ranged from 82% to 100%. Due to early data collection problems, we do not have an accurate baseline. As with the other two sites, Incaia Health Center had good rates of HIV testing, ranging between 87% and 94% during the period of September 2014 – February 2015. All women found to be HIV-positive were put on treatment.

Improvement in Key Indicators

Activity	Indicators	Baseline (March 2014)	Last value (Feb 2015)
PHFS Licilo – 15 sites Chissano- 11 sites Incaia – 13 sites Total – 39 sites	Total number of pregnant women identified for ANC services	Licilo – 103 (Mar 2014) Chissano- 32 (Jun 2014) Incaia – 18 (Jun 2014)	Licilo – 896 Chissano- 926 Incaia – 409
	Percent of identified pregnant women receiving ANC services at the health facility in the same month as identification	Licilo – 36% (Mar 2014) Chissano- 87% (July 2014)* Incaia – 89% (Sep 2014)*	Licilo – 97% Chissano- 57% Incaia – 99%
	Percent of identified pregnant women tested for HIV in the same month	Licilo – 36% (Mar 2014) Chissano- 80% (July 2014)* Incaia – 77% (Sep 2014)*	Licilo – 95% Chissano- 53% Incaia – 90%
	Percent of pregnant women who tested HIV-positive and who were initiated on treatment (39 sites)	100% all sites	100% all sites

*Problems in initial data collection in early months led to incorrect data on ANC attendance in early months of activity and later baseline figures. Given that the teams had been working for several months, these figures do not represent the pre-intervention baseline.

Challenges and Remedies

The results achieved in Mozambique emphasize the important role that the community can play in linking women with care in order to ensure that they are tested for HIV and put on treatment. One of the greatest challenges of this work was the limited timeframe and budget. Given that there was less than a year for implementation, much of the time was spent identifying community groups and organizing the community system. The community committees finally became engaged and were actively identifying pregnant women and following up on their ANC attendance when the activities came to an end. If there had been more time, ASSIST would have encouraged communities to begin tackling new areas, such as improving postnatal follow-up in order to ensure that all HIV-positive mothers and their children were appropriately supported. ASSIST addressed this problem by focusing on fewer areas, but making sure that we left behind a strong community system ready to take on new areas for improvement.

A second challenge was the delay in receiving obligations from USAID. The delay in receiving confirmation of funding and the actual funds meant that several months of expenses were accrued maintaining staff and office costs with no major activities. As a result, ASSIST was not able to hold a planned district-level training to transfer skills and knowledge on organizing community systems. We reconsidered our list of activities and prioritized those that would maximize learning from the experience.

A third challenge was the lack of active improvement happening at the facility level. ASSIST was requested to work at the community level. Demand for ANC was created, but in some places, like Chissano Health Center, the facility was not able to address the increased demand. Likewise, all communities complained that there were long lines at the health centers when women did go, which became a deterrent for seeking care.

Improving Equity

Many young men in this area of Mozambique go to South Africa to work in mines and are absent for the majority of the year. Women whose husbands are in South Africa have a harder time making a decision to seek care, as they often need their husbands' approval. Men are reluctant to give permission over the phone and have not been in the *bairro* to hear the multiple messages about the importance of ANC, which perhaps would have encouraged them to agree to ANC. The teams determined that an alternate solution for this was targeting mothers-in-law with health messaging, as they have a lot of influence over their sons' decisions.

The teams in Licilo noticed that one group of women who were not attending ANC were from the same religious sect. They spent time with the religious leaders explaining the importance of ANC and asking the religious leaders to share this message with their congregation. Following this intervention, the women began to come in for ANC.

Knowledge Management Products and Activities

- Developed a short case report on the PHFS Community Demonstration Project in Gaza Province for inclusion in an article on application of improvement methods to improve post-natal PMTCT services, to be submitted for a Special Supplement of the journal, *AIDS* (December 2014)
- Held final harvest meeting to gather lessons and confirm results from representatives of the health facilities and *bairro* committees (March 2015)
- Videotaped conversations with health workers and community members in Bilene District to complement the final case study on the community health system work in Gaza Province (March 2015)

Planned Activities Next Quarter: April - June 2015

- Complete and publish final report on the Mozambique community PHFS work.
- Complete and publish a case study and video on the Mozambique community PHFS work.

SOUTH AFRICA

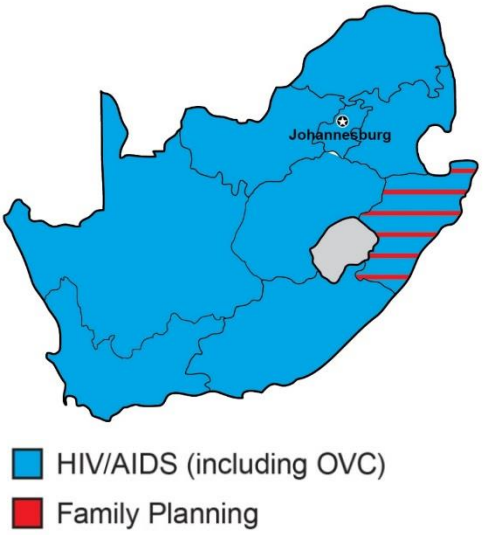
Background

South Africa faces a high burden of disease. HIV infection ranks the highest with almost 5.7 million people living with HIV and 18% of adults aged between 15 and 49 being infected with the virus. Approximately 1,000 adults are infected with HIV daily. A 2011 review of the National Strategic Plan 2007–2011 by the South African National Department of Health shows mixed achievements: much headway has been made, however there are key challenges that should be addressed in order to scale up HIV prevention, treatment, care, and support in South Africa. URC has worked since 2000 in South Africa through the Quality Assurance Project and its follow-on, HCI. The USAID ASSIST Project started activities in South Africa in October 2013. ASSIST is continuing to work in the five priority provinces at the provincial and district level to improve the quality of care through providing support and mentorship in planning, implementation, evaluation and documentation. In addition, starting in May 2014, ASSIST began working with approximately 160 PEPFAR-supported sites in all nine provinces of South Africa to improve the quality and safety of medical male circumcision (MMC) services.

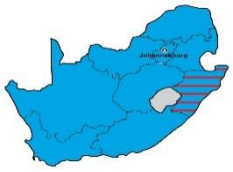
Institutionalization/Sustainability Strategy

The USAID ASSIST Project is building the capacity of Department of Health (DOH) staff at district, provincial, and national levels to continue with quality work through formal QA/QI training sessions and provision of mentorship and technical assistance in HIV prevention. In support of MMC programs, ASSIST will work with each of the provinces and districts to build IP and DOH capacities in order to be able to utilize continuous quality improvement (CQI) methodologies and programmatic data to identify priority areas, gauge performance, and plan for scale-up of services. ASSIST is also supporting the DOH and IPs to standardize MMC tools and develop QI indicators. In addition, ASSIST is working with District Management Teams to support MMC supervision and advocate for the integration of the MMC program into overall primary health care (PHC) service provision.

Scale of USAID ASSIST's Work in South Africa



DOH



5 out of 9 provinces (ART)
9 out of 9 VMMC
30 out of 52 districts

699 PHC facilities

10 QI teams

31,017,400 out of 54 million

Program Overview

What are we trying to accomplish?	At what scale?
1. Increase quality of HIV prevention, care, and treatment services	
• Reduce time to ART initiation for HIV+ clients by 20% • Increase retention of HIV+ clients on ART in care by 30%	Provinces: 5 out of 9 Districts: 30 Facilities in districts: 565 out of 1882 QI teams: 10
2. Build capacity of Department of Health staff	
• Build capacity of key DOH staff (primary health care supervisors and facility managers) in all provinces in strategic planning, supervision, program review, training, and mentorship	Provinces: 5 out of 9
3. Integrate continuous quality improvement (CQI) for MMC activities	
• Improve the quality and safety of MMC services by applying CQI methodology	Provinces: 9 Facilities: 134 QI teams: 10

	Improvement Activity
	Cross-cutting Activity

Accomplishments and Results by Activity (October 2014 – March 2015)

Activity 1. Increase quality of HIV prevention, care, and treatment services

Overview: ASSIST provided support for mentoring visits in 10 districts in three provinces (Eastern Cape (EC), Mpumalanga (MP) and Limpopo (LP)). To improve ART uptake and retention, ASSIST continued to provide technical support at above site level in the form of quarterly HIV, AIDS, Sexually Transmitted Diseases and TB (HAST) planning meetings, data reviews, and CQI plan development for HAST Program Managers at the district level. ASSIST, together with District HAST Program Managers, visited some of the sites (eight in MP; seven in LP for support and coaching visits, as well as for data verification 17 in EC).

Accomplishments and Results:
Figure 35 shows the data reflecting the number of patients on ART as of December 2014. In brief:

- The number of clients initiated on ART has been increasing at an average of 10% per quarter.
- Although no data is shown, the TB/HIV co-infected on ART in LP improved slightly: In Sekhukhune the percentage on ART increased from 54.5% in Q1 to 57.2% in Q2, while in Waterberg, it increased from 64.1% to 67.3% during the same time period. The target is 85%, and there is a concern about the recording of ART data in TB registers.
- In MP, the viral load completion rate was 47%, and the viral load suppression rate was 76%.

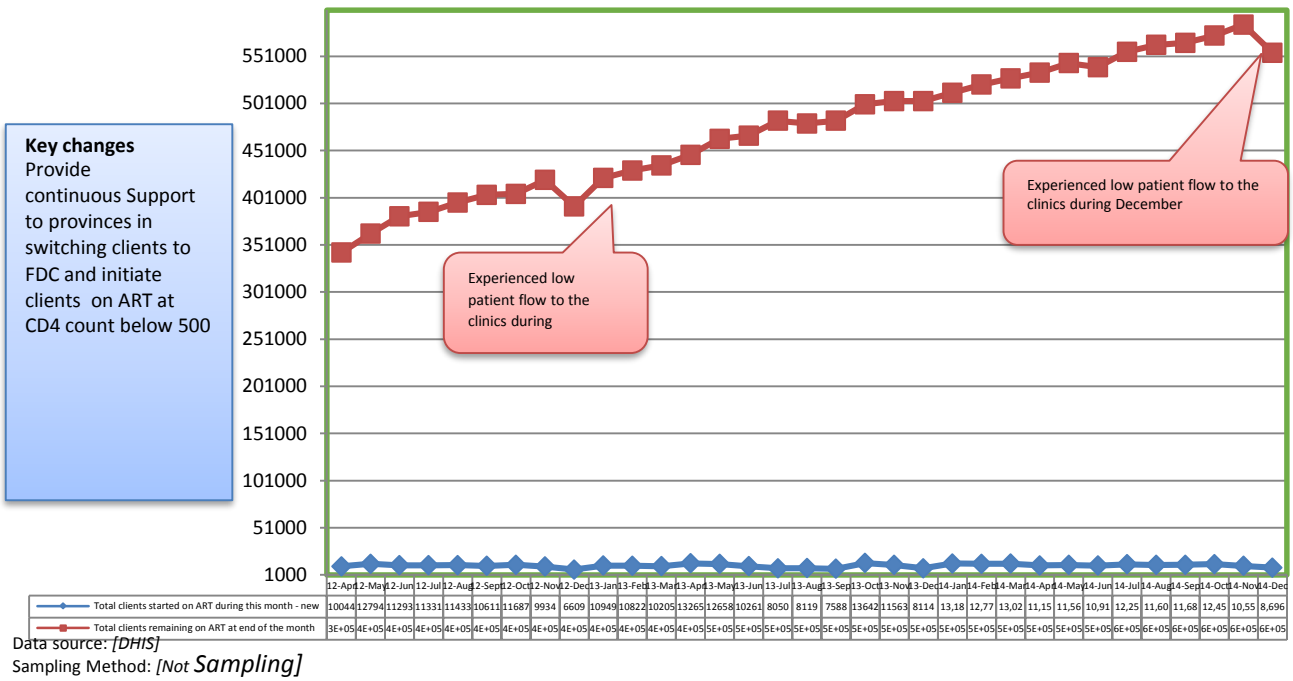
Activity 2. Build capacity of Department of Health (DOH) staff

Overview and Accomplishments:

At the request of the DOH, ASSIST also worked to strengthen the capacity of district, sub-district, and facility staff to deliver good quality health care service through provision of ongoing participatory trainings and mentoring. These are some of accomplished activities:

- **Initiated the formation of adolescent support groups in one sub-district (EC)** (Nov 2014)**.** To date, there are eight facilities with adolescent support groups involving 2,810 individuals, including clients on ART.

Figure 35. South Africa: Number of patients on ART (ART starts and remaining) in Mpumalanga and Limpopo (Apr 2012 - Dec 2014)



- **Conducted two formal Sexual and Reproductive Health trainings in KZN, where 25 nurses were trained** (13 from UThungulu, and 12 at UMzinyathi) (Oct-Nov 2014). Trainings were 2.5 days each with a pre-test conducted on day 1 of the training and a post-test on day 3. The pre training test score results were 26% at UThungulu and post-test score was 70%. At UMzinyathi the pre-test score was 30% and post-test score, 90%.
- **Conducted pediatric and adolescent clinical stationery training (25 nurses) for Mbombela sub district managers in MP** (Oct 2014). The stationery training is aimed at providing guidance to nurses and enable them to manage ART patients well.
- **Conducted supervision training in Nkomazi sub district for supervisors and the program coordinators (total 14)** (Oct 2014). The practical supervision exercise in four PHC facilities was conducted using the following supervisory tools: Red flag, Regular review, HAS quarterly review and the comprehensive HIV, AIDS treatment program support visit tool.
- **Supported and mentored 76 facility managers during training workshops on the development of operational plans at the following sub districts:** Bushbuckridge, Mbombela, Thabachweu, and Nkomazi (Nov 2014 – Jan 2015)**.**

Activity 3. Integrate continuous quality improvement for MMC activities

Overview and Accomplishments: ASSIST has been recognized as the partner specialized in quality. Throughout this reporting period, the project has been focused on providing CQI support to strengthen the capacity of DOH and implementing partners to deliver high-quality VMMC services. During Oct 2014 – March 2015:

- **MMC baseline assessments were completed at 127 sites, and feedback was made and action plans were developed** (**Table 2**)**.**
- **From the findings: 34 sites were identified as requiring intensive support, 62 sites as light support, and 31 sites as annual support sites.**
- **All the intensive support sites are currently receiving onsite coaching monthly, and specific gaps identified during the baseline assessment are being addressed.**

Table 2. South Africa: MMC Dashboard – Summary baseline scores in eight key quality standard areas from all USG IPs (134 sites)

No.	Quality Standards Areas	Score
1	Leadership and Planning	48.6
2	Management systems	68.9
3	Monitoring and Evaluation	75.6
4	Registration, group education and IEC	80.5
5	Individual counselling and HIV testing	81.1
6	Infrastructure, supplies, equipment and environment	79.4
7	Male circumcision surgical procedure	77.8
8	Infection prevention	82.0
Grand Total		74.1

Legend: Surgical Procedure (SP) and Infection Prevention (IP) (=>85%+: (<70%: Poor)

Other Standards: >=80%+: Good); (50%-80%: Fair); (<50%: Poor); (Blank: Not assessed). Good); (70%- 85%: Fair);

Improvement in Key Indicators

Activity	Indicators	Baseline	Last value
Increase quality of HIV prevention, care, and treatment services	No. of individuals remaining on ART at the end of the month (cumulative)	405,086 (October 2012)* ** EC and MP only*	554,745 (December 2014) ** EC and MP only*

Challenges and Remedies

- There was poor district support in some provinces that became apparent to ASSIST while visiting the facilities and during trainings, as well as during the MMC baseline assessments. ASSIST staff engaged the provincial and district management teams through advocacy and mentorship visits, CQI support visits and onsite mentoring.
- Many districts have poor access to the DHIS and TIER.net data to plan accordingly. ASSIST is working on addressing this. Thus far we have engaged the M&E and Information directorates at provincial level to access DHIS data. We are also working at a district level to support the implementation of TIER.net.
- Request of support outside the PEPFAR mandate by provinces.

Knowledge Management Products and Activities

- CQI in MMC programs: 145 baseline assessment reports submitted (1 USAID report, 1 CDC report, 9 IP reports, and 134 VMMC partner site reports)

Planned Activities Next Quarter: April - June 2015

- Identify ART sites for CQI support.
- Continue to strengthen CQI and fill gaps in the provision of medical male circumcision services. Strengthening monitoring and evaluation of the HAST program at all level and improve access to DHIS/Tier.net data.

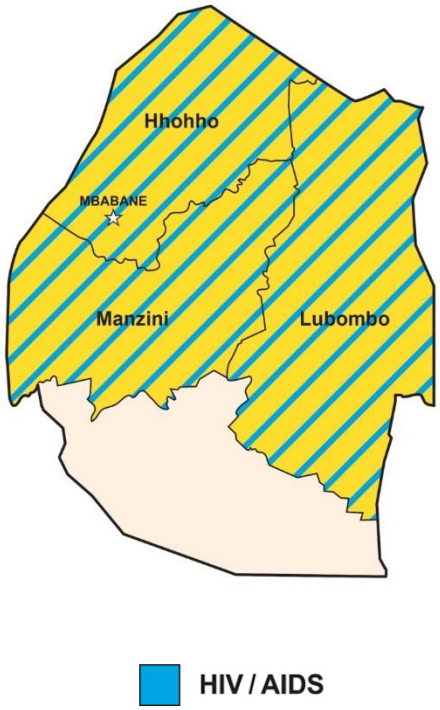
SWAZILAND

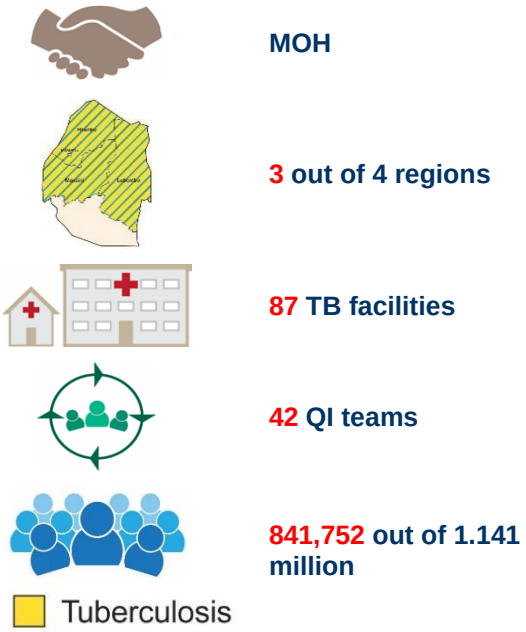
Tuberculosis is one of the major public health problems currently confronting Swaziland. Currently, TB accounts for approximately 10% of in-patient morbidity in the country and is responsible for 20% of in-patient deaths (NTCP Q3 report 2014). The high TB/HIV co-infection and multidrug resistance rates adversely affect TB case detection as well as treatment outcomes. With funding from the PEPFAR, the USAID ASSIST Project began working in Swaziland in October 2012. Building on the work done by HCI from 2008, ASSIST continues to support the Ministry of Health's Quality Management Program (QMP), implementing partners, and stakeholders to institutionalize modern quality improvement in health care by: improving the national capacity to conduct QI planning, implementation, and evaluation; building the capacity of health care workers and QI mentors on quality improvement; and improving health care performance measurement at national, regional, and health facility levels. ASSIST also works with the National Tuberculosis Control Program (NTCP) and the Swaziland National AIDS Program (SNAP) to expand the coverage of integrated TB/HIV diagnosis, treatment, and care as well as improve TB outcomes. In addition, ASSIST works with stakeholders to improve the quality of TB, TB/HIV, and multidrug-resistant (MDR) TB services using modern quality improvement approaches.

Institutionalization/Sustainability Strategy

Through the support provided by ASSIST to the Ministry of Health through the NTCP, the SNAP, the QMP, and the Swaziland Health Laboratory Services, ASSIST is applying lessons learned from established TB, HIV and AIDS quality improvement activities and capacity building initiatives to spread integrated service delivery models and algorithms for health facilities and providers in Swaziland.

Scale of USAID ASSIST's Work in Swaziland





Program Overview

What are we trying to accomplish?	At what scale?
1. Support the MOH and implementing partners to institutionalize modern quality improvement approaches	
• Improve national capacity health care QI planning, implementation and evaluation • Build the capacity of health care workers, and QI mentors on quality improvement • Improve health care QI performance measurement, at national, regional and health facility levels	Countrywide 87 TB diagnostic clinics out of 287
2. Establish integrated TB/HIV/NCD model clinics and centers of excellence for MDR-TB clinics to improve implementation of the essential health care package (EHCP)	
• Establish integrated TB/HIV/NCD health services • Implement the EHCP	Regions: 3 out of 4 (Hhohho, Manzini, Lubombo) Facilities: 10 -Hhohho Region 7 out of 67 (3 model clinics and 4 TB/HIV comprehensive care clinics) -Manzini Region (1 TB/HIV comprehensive care clinic) -Lubombo Region: 2 out of 45 (2 TB/HIV comprehensive care clinics):
• Establish the MDR-TB hospital and TB center as center of excellence	Manzini region (TB hospital Moneni and TB center clinic Manzini)
3. Implement high quality directly observed therapy (DOTS) expansion for TB & MDR-TB and strengthen implementation of integrated TB/HIV prevention, care, and treatment	
• Increase case detection of TB • Increase TB treatment success • Increase TB/HIV integrated management • Ensure proper management of MDR-TB • Strengthen TB infection control • Increase research and use of evidence in designing in priority areas interventions and policies	Focus regions: 3 out of 4 regions. Part-time support to Shiselweni region Target population: 841,752 Facilities: 52 -Hhohho region: 21 health facilities (2 hospitals, 2 health centers and 17 primary health clinics). Population: 309,184 -Manzini sub region: 24 facilities in (2 hospitals, 4 specialized clinic and 18 primary health clinics). Population: 352,568 -Lubombo region: 16 facilities in (1 hospital, 3 private industrial clinics and 12 primary health clinics). Population: 180,000
4. Implement advocacy, communication and social mobilization (ACSM) interventions to improve HIV and MDR-TB services uptake and outcomes	
• Strengthen the capacity of NTCP to develop and implement a TB ACSM strategy	87 health facilities in 4 regions

What are we trying to accomplish?	At what scale?
• Improve the early detection of TB, TB/HIV and MDR-TB health facilities and communities • Increase community engagement in support TB patient treatment adherence	
5. National Framework for In-service Training (IST)	
• Design and implement a national framework for IST in Swaziland	National All implementing partners with IST programs (19 facilities out of 287 facilities) Facility in-service training coordinators
6. Improve Option B+/ART laboratory related care and treatment monitoring	
• Strengthen National Sample Transportation Services (NSTS) services to enable facilities access viral load testing for pregnant women and improve turn-around time for viral load and DBS results of pregnant women and HIV exposed infants; Establish m-health options patient feedback system to ensure they return to the facility once laboratory results are available; conduct operational research for TB screening among pregnant women	National NSTS: 3 out of 4 regions (121 health facilities) 28 clinics in Hhohho 51 clinics in Manzini 42 clinics in Lubombo National: An mHealth system for Viral Load

Improvement Activity

Cross-cutting Activity

Accomplishments and Results by Activity (October 2014 – March 2015)

Activity 1. Support the MOH and implementing partners to institutionalize modern quality improvement approaches

Overview: Institutionalization of modern quality improvement approaches provides sustainable and efficient long-term improvements in the quality and cost of health services in Swaziland. The USAID ASSIST Project in Swaziland uses this approach to enable the MOH to meet its health goal of improving the health and social welfare of the Swazi population by providing preventive, curative, and rehabilitative services that are of high quality, relevant, accessible, affordable, equitable, and socially acceptable. Project interventions include: building capacity of health care workers (HCWs) for QI implementation at national, regional, and facility levels; engaging HCWs, health care program managers, Regional Health Management Teams (RHMTs) for scaling up QI activities and lessons, and using health data to inform improvements.

Accomplishments and Results:

- **Conducted QA/QI training of trainers (TOT)** (Dec 2014). Following the success of the first QA/QI TOT training, a second QA/QI TOT was conducted in collaboration with the Quality Management Program in December 2014 at Esibayeni Lodge with 21 participants from health facilities. From January- March 2015, clinical mentoring and supportive supervision was conducted with 15 of the 21 QA/QI trainers. All the participants visited were able to conduct facility based QA/QI trainings and implement QIPs. At Emkhuzweni Health Centre, one trainer was observed conducting an on-site training to 23 participants. The third and final TOT session is scheduled in the third quarter 2015.
- **Conducted clinical mentoring and supportive supervision for QA/QI** (Jan 2015). ASSIST in collaboration with the MOH provided mentoring and supportive supervision to 148 HCWs (facility QA focal persons, QA committees, and QA/QI trainers) from 11 health facilities to build their capacity on QA/QI methodologies.

- **Conducted regional TB QRM workshop** (Feb 2015). The project supported a quarterly review workshop for health facilities' QI focal persons to discuss, learn, share best practices, and build their capacity and skills to utilize their data to identify gaps, develop specific quality improvement plans (QIPs), and inform health care service delivery.
- **ASSIST supported the MOH Quality Management Team to conduct a national collaborative learning session** (March 25, 2015). Eleven facilities and 47 participants from the four regions participated. Nine facilities shared progress on their quality improvement projects.
- **Conducted health facility QI sessions** (March 2015). The project continued to support facility-based QI learning sessions where departments presented their QI projects.
- **Finalized National TB Hospital Strategic Plan 2015-2017** (Jan 2015). The National TB Hospital Strategic plan was finalized, printed, and shared to all key stakeholders. The document guides and supports the delivery of services at the National TB Hospital. It will be used as a guide and tool for resource mobilization. At the programmatic level, it is hoped that implementation of the activities in the strategic plan will contribute to the reduction of DR-TB incidence and prevalence in the country.
- **Finalized QA/QI customer care framework development** (Dec 2014). The health facilities' Customer Care Framework was finalized in December 2014 during a two-day workshop at the George Hotel. The framework was developed to prepare for the TB/HIV client satisfaction surveys to be carried out in 10 sites. The 10 sites were identified and a data collection tool developed. Eleven customer care officers from nine health facilities participated.
- **Client satisfaction survey** (Jan-March 2015). A client satisfaction survey was conducted in six facilities (Mbabane Government Hospital, Piggs Peak Government Hospital, Emkhuzweni Health Centre, Ezulwini Satellite Clinic, Horo Clinic and Ngowane Clinic). The exit survey targeted various service delivery points, including the VCT/ART clinic, TB clinic, pharmacy, public health unit, laboratory, and general outpatient department. Report analysis and writing is currently underway.
- **Feedback on performance in TB/HIV indicators and coaching on quality improvement plan.** The ASSIST team conducted a meeting in October 2014 with Cabrini Ministries Mission Clinic's Health Care Workers to assess the implementation of key themes in the facilities' quality improvement plan, which was developed from January - March 2014. The exercise reached 17 HCWs.

Activity 2. Establish integrated TB/HIV/NCD model clinics and centers of excellence for MDR-TB clinics to improve implementation of the EHCP

Overview: The Ministry of Health launched the EHCP to be used to improve health care service delivery. In line with this, ASSIST in consultation with the EHCP Coordinator, National TB Control Program, and RHMTs in Hhohho and Manzini regions, developed a plan to use model clinics and COE for rolling out the TB/HIV and MDR-TB services in Swaziland. At the COEs, the project focuses on development of high quality MDR-TB management practices, implementation of the FAST strategy, and capacity building of the TB hospital and TB Centre as training centers in Manzini Region. The project further increases support towards implementation of the entire continuum of HIV/TB care with the eventual goal of implementing the EHCP in three model clinics in the Hhohho Region.

Accomplishments and Results:

- **Held collaborative learning sessions** (Jan 2015)**.** ASSIST conducted a collaborative learning session for model clinics to track progress and address challenges that cut across all facilities. Thirteen HCWs from Ngowane clinic, Ezulwini satellite clinic, and Horo clinic attended the sessions.
- **Model clinics participated in regional collaborative learning sessions** (Feb 2015). Focal persons from the model clinics participated in regional collaborate learning workshops such as Regional TB Quarterly Review Meetings, and also in Regional Semi-Annual Reviews (RESAR). The RESAR was attended by 116 participants from health facilities.

Activity 3. Implement high quality DOTS expansion for TB & MDR-TB and strengthen implementation of integrated TB/HIV prevention, care, and treatment

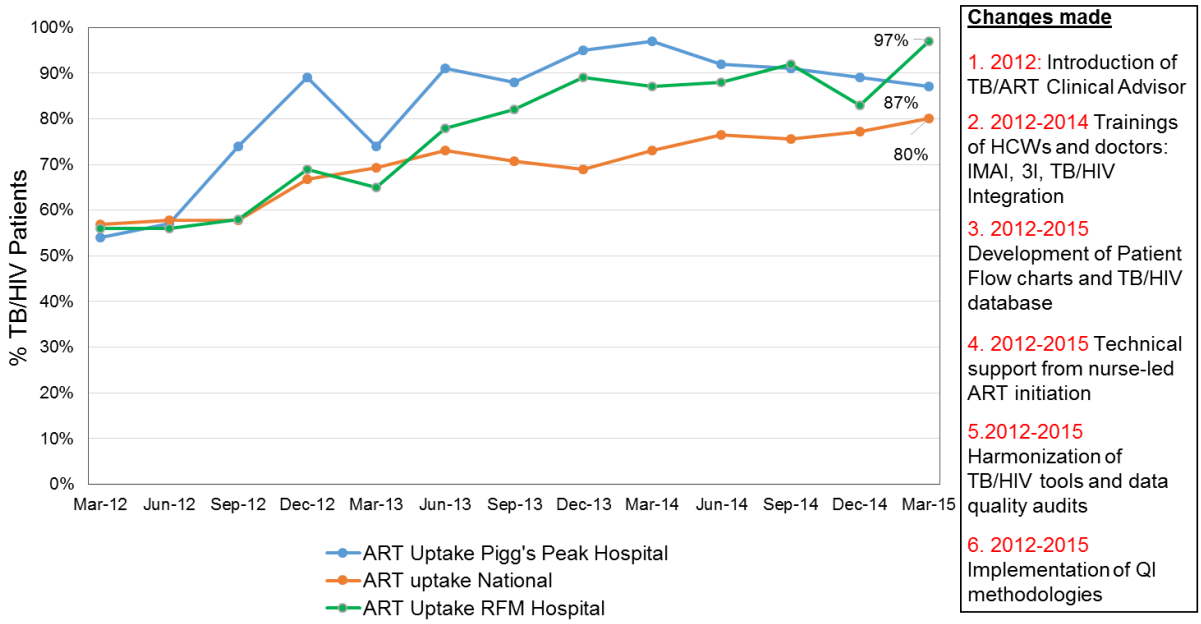
Overview: Nationally the treatment enrollment is 95% among sputum bacteriologically confirmed positive patients, the defaulter rate among all TB patients is 5%, but in the TB/HIV co-infected rate is 7%. The

treatment success rate is 72% with a cure rate of 51% and treatment completion rate of 21%. A drug resistance survey showed multidrug resistance rate of 7.7% in all new TB cases and 33.9% in retreatment cases (DR-Survey Report, 2009). The prevention of MDR-TB is paramount to curtailing the MDR-TB outbreak in Swaziland, which necessitates effective TB case finding and retention for drug sensitive TB as well as reducing the transmission if MDR-TB from established MDR-TB cases in the community.

Accomplishments and Results:

- **Conducted community multi-drug resistant tuberculosis outreach** (Oct 2014– March 2015). ASSIST through the MOH TB hospital community MDR-TB outreach program conducts home assessments, contact tracing, and links patients to care. The project further provides health education on TB and MDR-TB to TB and MDR-TB patients, their families, and neighbors. Between October 2014 – March 2015, 107 home assessments were conducted; 49 people linked to care; and 322 people reached through health education.
- **Capacity building of HCWs to implement integrated TB/HIV management**
  - **IPT onsite trainings** (Nov 2015)**.** ASSIST successfully conducted on-site trainings in two health facilities (Siphofaneni clinic and FLAS clinic, with 15 and 12 participants, respectively).
  - **Basic TB Management Training** (March 2015)**.** Conducted two-day basic TB Management training at Zombodze clinic to 16 HCWs. Training objectives were: to provide knowledge on TB management to the facility's HCWs; to increase access to care of TB services by decentralizing to the clinic; and to increase index for suspicion of TB patients.
  - **HIV guidelines dissemination training management for health care workers** (March 2015). ASSIST conducted a four-day training for 30 HCWs on the new HIV guidelines. The objectives of the training were to: orient health care workers from all health facilities in Manzini on the integrated HIV management guidelines; and update the HCWs on the changes in the new integrated HIV guidelines.
- **ASSIST continued to provide resources and technical assistance to Piggs Peak and RFM Hospitals to strengthen provision of ART for TB/HIV co-infected patients. The two hospitals have demonstrated improvement of ART provision** with Piggs Peak Hospital at 87% and RFM Hospital at 97% in Q1 FY15 compared to 80% performance at national level (**Figure 36**).

Figure 36. Swaziland: Comparison of national uptake to 2 hospitals ART uptake (Jan 2012 – March 2015)



- **ASSIST in partnership with the NTCP collaborated in training health care workers (nurses) on DR-TB clinical management of patients** (Oct 2014). The objectives of the training were to: provide knowledge to nurses on TB/HIV and DR-TB Management in the country, share experiences in health facilities and come up with standard operational procedures with all the facilities involved, and share with the participants on best practices in other countries.
- **Conducted TB/HIV sensitization and screening campaign** (Oct 2014). ASSIST through the TB in the mines project sensitized and screened mineworkers from the Maloma coalmine for TB and also tested them for HIV. Of the 248 miners screened for TB, 96 screened positive for TB, 58 had lab tests for TB, 108 miners tested for HIV, and seven miners tested positive for HIV.
- **Worked to strengthen and ensure sustainability of the infection prevention and control structure at national, regional and facility level to improve infection control practices**
    - **Conducted assessments to look at infection prevention and control (IPC) practices in health care facilities, to track device associated health care infection, and to establish a database for health care associated infections** (Q1-Q2 FY15). Conducted assessments at Good Shepherd Hospital, Cheshire Homes, and Mbabane Government Hospital.
    - **IPC site visit** (Dec 2014). ASSIST's IPC specialist provided technical support and TB IPC assessment to Good Shepherd Hospital to prepare for the MDR-TB treatment initiation at the newly accredited site. Some of the key findings and follow up actions are shown in **Table 3**.

Table 3. Key findings and recommendations from TB IPC assessment at Good Shepherd Hospital

Key findings	Issues for follow-up and recommendations
• TB, MDR TB patients and all other patients mixed at the outpatient department while queuing at the X-ray, laboratory, and ultra sound departments. (No safe separation of TB and MDR –TB patients) • TB screening conducted at outpatient department but clients who were positive to screening tool were not issued surgical masks. • Presumptive TB clients not given surgical masks while waiting at the laboratory and ultra sound room • Outpatient department, radiography department, and ultra sound room poorly ventilated. • Narrow passages used as waiting areas	• Safe separation of presumptive TB and MDR TB clients at radiology and all other departments. • Alternative waiting area • TB screening of employees every six months (documented proof) • Provision of an outside or alternative shelter for MDR-TB, TB and presumptive TB clients • Offering surgical masks to the MDR TB, TB and presumptive TB clients , even at the other departments (X-ray, laboratory, ultrasound room)

Activity 4. Implement advocacy and social mobilization interventions to improve HIV and MDR-TB services uptake and outcomes

Overview: ASSIST continues to work towards building the capacity of the NTCP through implementing the TB ACSM. This strategy was developed in collaboration with NTCP and other supporting partners and is being carried out in conjunction with the STOP TB partnership in Swaziland and Communication Behavioral Impact (COMBI) strategy. The strategy is aimed at implementing advocacy and social mobilization interventions to improve TB, TB/HIV and MDR-TB services uptake and outcomes.

Accomplishments and Results:

- **ASSIST continued to provide technical support to NTCP to review, finalize, and disseminate the ACSM strategy using local evidence**. A stakeholder's consultative meeting was held to finalize and disseminate the ACSM strategy. Twelve billboards have been placed around the country. The billboards were themed: Find TB, Treat TB, Cure TB, Kick TB, and Stop TB.

- **Conducted advocacy, communication, and social mobilization events**: During the reporting period the project managed to support a number of community activities including: TB IPC sensitization for public transport operators, MoLeSwasa campaign addressing TB among returning miners from neighboring countries for Christmas, and World AIDS Day at Siteki Sports ground in the Lubombo Region.
- **Held TB IPC campaign in collaboration with NTCP** (March 2014). Held at Mbabane Bus Rank with 700 people attending and receiving health services. The event was aimed at: providing TB, HIV services, screening of non-communicable diseases (hypertension and diabetes) including health education; disseminating TB infection control messages in the form of pamphlets and stickers to be displayed in the public transport vehicles (i.e., open window stickers); and actively finding TB and DR-TB cases and linking TB suspects to the nearest hospital for sputum examination.
- **Conducted TB IPC awareness campaign** (Oct 2014). ASSIST conducted a TB IPC awareness campaign at Manzini bus rank in collaboration with the Ministry of Health, National TB Control Program, and Swaziland Commercial Amadoda Transportation Corporation. The purpose was to educate the general public on TB/HIV, TB IPC, and non-communicable diseases (NCDs). About 200 health care workers, 310 members of the public,and 100 members of the Royal Swaziland Police force attended. The success of the event was demonstrated by 96 people being screened for TB, of which 46 were positive and 28 sputum samples were sent to the laboratory. In addition, BCC materials were shared and approximately 1000 *Open Windows Stickers* distributed; and people were screened for hypertension, HIV, and diabetes mellitus.
- **World TB Day** (March 2015)**.** World TB Day was commemorated at Maseyisini in the Shiselweni Region where the military, police, mineworkers, factory workers, and the general public were targeted. More than 900 people were present during the event, 500 received IEC materials including information packs from URC Laboratory project and ASSIST, 300 screened for TB, with the first person being screened was the Minister of Health. Forty-two people screened positive for TB and were linked to care.
- **World AIDS Commemoration day** (Dec 2014). The National TB Control Program, ASSIST, and University Research South Africa as supporting partners joined the Swaziland National AIDS Program in the Lubombo Region Siteki sports ground to celebrate those lives that have been saved and improved in the country and recommit to the fight against HIV/AIDS. The 2014 World AIDS Campaign's theme was "**G*etting to Zero in Africa: Zero New HIV infections, Zero discrimination, and Zero AIDS related deaths"***. The objectives for the World AIDS day commemoration were to raise and strengthen HIV and AIDS awareness, to call for action and commitment to HIV and AIDS national response, and to review progress in the national response to HIV and AIDS. About 1500 people from all over the country attended the world AIDS day commemoration.
- **Training on TB, TB/HIV, and DR-TB among prisoners** (Feb 2015), ASSIST conducted a training on TB, TB/HIV, and DR-TB for inmates at Big Bend Correctional Institution. Sixteen male inmates who had not received any TB screening since incarceration were screened for TB. Nine of them screened positive for TB, and they were linked for diagnosis, care, and treatment in the onsite clinic. Twelve male inmates who did not know their HIV status were tested for HIV, and six of them tested HIV positive. The inmates that tested HIV-positive were linked successfully to care and treatment in the prison's clinic.

Activity 5. National Framework for In-service Training (IST)

Overview: Implemented under the Ministry of Health Training Unit, the IST project started in January 2014. The aim of the IST project is to improve the quality and effectiveness of the IST for HCWs through improved design, delivery, coordination, and tracking of all IST. ASSIST works with the MOH planning unit-training department to ensure that the current trainings in the Ministry are well coordinated.

Accomplishments and Results:

- **Following the development of the IST coordination mechanism in the last quarter to reduce disruption of health services, the project continued to support the MOH training unit to develop a training calendar.** Starting in January 2015, the training calendar is being piloted as a tool to coordinate trainings under the three national programs addressing HIV/AIDS and related diseases, i.e., SNAP, the NTCP, and Sexual and Reproductive Health (SRH). These are the programs with

high-volume trainings. A process designed to streamline the approval of trainings as a means of coordinating training is also under this pilot that ends in June 2015. Immediate results from the pilot include: A training calendar was developed for the first time; zero trainings were conducted on the same days targeting same health care workers hence there was a reduction in disruption of services; the MOH training office began being in charge of coordinating training; and facilities are able to plan better for deployment of staff during and after training to ensure less disruption of services.

- **With the aim of improving training information management to enhance tracking and staff development planning, standard training registers were developed and started being piloted in 19 health facilities** (Jan 2015 – present)**.** Facilities include seven hospitals, five health centers, and four public health units selected from across the country, plus the three pilot programs (i.e., SNAP, NTCP, SRH). A software developer has been hired and is currently developing a computerized Training Information Management System that will be used to track trainings and trainees and generate training reports for improved decision-making. The system will be operational in the next quarter producing report for facility, regional and national level managers, as well as partners.
- **The IST improvement advisor has continued to provide technical support to different MOH programs as listed below**
  - Swaziland Nazarene University: Guidance on MDR TB curriculum review process (March 2015)
  - Quality Program: In December 2014 QI/QA TOT identified areas of improvement in the program and made recommendations
  - Environmental health program**:** In February 2015, ASSIST was requested by the Environmental Health Program to be part of the team evaluating consultants to develop the health care waste management training manual.
  - Swaziland Health Laboratory Services**.** In February 2015, ASSIST provided technical assistance in conducting a training needs assessment for all SHLS staff. Training Needs Assessment (TNA) tool has been developed and submitted for approval
  - The project is in a process of contracting a consultant to develop standard guidelines for conducting effective trainings in the MOH. This will help improve the quality of training.
- **Held IST coordination mechanism workshop** (Nov 2014). The in-service workshop was successfully held at Esibayeni Lodge with the following objectives: orient participants on IST coordination mechanism; finalize training and recording tools; and develop IST coordination calendar for the pilot programs (i.e., NTCP, SNAP, and SRHU). The workshop was attended by 18 participants who included facility IST coordinators, program training focal persons, program thematic area coordinators (from NTCP, SNAP, SRHU, MOH training unit, Ministry of Public Service), and training focal persons from partners supporting the three mentioned programs.

Activity 6: Improve Option B+/ART laboratory related care and treatment monitoring

- **Strengthen National Sample Transportation Services (NSTS) to enable facilities access viral load testing for pregnant women and improve turn-around time for viral load and DBS results of pregnant women and HIV exposed infants** (Jan - March 2015). In order to increase the NSTS coverage and frequency the project has procured five additional vehicles. Currently, the vehicles are being remodeled to suit the requirements of safe storage and transportation of hazardous samples.
- **Establish mHealth patient feedback system** to ensure they return to the facility once laboratory results are available (ongoing). The mHealth system has been developed to deliver patient results to the requesting facility, and to notify the clinician and patient of the availability of a result. The system also sends reminders to patients who have missed their appointments. Currently the system is awaiting approval from USAID, and implementation will commence immediately thereafter.
- **Conduct operational research for TB screening among pregnant women** (Feb 2015). The full study protocol was drafted with inputs from ASSIST, URC headquarters, SHLS, CDC Atlanta, CDC Swaziland, and USAID. The protocol, entitled “Screening in Maternity to Ascertain Tuberculosis Status (SMART): an evaluation of the sensitivity of the WHO-recommended symptom screening algorithm compared to enhanced screening algorithms in detecting TB cases among pregnant and lactating women in Swaziland” has been submitted to and approved by the URC IRB. It was also submitted to CDC IRB and the national scientific and ethics committee and is awaiting approval

before data collection can begin. The study data collection will likely begin in May 2015, upon procurement of supplies and necessary human resources.

Improvement in Key Indicators

Activity	Indicators	Baseline (Sept 2013)	Last value (Dec 2014)
Implement high quality DOTS expansion for TB & MDR-TB and strengthen implementation of integrated TB/HIV prevention, care, and treatment	TB case notification	1782 (83 sites)	1259 (87 sites)
	TB treatment success rate	77% (83 sites)	80% (87 sites)
	HTC uptake	96% (83 sites)	97% (87 sites)
	CPT uptake	98% (83 sites)	98% (87 sites)
	ART uptake	69% (83 sites)	80% (87 sites)
	MDR-TB case enrolment	76% (6 sites)	76% 8 sites
	MDR-TB 6 months interim outcome	68% (7sites)	65% (8 sites)
	MDR-TB Treatment success rate	59% (6 sites)	55% (8 sites)

Challenges and Remedies

Community DR-TB outreach

- Accessibility: Some places are not reachable with a car thus require the team to walk over long distances to reach a particular homestead.
- Mobile patients: The community team finds it difficult to map and link patients to other services as they may provide improper directions or are staying in rented homes and may leave at any time. Efforts are made to contact the patients through phone numbers provided or through the registered treatment supporter, but sometimes these interventions are not successful.
- Absence of the patient at home: Some patients are not at home during the home visit by the DR-TB mobile outreach team. ASSIST linkage officer and the MDR-TB nurse coordinator work after hours to provide support for these patients.
- Some patients do not have treatment supporters. This is especially true for patients across the borders. To address this, facilities try to contact patients if they miss a clinic appointment and try to follow up with the patient remotely. There are ongoing discussions to implement cross-border referrals and follow-up at the national level.

Facility Level

- There is an increase in number of defaulters thus leading to low treatment success rates.
- Health care workers are very reluctant to take IPT mainly stating that it protects for a short period of time. They also raised concerns about side effects experienced by some of their patients, and others fearing resistance. To address this, a focus group discussion and a mini survey have been conducted to establish the reasons for why and how these concerns can be addressed. Lack of knowledge of IPT seems to be the greatest reason for concerns about side effects. Further trainings and informational brochures are planned to address this issue.

- The absence of an appointment system for DR-TB patients makes it difficult to identify patients who fail to pick-up their monthly refills; most such patients are only identified at end of a reporting period. An appointment system has been set up, as explained in the report.

Improving Equity

ASSIST collects and analyzes TB/HIV data sex disaggregated in Swaziland to identify and respond to gender-related gaps leading to poorer health outcomes among females and males, and also targets vulnerable and at-risk groups. In the previous reporting period, ASSIST identified that inmates are at an elevated risk of TB and HIV, and responded to this heightened vulnerability by conducting training on TB, TB/HIV, and DR-TB among prisoners at Big Bend Correctional Institution. The inmates that tested HIV positive for were linked successfully to care and treatment in the prison's clinic.

Knowledge Management Products and Activities

- **URC Staff quarterly review meetings (QRMs):** The URC Swaziland staff QRMs were held in November 2014 and February 2015. In November a total of 36 staff members attended the 2-day workshop, while in February there were 55 URC staff in attendance. The objectives of the QRM were to: use data to inform implementation; present performance of supported health facilities and services; identify corrective measures and interventions to address gaps in identified sites and systems; document improvement interventions; and to share best practices, transfer knowledge and support learning. Power point presentations, flip charts, group work, knowledge cafes, and poster presentations were methods used to share information during the staff QRMs.
- **The months of October-March saw the wrapping up of one of the ASSIST major research projects: the study entitled "Increasing diagnosis of childhood TB in Swaziland: Clinical utility and validity sample collection and diagnostic methods among children in Swaziland."** Data collection for this study ran from February to August 2014 and analysis was completed in December 2014. A full comprehensive study report was compiled, and two research manuscripts were developed for submission to peer-reviewed journals. A dissemination event took place in early March 2015, with key stakeholders from the MOH and supporting partners. An executive summary was distributed and, after presentation of the findings, a discussion took place concerning the implications of the findings for policies and guidelines. These were then incorporated into the full report. This report, along with the manuscripts, is currently being reviewed at URC headquarters and it is anticipated to be printed and disseminated to all relevant stakeholders in late April 2015.
- **Participated in 45th Union World Conference on Lung Health, Barcelona Spain:** October 28–November 1, 2014, five ASSIST team members participated in the 45th Union World Conference held in Barcelona, Spain, presenting four oral presentations and three posters. The conference was themed "Community-driven solutions for the next generation".

Planned Activities Next Quarter: April - June 2015

- Prepare health facilities for ASSIST's close-out and make them ready for the transition.

TANZANIA

Background

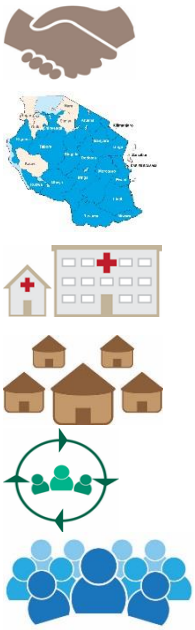
For FY15 the USAID ASSIST Project was requested by USAID in Tanzania to continue supporting the Ministry of Health and Social Welfare (MOHSW) and PEPFAR ART/PMTCT IPs in building capacity to improve quality of care. This work builds on activities begun under QAP in 2003 and continued under HCI in 2008.

ASSIST supports activities geared to strengthening access, retention, and effectiveness of ART/PMTCT care; services and protection of most vulnerable children (MVC); and community-based services including community-facility linkage activities' support. Furthermore, under the aegis of the PHFS initiative, ASSIST is also supporting activities aimed at eliminating HIV infection in children and reducing deaths among HIV-infected mothers, including national scale-up of PMTCT Option B+. Other technical areas include: support to efforts to improve the quality of ART care to infants and children exposed or infected with HIV through provider-initiated HIV testing and counseling (PITC) support; improving the quality of VMMC to reduce possible HIV transmission. At the same time, innovation created during the PHFS implementation will be integrated into MNCH programs. All these interventions align to WHO and PEPFAR goals in reducing HIV transmission while improving the quality of ART and MNCH services.

Institutionalization/Sustainability Strategy

ASSIST's approach is to build the capacity of RHMTs and Council Health Management Team (CHMTs) to coach and mentor facility-based improvement teams to test changes that will improve access and retention in care, such as increased TB screening, improved adherence to anti-retroviral drugs, and improved nutritional care for HIV-positive mothers and exposed infants. ASSIST supports all regional IPs in order to strengthen the health system, achieve scale-up, and promote sustainability of the program through capacity building of CHMTs at a faster and wider scale.

Scale of USAID ASSIST's Work in Tanzania



MOHSW, 12 IPs

25 out of 30 regions/ 126 out of 152 districts

398 facilities

147 communities

570 QI teams

21,981,430 out of 45 million

Program Overview

What are we trying to accomplish?	At what scale?
1. Strengthen the capacity of the MOHSW and IPs to continuously improve the quality of PMTCT care and support scaling up PMTCT Option B+ countrywide	
• Strengthen MOHSW leadership to facilitate institutionalization of QI as a tool towards achievement of e-MTCT • Support MOHSW, R/CHMTs and IPs to increase access to HIV prevention, testing, care, treatment and support to pregnant, postnatal women, HIV-exposed and infected children • Support R/CHMT, facility improvement teams and IPs to improve retention to HIV care for infected women and their exposed infants • Support R/CHMT, facility improvement teams and IPs to improve wellbeing of the infected pregnant and breastfeeding women and their families	National New regions: 2 out of 30 (Ruvuma and Rukwa). 10/152 districts; and 22 high-volume sites out of 4010 sites Old regions: 22 out of 30 regions; 116 out of 152 districts; 376 high-volume sites out of 4010 sites.
2. Support the MOHSW and IPs to scale up improvement activities for ART services to achieve sustainable patients coverage, retention and clinical outcomes	
• Support MOHSW, RCHMTs and IPs to scale up HIV/AIDS care improvement efforts to 4 new regions • Provide TA to MOHSW, R/CHMT in integrating essential services with ART program • Strengthen follow-up of ART patients for retention and clinical outcomes	New regions: 2 out of 30 (Ruvuma and Rukwa). 10/152 districts; and 22 high-volume sites out of 4010 sites Old regions: 22 out of 30 regions; 116/152 districts; 376 high-volume sites out of 4010 sites
• Strengthen patient-centered care and treatment	2 districts in Morogoro; 14 facilities
3. Support the MOHSW, MVC, IPs and local structures to strengthen quality of care, support and protection to most vulnerable children (MVC) through improvement approaches	
• Support the Department of Social Welfare (DSW) of the MOHSW and MVC IPs in improving and strengthening the MVC care response system	National
• Strengthen families and households of MVC to improve care, support and child protection.	2/6 districts in Pwani Region
• Strengthen service integration and community linkages	4/33 wards in Muheza District
• Implement a comprehensive care package addressing child protection and wellbeing in a model district	22/22 wards in Bagamoyo and 3/18 wards in Mkuranga District in Pwani Region
4. Support the MOHSW, LGAs, community-based IPs to strengthen structures and mechanisms used by communities to maximize linkages and coordination of home-based care and social protection	
• Support MOHSW and IPs to scale-up utilization of HBC and standard operating procedures (SOP) nationwide	Nationwide
• Support R/CHMT and IPs to integrate HBC, MVC services and clinical services across a continuum of care • Support MOHSW and IPs to strengthen the M&E system	7/33 wards in Muheza District Tanga City 14 wards
5. Support MOHSW and IPs to improve access to testing and linkage to HIV/AIDS care and services for infants and children below 15 years	
• Increase the proportion of HIV-exposed infants and children	4/30 regions: Njombe, Tabora,

What are we trying to accomplish?	At what scale?
seeking outpatient and inpatient care • Increase the proportion of HIV-exposed children who receive HIV deoxyribonucleic acid (DNA)/PCR test results within four weeks of sample collection • Increase proportion of HIV-positive infants and children who initiated ART • Increase the proportion of HIV-infected infants and children who are retained on ART	Shinyanga and Morogoro) 22/24 districts 42/222 health facilities
6. Work with MOHSW and IPs to improve safety, increase quality and the level of integration of Voluntary Medical Male Circumcision services	
• Support the MOHSW in improving access, safety, and quality of male circumcision for adults above 10 years and children below 60 days • Support IPs and facility providers to reduce adverse effects resulting from male circumcision • Support the MOHSW frontline workers to improve VMMC logistics and supplies • Increase the capacity of health care providers and IPs to provide high-quality male circumcision services	4/30 regions: Njombe, Iringa, Mbeya and Shinyanga 26/66 districts/councils 260/1027 health facilities 40 MMC national and regional Trainers for 4/12 priority regions Establish 26 district/council QI teams working with early infant male circumcision (EIMC) & VMMC VMMC (adult) target 1,518,683 in 4 regions EIMC target: 2000 in 4 regions
7. Work with MOHSW and IPs to improve effectiveness, efficiency and safety of PITC services	
• Strengthen integration of PITC within primary care services	2/130 regions: Njombe and Morogoro 11/12 districts 22/110 health facilities
• Support the MOHSW frontline workers to improve HIV testing, safety and referral, logistics and supplies	
8. Support MOHSW and IPs to improve continuum of care and retention of PLHIV through strengthening of linkages between community and facility actors	
• Improve coordination and collaboration of facility and community providers to provide seamless link from HTC to ART for all clients	4/30 regions: Ruvuma, Njombe, Iringa, Morogoro One district from each region (4/22) 10 facilities in each district, three villages from each facilities
• Promote clients and community involvement in HIV care linkages through tasks sharing and support	
• Support the R/CHMTs to improve the information systems to inform on program progress	
9. Support MOHSW and IPs to improve quality of integrated PMTCT services in MNCH settings	
• Support MOHSW, IPs, R/CHMT in the development of implementation of integrated care package for PMTCT and MNCH services	4/30 regions: Katavi, Ruvuma, Rukwa, and Shinyanga All 20 districts in the four regions 10 high-volume facilities in each region
• Support MOHSW, IPs, R/CHMT in integrating TB/HIV inventions in MNCH settings	

Improvement Activity

Accomplishments and Results by Activity (October 2014 – March 2015)

Activity 1. Strengthen the capacity of the MOHSW and IPs to continuously improve the quality of PMTCT care and support scaling up of PMTCT Option B+

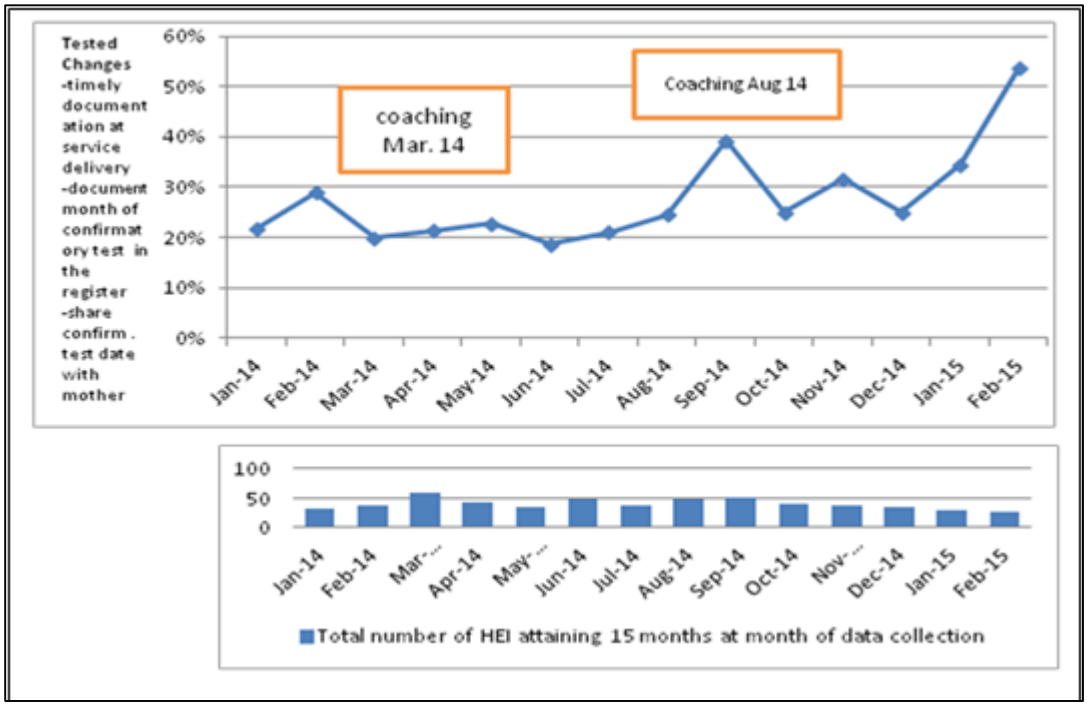
Overview: ASSIST continues to support the MOHSW, regional IPs, RHMTs, and CHMTs to improve the quality of PMTCT services and scaling up of PMTCT option B+ to all regions. Through working with the MOHSW and partners in intervention districts, HIV+ pregnant and breastfeeding women are provided with quality PMTCT services that ensure continuous availability of ARVs, clinical monitoring for opportunistic infections (OIs), DNA/PCR testing, and access to timely HIV test results for exposed babies. PHFS, as part of PMTCT, addresses retention, nutrition support, HIV testing care and treatment for pregnant and post-natal women, and HIV exposed infants. ASSIST in collaboration with RHMTs, CHMTs, and regional IPs continues to support the regions across the country to improve retention in care, identification of infected HIV-exposed infants and monitoring the well-being of both mothers and their babies. The data support system is being revisited to improve linking mother-infant pairs in the medical record system and improve male involvement in PMTCT activities. ASSIST is also planning to facilitate use of dashboards to monitor district level performance, which will be spread to all the districts. Lessons learned from this monitoring process will be documented in the form of knowledge management products, such as knowledge nuggets, success stories, and a PMTCT Option B+ knowledge asset.

Accomplishments and Results:

Singida and Arusha regions

- **ASSIST supported 100 QI teams from Singida (24 sites) in December 2014, Morogoro (22 sites) in February 2015 and Arusha (24 sites) in March 2015 where a total of 360 service providers were coached and mentored to improve access, retention and wellbeing of HIV-positive pregnant and breastfeeding mothers and their exposed infants.** IPs, RHMT, CHMT, and QI teams from these regions were supported on how to analyze systems and processes of care, identify gaps, and test changes to improve access, retention to care and wellbeing of HIV positive pregnant and breastfeeding women. QI teams were supported on how to work with HBC, PLHIV, local government associations, religious leaders, and other community groups to advocate for first trimester ANC booking to enable early initiation of ARVs to HIV-infected pregnant women, advocacy for male involvement, and ensuring mother-baby pairs are seen at the same time by the same provider.
- **Results: Increase in access and retention to care.**
  - In Arusha: male partner testing and counseling at RCH increased from 21% in January 2014 to 48% in February 2015. HIV confirmatory test for HIV-exposed children six weeks after cessation of breastfeeding increased from 22% in January 2014 to 54% in February 2015 (**Figure 37**), and retention of HIV-positive mother-baby pairs increased from 7% in January 2014 to 64% in February 2015.
  - In Iramba district, Singida Region: From October 2013 to November 2014, there was an increasing trend for early ANC booking (7% to 16%); male partner testing for HIV at RCH (22% to 60%); and initiation of cotrimoxazole at 2 months for HIV-exposed children (2% to 44%).

Figure 37. Tanzania: Percentage HIV exposed children receiving confirmatory test six weeks after complete cessation of breastfeeding, 12 sites, Arusha Region (Jan 2014 – Feb 2015)



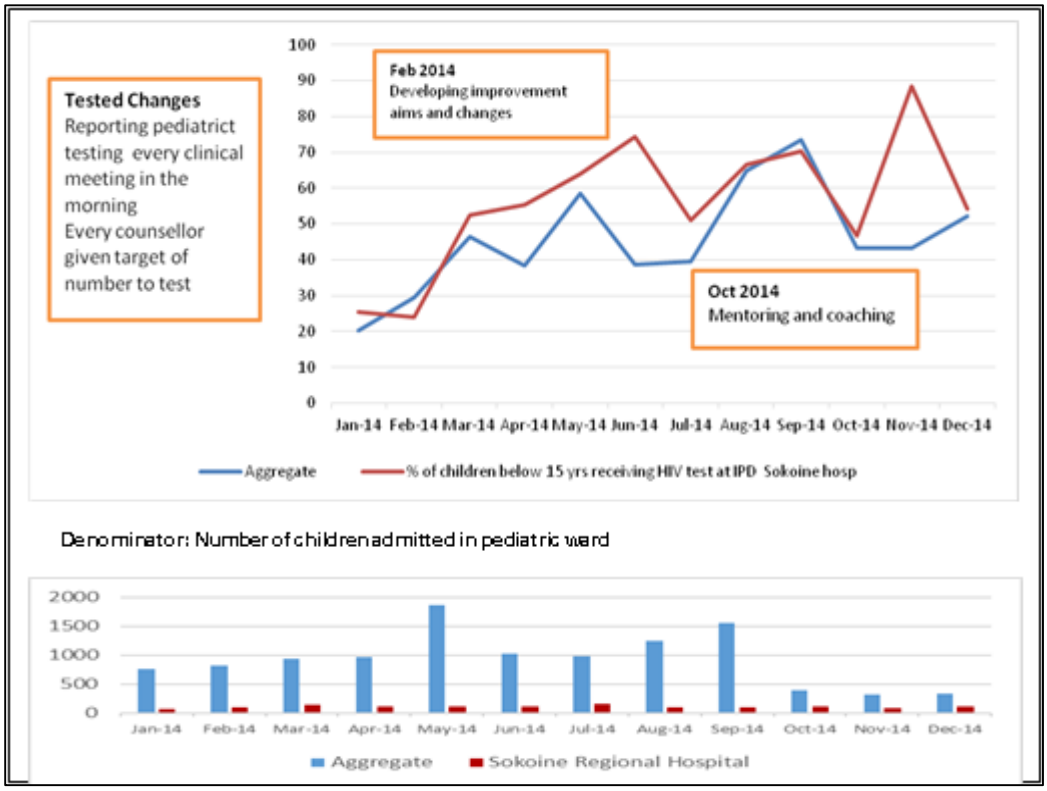
Lindi and Mtwara regions:

- **ASSIST facilitated training of six EGPAF field staff from Lindi and Mtwara regions** (Nov 2014). The training aimed to build their capacities to better understand the concept of QI and support the RHMT and CHMTs in designing, implementing, supervising, and monitoring and evaluation of improvement initiatives in the region.
- **Learning sessions were conducted to 31 sites, of which 16 were new sites in Lindi Region** (February 2015). Health care workers from new facilities were oriented on principles of QI in improving the quality of ART/PMTCT services. Improvement activities for FY15 were developed for both new and old sites. ASSIST identified five CHMT members as QI champions, and they were involved in the facilitation of the learning session to build their confidence and morale to the support of QI initiatives. ASSIST supported six EGPAF field staff, two RHMT, and four CHMT members to conduct coaching and mentoring to 66 QI team members from 12 health facilities in the region.
- **Results: Increase in access and retention to care:**
  - Percent of HIV+ mother-baby pairs seen at the facility increased from 2% in January 2014 to 36% in December 2014.
  - HIV-exposed infants receiving DNA/PCR test for HIV increased from 64% in January 2014 to 100% in December 2014.
  - Pregnant women making four antenatal visits increased from 9% in January 2014 to 54% in December 2014.
  - Percent of children below 15 years tested for HIV in the pediatric wards increased from 20% in January 2014 to 52% in December 2014 (**Figure 38**).

PHFS Sites (Mufindi, Mbeya, and Nzega districts):

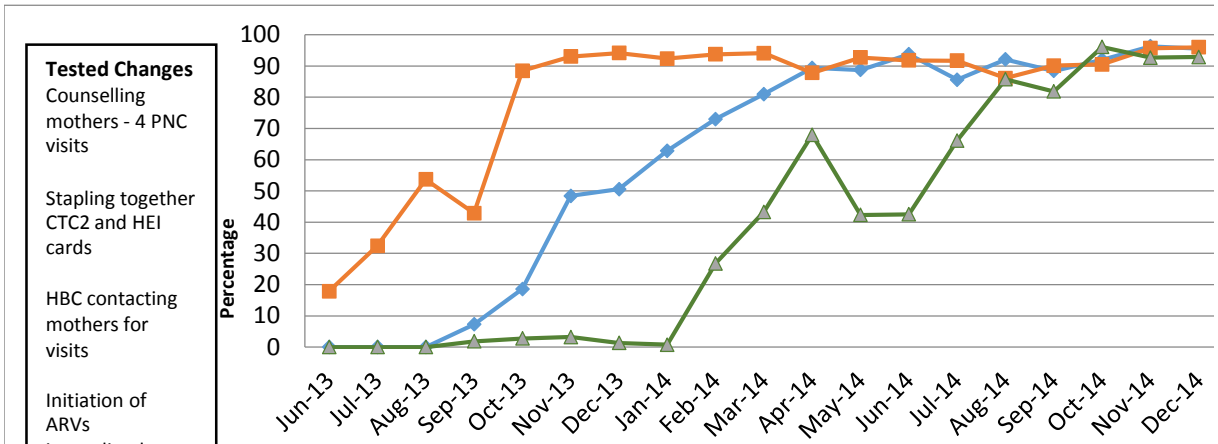
- **ASSIST supported the PHFS program to address: retention, nutrition support, HIV testing care and treatment for pregnant, post-natal women and HIV-exposed infants.** All the teams reported to have carried out at least two meetings from October to December 2014, and minutes were available in most health facilities. National learning platform for initiation of scale-up activities through application of improvement science consisting of 80 participants for three days enabled scale-up to 60 new sites, for a total of 90 sites.

Figure 38. Tanzania: Percent of children below 15 years receiving HIV tests at pediatric wards, 9 sites and Sokoine Regional Hospital, Lindi Region (Jan – Dec 2014)



- **The tested changes that were done in the three districts were compiled in a scale-up package that will be used for the new 60 health facilities in the program from April to September 2015.**Tested changes for improving post-natal visits for day 1, 2-7, 28 and 42 days include the following:
  - Provide a list of names of all with missed appointments to HBCs for tracking them
  - Calling mothers, those with mobile phones, if they missed appointment
  - Writing on their cards the specific date and day that they should come
  - Counselled mothers on the importance of the four visits and dangers of not coming
  - Oriented all health care staff on how to properly document in MTUHA 13 register
  - Involvement of male partners to escort their spouses
- **Results: Increase in retention of mother-baby pairs attending postnatal services** in selected 30 demonstration sites in three districts of Mufindi (0% - 77% from July 2013 to December 2014), Nzega (0 - 96% from April 2013 to December 2014), and Mbeya (18% - 89% from June 2013 to December 2014). **Improvement in the percentage of mothers attending all post-natal care (PNC) standard visits (24hrs 2-7 days, 28 days and 42 days)** from 14% to 64% in Mbeya, 0% to 61% in Mufindi and 0% to 93% in Nzega from June 2013 to December 2014 (**Figure 39**).

Figure 39. Tanzania: Pregnant and lactating mothers taking ART, 10 sites, Nzega District (June 2013 – Dec 2014)



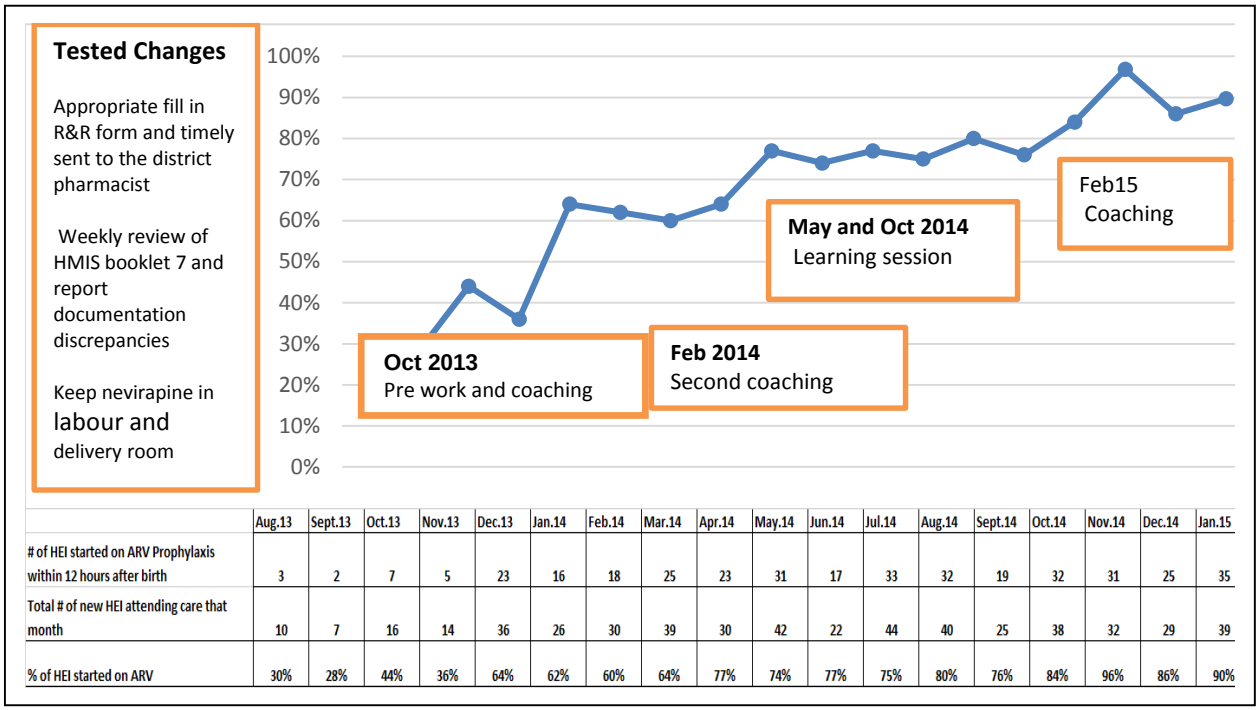
	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14
ART Uptake Nzega	0	0	0	7	19	48	51	63	73	81	89	89	94	86	92	88	92	96	96
Baby mother pair	18	32	54	43	88	93	94	92	94	94	88	93	92	92	86	90	91	96	96
Attending 4 PNC	0	0	0	2	3	3	1	1	27	43	68	42	42	66	86	82	96	93	93

Mwanza Region:

- **ASSIST conducted a second learning session (staggered by groups between November 3-12, 2014) and coaching sessions from February 16-27 2015 to CHMT and health providers from 29 health PMTCT sites in Magu district, Mwanza.** In the learning session, the Christian Social Services Commission QI technical lead, two RHMT members, eight CHMT members, and 79 PMTCT providers across the district participated, whereas in the coaching sessions two RHMT members, 10 CHMT member, and 116 service providers were involved. In both sessions, objectives included sharing of site-level performance versus set targets and associated better care practices, QI team work plan reviews and capacity building of teams on how to overcome implementation challenges/barriers and abstraction of performance data from various registers and monthly summary books. In addition, technical support on strengthening district and facility-level response mechanisms to address stock-outs of ARVS, test kits and other supplies was provided.

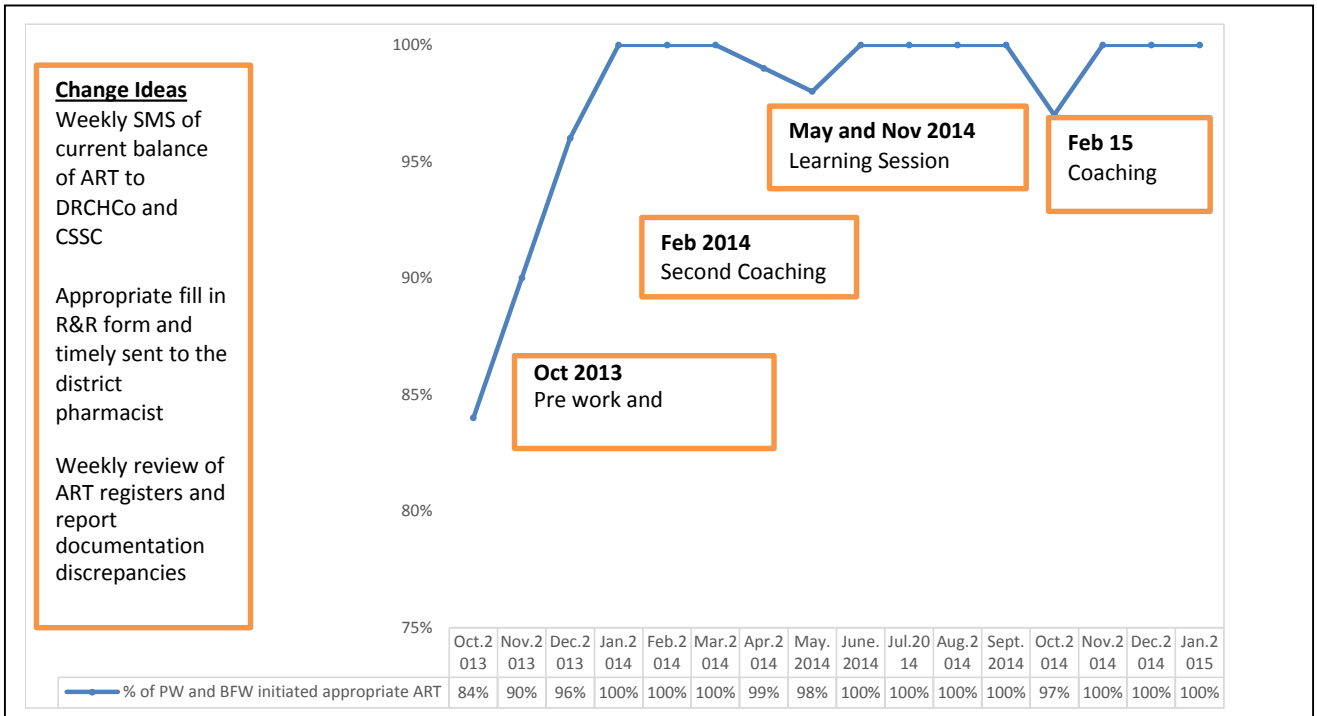
  RHMT and CHMT staff have been actively involved in learning sessions and coaching and were able to guide facility teams in problem identification and solving of system and process deficiencies contributing to failure to test women at RCH clinic and labor wards, stock-out of test kits and ARVs, and proper filling of recording and reporting (R&R) forms.
- **An inventory of tested change ideas from all health facilities per each improvement objective has been compiled for synthesis of a change package for implementation of QI at primary health care facilities.** It will be finalized in the 3rd quarter of 2015.
- **HIV-exposed children receiving Nevirapine soon after birth increased from 30% in August 2013 to 90% in January 2015 (Figure 40).**
- **HIV testing of all pregnant women and subsequent appropriate initiation of ARV treatment for those found positive increased in 29 RCH clinics from 84% in October 2013 to 100% in January 2015 (Figure 41).**
- **The gap between the number of HIV-exposed infants receiving care those that were started on ARV prophylaxis within 12 hours of birth reduce at 29 sites in Magu District, from 70% in August 2013 to 10% in January 2015 (Figure 42).**

Figure 40. Tanzania: Percent of HIV exposed infants started on Nevirapine 12 hours after birth, 29 sites, Magu District, Mwanza Region (Aug 2013 – Jan 2015)



	Aug.13	Sept.13	Oct.13	Nov.13	Dec.13	Jan.14	Feb.14	Mar.14	Apr.14	May.14	Jun.14	Jul.14	Aug.14	Sept.14	Oct.14	Nov.14	Dec.14	Jan.15
# of HEI started on ARV Prophylaxis within 12 hours after birth	3	2	7	5	23	16	18	25	23	31	17	33	32	19	32	31	25	35
Total # of new HEI attending care that month	10	7	16	14	36	26	30	39	30	42	22	44	40	25	38	32	29	39
% of HEI started on ARV	30%	28%	44%	36%	64%	62%	60%	64%	77%	74%	77%	75%	80%	76%	84%	96%	86%	90%

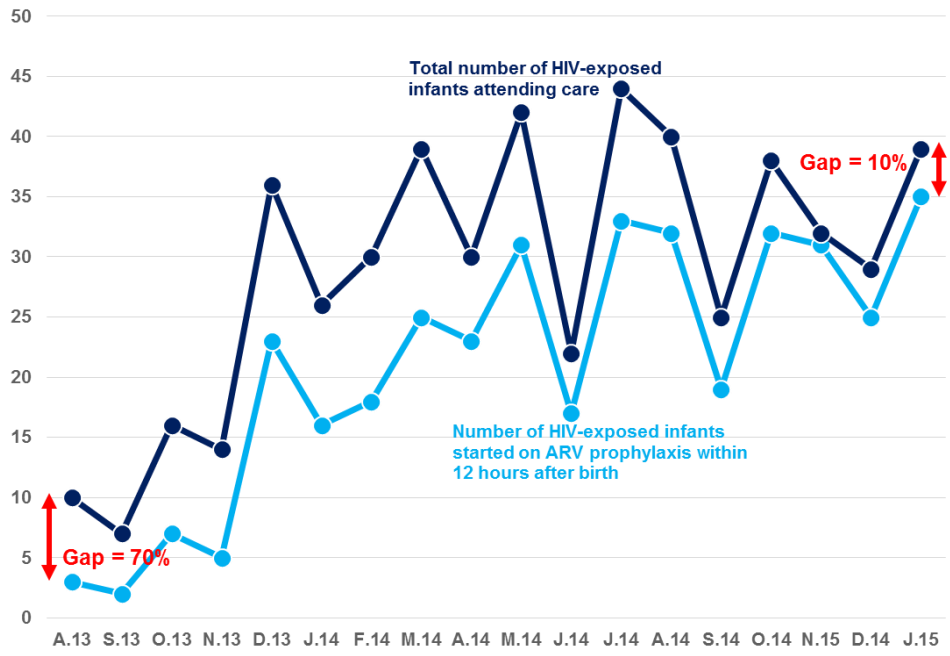
Figure 41. Tanzania: Percent HIV-positive pregnant women started on appropriate ARVs, 29 sites, Magu District, Mwanza Region (Oct 2013 – Jan 2015)



	Oct.2013	Nov.2013	Dec.2013	Jan.2014	Feb.2014	Mar.2014	Apr.2014	May.2014	June.2014	Jul.2014	Aug.2014	Sept.2014	Oct.2014	Nov.2014	Dec.2014	Jan.2015
% of PW and BFW initiated appropriate ART	84%	90%	96%	100%	100%	100%	99%	98%	100%	100%	100%	100%	97%	100%	100%	100%

Oct. 13	Nov. 13	Dec. 13	Jan. 14	Feb. 14	Mar. 14	Apr. 14	May. 14	Jun. 14	Jul. 14	Aug. 14	Sept. 14	Oct. 14	Nov. 14	Dec. 14	Jan. 15
11	38	50	100	150	111	105	99	103	60	64	78	47	52	28	44
13	42	52	100	150	111	106	101	103	60	64	78	48	52	28	44

Figure 42. Tanzania: Improved uptake of ARV prophylaxis by newborns, 29 sites, Magu District, Mwanza Region (Aug 2013-Jan 2015)



Tested Changes

Appropriately fill in R&R form and timely send to the district pharmacist

Weekly review of HMIS booklet 7 and reporting documentation discrepancies

Keep Nevirapine in labor and delivery room

Activity 2. Support the MOHSW and IPs to scale up improvement activities for ART services to achieve sustainable patients coverage, retention and clinical outcomes

Overview: In FY15, ASSIST is supporting the MOHSW, IPs, RHMTs and CHMTs in scaling up of ART improvement efforts to four new regions of Ruvuma, Rukwa, Mara and Kagera. During the reporting period, ASSIST has started to work in one district in each new region to create a learning platform to help partners scale up to other districts in their regions.

Accomplishments and Results:

Ruvuma and Rukwa regions:

In this reporting period, ASSIST rolled out its QI activities to the Southern part of Tanzania to cover the regions of Ruvuma and Rukwa.

- **Held orientation meetings with the RHMTs, CHMTs, and regional IP – Henry Jackson Foundation Medical Research Institute/Walter Reed Program (HJFMRI/WRP)** (Feb 24 – March 3, 2015). During orientation meetings, participants were introduced to the ASSIST Project in Tanzania and the objectives, coverage, and approach to be used. ASSIST also discussed ART/PMTCT program challenges and agreed on priority areas that need to be improved, including: access to pediatric ART; integration of TB and HIV services; retention of PLHIV on ART; integration of PMTCT and MNCH services; scaling QI to lower level facilities; and clinical monitoring of patients on ART.
- **ASSIST, RHMTs, CHMTs, and the IP identified 11 high-volume facilities in each region and visited them for pre-work** (March 2015). The pre-work involved forming and strengthening council and facility improvement teams, collecting baseline data for the agreed improvement areas, and introducing standard tool for documentation of quality improvement work.

Morogoro Region:

- **ASSIST supported four RHMT members, seven CHMT members, and three staff from IP Tunajali and four QI champions from health facilities to conduct two coaching and mentoring sessions to 22 QI teams** (Oct 2014; Feb 2015). During these sessions, 70 facility QI team members were supported in the first session, and 173 members were reached in the second coaching.

Coaching focused on initial and six-month follow-up CD4 testing; enrolling and testing for CD4 to all HIV-infected children below 15 years; and supporting caretakers to ensure retention of these children to care. In-between coaching, the IP for Morogoro Region and ASSIST conducted on-site support visits to revive weak teams and supported them on documenting changes in the Standard Evaluation System team journal tool. During this coaching, it was observed that Turiani Hospital has made great improvement on pediatric PITC, with up to 90% of children being tested for HIV at RCH. Mtibwa Sugar Factory Hospital has started involving HBC providers to track lost-to-follow-up (LTFU) clients after observing that the LTFU numbers had increased following false belief that the clinic has closed as the factory closed.

- **A one-day meeting was held with 45 peer mentors who continue to provide support in 13 facilities implementing patient self-management (PSM) interventions** (Oct 2014). With time, ASSIST is reducing support to the PSM sites in Morogoro, where peer mentors appear to perform well. In recognizing and supporting peer mentors' work, TUNAJALI is working with their HQ to devise a mechanism of supporting the peer mentors to sustain their services. During the meeting, peer mentors were also reminded on ethical issues pertaining to service provision. The importance of linkage and collaboration with other HBC providers supported by other partners was emphasized.

Dodoma Region:

- **ASSIST and Tunajali conducted a coaching and mentoring session with 10 health facilities in Dodoma Region** (Nov 2014). ASSIST, Tunajali and R/CHMT worked with 66 service providers and managers from these facilities. The teams helped the QI teams to review the site work plans to establish the current improvement performance status and document gaps and develop new improvement plans to address gaps. During the same coaching, ASSIST and Tunajali introduced a new activity on Human Resource Management and Leadership to the RHMT and CHMT. Teams were facilitated to develop work plans on agreed areas.

Singida Region:

- **Two staff from TUNAJALI, two RHMT members, and four CHMT members were supported by ASSIST to coach and mentor 24 QI teams where 61 team members participated, in Iramba District.** Most of the Singida QI teams were functional, and they conduct team meetings, except three teams which were supported on how to conduct QI team meetings. Teams were advised to work closely with HBC and other CHWs and even include this cadre in their QI teams and invite them during QI meetings, as they are tracking LTFU and supporting PLHIV in the community.

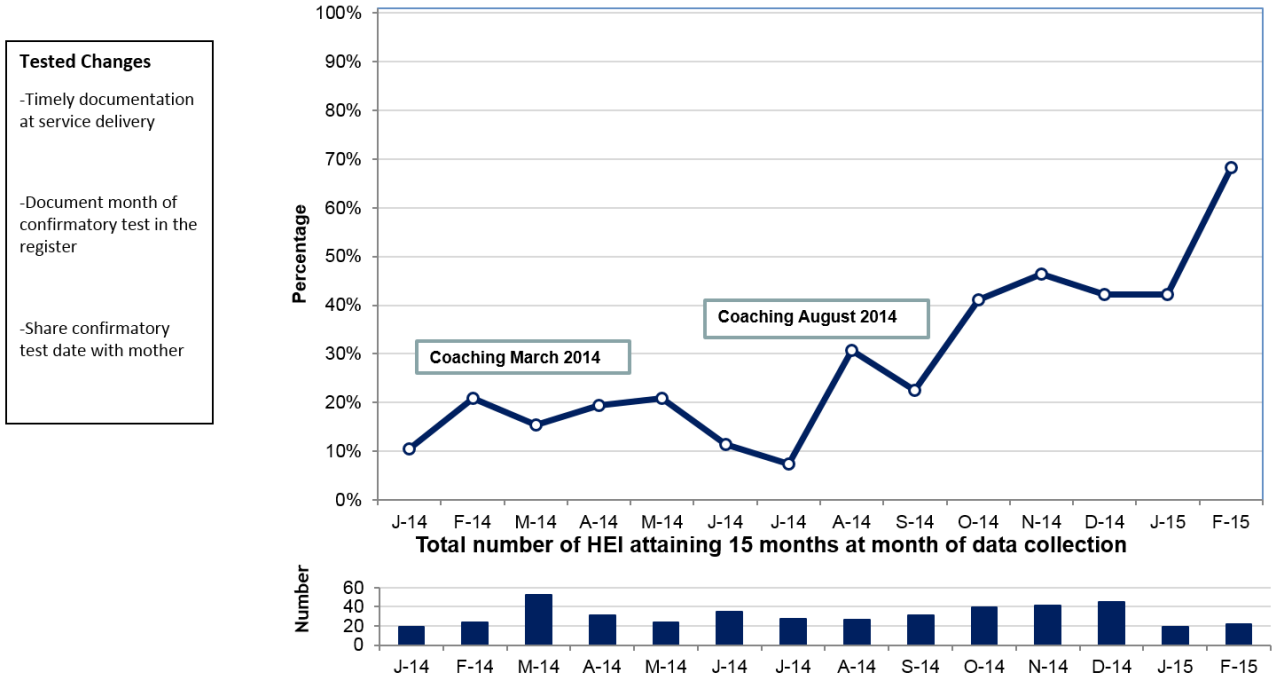
Arusha Region:

- **ASSIST and EGPAF conducted coaching to all 24 health facilities** (March 2015)**.** The facilities are working to improve areas that address ART services for adults and pediatric clients. All facility improvement teams were supported on development of site-level work plans for the missing key service areas of pediatric care, like follow-up of exposed children for HIV confirmation status, HIV testing among non-exposed children attending reproductive and child health (RCH) and outpatient delivery (OPD, and facilitating linkage of HIV-infected children under 15 years into HIV care and ART service. The changes being tested in Arusha include giving PITC to all admissions through allocation of one staff to conduct the PITC, community sensitization meetings to enhance early bookings and male involvement in care, male partners' invitations, promotion of mother-to-mother groups, screening out admissions to check out for all under 15 and promote PITC to this group, and printing monthly lists of clients who are lost to follow-up. Same day appointment for mothers and babies attending RCH/care and treatment center (CTC) services is done to address retention of services and all HEI are documented in HEI cards and linked to their mother's information in the database.

Results:

- HIV testing for children admitted to pediatric wards increased from 5%-15% from January 2014 to February 2015 in 12 facilities of Arusha; the percentage of HIV-exposed children receiving HIV confirmatory test after cessation of breastfeeding increased from 11% in January 2014 to 68% in February 2015 (see **Figure 43**); and HIV-positive mother-baby pair retention increased from 7% in January 2014 to 64% in February 2015, while provision of ARV to HIV-infected children increased from 82% in January 2014 to 94% in February 2015.

Figure 43. Tanzania: Improved uptake of ARV prophylaxis by newborns, 29 sites, Magu District, Mwanza Region (Aug 2013-Jan 2015)



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

Overview: ASSIST is working with IPs and the MOHSW Department of Social Welfare (DSW) to support CHMT staff orientation to apply improvement approaches in identifying performance gaps and test changes to narrow the gaps on priority areas, including: effective case management, PSS, household economic strengthening, and overall child wellbeing and protection. Working with DSW and other IPs, ASSIST will work to improve community child protection (CP) in a learning site in Mkuranga District and support DSW and IPs to improve and measure performance country-wide. In these districts, efforts are made to rekindle community-shared responsibility for CP, ensuring that vulnerable children are in the care of families and receive PSS. ASSIST supports strengthening of relevant systems to track and effectively respond to abuse, neglect, and exploitation. Learning from these sites that will be packaged to guide spread to other regions, starting with Iringa and Mbeya.

Accomplishment and Results:
During this reporting period ASSIST, in collaboration with DSW, Mkuranga District Council, and IPs has continued to strengthen the capacity of child protection teams in the three wards of Mkuranga in preventing and responding to child abuse, violence, neglect, and exploitation; and provision of quality services to vulnerable children.

- **A coaching session was conducted to 21 teams in the three wards** (Dec 2014).
  - Teams have continued to mobilize MVC caregivers to join SILC which encourage them to save and borrow money to support their basic needs. Through SILC, the caregivers have allocated some amount of money to support most vulnerable children.
  - Teams have provided different services to most vulnerable children, including visiting them at home, conducting nutritional assessment, and providing referrals to those who were found to have nutritional problems. In addition, various services were provided by teams and other providers, ranging from schools supplies, school fees, food, insecticide-treated bednets, and in the care of one MVC household, construction of a house.

- Teams and village authorities have started to plan and utilize local available resources in support of vulnerable children and families. For example, the village authority in Hoyoyo has committed to support 10 vulnerable children who will join secondary school each year starting January 2015. Also a village authority in Magoza has allocated a place to start a preschool class. The teacher for the class will be employed and paid by through revenues collected from within the village.

- Various cases of abuses, neglect, and exploitation have been reported to relevant authorities, and actions are taken to make sure children are protected. **ASSIST also supported Mkuranga District Council to mark a CP week from February 9-16, 2015.** CP team members conducted a number of awareness creation activities related to CP issues. Twelve CHMT and 22 CMT members participated in meetings organized by the CP team at district level to discuss planning and allocation for resources to support CP activities. At the community level, 17 out of 18 wards were reached, and awareness-raising activities were carried out in some selected primary schools and villages. A total of 1686 pupils and 722 adults (teachers, ward, village and hamlet leaders) participated. They were reminded of the rights of children and the importance of preventing and responding to abuse, violence, exploitation, and neglect.

Activity 4. Support the MOHSW, LGAs, community-based IPs to strengthen structures and mechanisms used by communities to maximize linkages and coordination of home-based care and social protection

Overview: In FY15, ASSIST is continuing to support HBC/MVC services to include other community-based health services such as HIV/AIDS, sexually transmitted infections (STI), cholera, malaria, and promotion of family planning and safer MNCH in two more districts. The Data Quality Audit (DQA) tool will be concurrently rolled out, coupled with building the capacity of service providers and managers in documentation, reporting, and audit respectively.

Accomplishment and Results:

- **In March 2015, ASSIST conducted a coaching and mentoring session** for CHMT, Mkuzi District Hospital CTC staff, 12 HBC providers, and PLHIV groups on documentation of referral, linkage of home-based care services, and tracking LTFU using available systems in improving retention to HIV care and access to other social services. More emphasis was given in linking clients to community HBC providers during pre-ART and after initiation of ART to ensure clients' continuity on uptake of HIV services, both at facility and community levels.
- **Conducted a mapping of systems and structures to additional new five wards and one high-volume facility (Muheza District Hospital) (March 2015).** The goal was to explore gaps related to retention to care and access of HIV services for adults and children. A client pathway from community to facility and vice versa was examined. It focused on looking at coordination and collaboration among facility and community systems. The facility inter-departmental and community system linkages were found to be weak. A review was done to a sample of 123 HIV-positive clients enrolled into care and treatment from October-December 2013 to October-December 2014. Out of these:
  - 100 HIV-positive clients (81%) received baseline CD4 count
  - 19 HIV-positive clients (15%) received 6- month CD4 Count
  - 10 HIV-positive clients (10%) had 12-month CD4 Count
  - 22 HIV-positive clients (18%) missed appointment on first visit
  - 33 HIV-positive clients (27%) were LTFU

  Based on these findings, providers were taken through process mapping to identify and plan for changes to ensure clients are retained, initiated on ART, and linked with community HBC services and other systems such as CBOs and PLHIV groups in maintaining their welfare. The mapping exercise will help the CHMT in planning ways to support community HBC services in the district.

Activity 5. Support the MOHSW and IPs to improve access to testing and linkage to HIV/AIDS care and services for infants and children below 15 years

Overview: In FY15, ASSIST has begun providing TA to MOHSW, RHMTs, CHMTs, and IPs in reducing the pediatric ART coverage gaps. ASSIST is supporting MOHSW and IPs to apply QI methodologies at

ten high-volumes sites from each of the four regions: Tabora, Shinyanga, Morogoro, and Njombe. The activity will support the sites to test changes and accelerate quality of pediatric ART services in order to address low HIV testing rates among exposed and non-exposed children, weak linkages of HIV-infected children to CTC, and poor retention of both pre-ART and ART children under 15 years in these regions. Partners who are involved are Ariel Glaser Pediatric AIDS Healthcare Initiative (AGPAHI), Tunajali, EGPAF, RHMTs, CHMTs, facility management, and facility level QI teams.

Accomplishment and Results:

Baseline assessments in all four focus regions revealed low performance in: HIV testing for children below 15 years, HIV first test at 4-6 weeks after birth, HIV confirmatory testing for exposed children six weeks after weaning, and linking and retaining HIV-infected children to care and treatment services.

- **ASSIST conducted learning sessions, coaching and mentoring to pediatric ART regional partners to build their capacity on improving services to reduce the performance gaps** (October 2014 – March 2015). Providers were supported in tracking the PMTCT pathway, identifying intervention points for HIV testing in HIV-exposed infants and children seen at RCH and other service delivery points, specifically focusing on children below five years of age.
- **A learning session was conducted to HCWs from 13 high-volume facilities of Morogoro Region, reaching four RHMT members, 12 CHMT members, six TUNAJALI staff, and 50 service providers** (November 2014).
- **Coaching was conducted to 10 sites in Shinyanga Region** (November 2014). Most of the sites had inactive QI teams and no significant improvement of the pediatric key priority improvement areas. About 80% of QI teams had followed up at least one indicator. The QI teams were supported by CHMTs, RHMT, ASSIST, and AGPAHI to develop new work plans for priority areas using the SES journal.
- **Members from sites implementing QI for pediatric ART from Tabora and Njombe shared experiences in increasing access to HIV testing among children at the sites of Ilembula, Njombe Town health center, Makambako Hospital, Nkinga Mission Hospital, Kitete Regional Hospital, Urambo District Hospital, and Sikonge District Hospital** (December 2014).
- **Coaching visits were conducted at 22 sites in the two regions** (March 2015).
- **Service providers in all the four regions tested the following additional changes:**
  - Keeping PITC register for children at these service delivery points and orienting all providers at OPD, IPD, and RCH to testing for HIV in all children below 15 years attending for services.
  - Report on children tested, those not yet tested, linking HIV-infected children to HIV care, and access to CD4 percent assessment as one of ART eligibility criteria.
  - Conducting Early Infant Diagnosis for all HIV-exposed children and escorting HIV-positive children for enrollment to CTC.
  - QI networking group was initiated through WhatsApp social media to facilitate communication between QI teams IPs, R/CHMT members sharing challenges and successes, and calling for support during shortage of supplies.
  - Documenting date for HIV confirmatory test in CTC1&2 cards, mother-child follow-up register, and inform mother of importance of the date and that she should also play a part by reminding the provider about the confirmatory test.
- **ASSIST in collaboration with AGPAHI, RHMT, and CHMTs in Shinyanga, conducted a third coaching and mentoring session on pediatric ART QI at 10 high-volume sites** (March 2015).
- **There was an increase in HTC uptake in the pediatrics wards** (**Figure 44** and **Figure 45**).
- **The percentage of HIV-positive infants and children under 15 enrolled into HIV care increased from 58% in May 2014 to 84% in October 2014 at 10 sites in Shinyanga Region** (**Figure 46**).
- **The activities Igunga District Hospital tested to increase uptake of HIV testing in pediatric ward included:**
  - On-site mentoring among trained PITC staff
  - Sharing information about testing of children during shifts of staff
  - Pre-work done by ASSIST in collaboration with IPs, CHMTs and RHMT included work plans
  - PITC/ ART focal person shared PITC performance for children in morning clinical meetings
  - Testing children established as part of admission and ward round procedure

Figure 44. Tanzania: Proportion of children under 15 years tested for HIV at pediatric wards, Shinyanga Regional Hospital (March – Dec 2014)

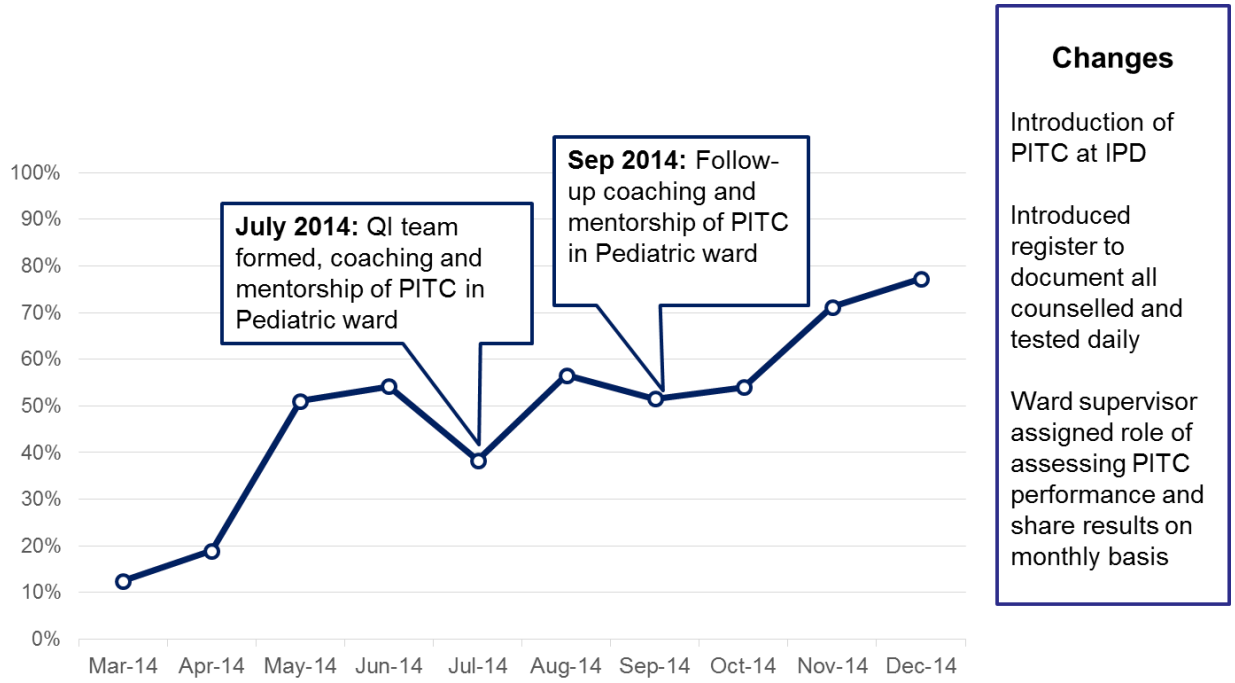


Figure 45. Tanzania: Increase in uptake of HIV testing and counseling among children admitted in pediatric in patient wards, Igunga District Hospital (May 2014 – February 2015)

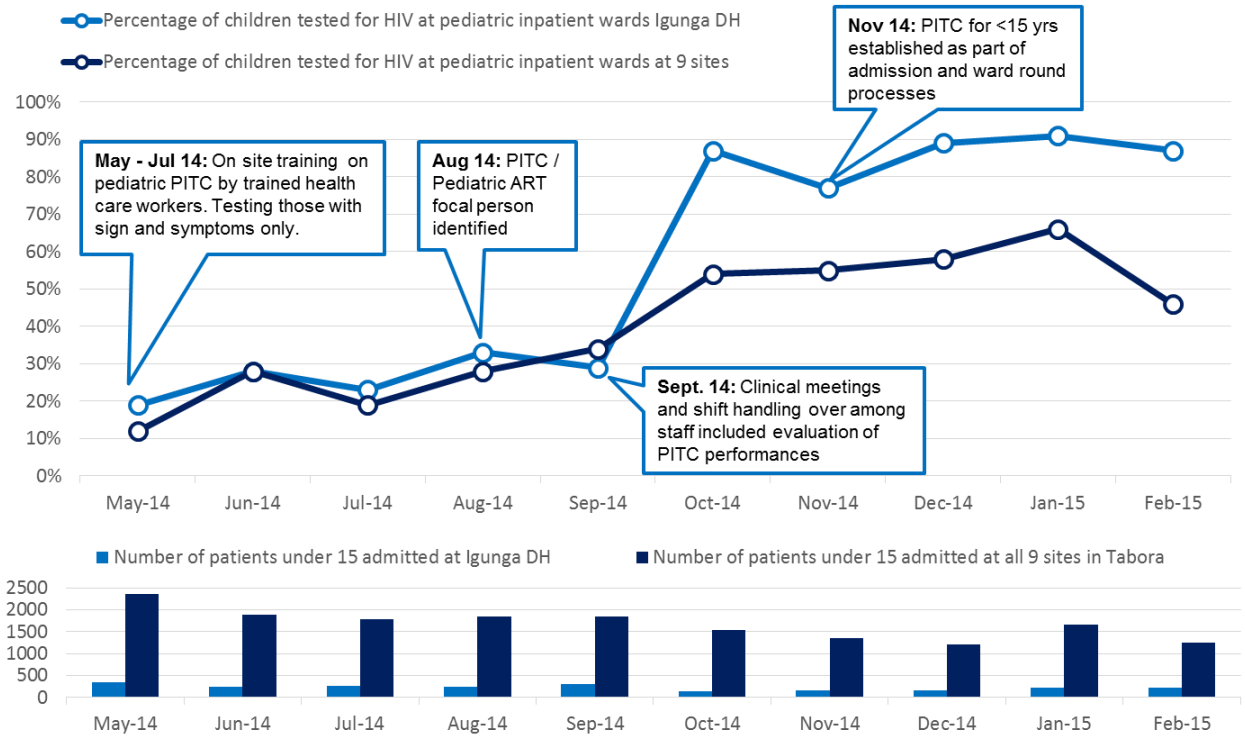
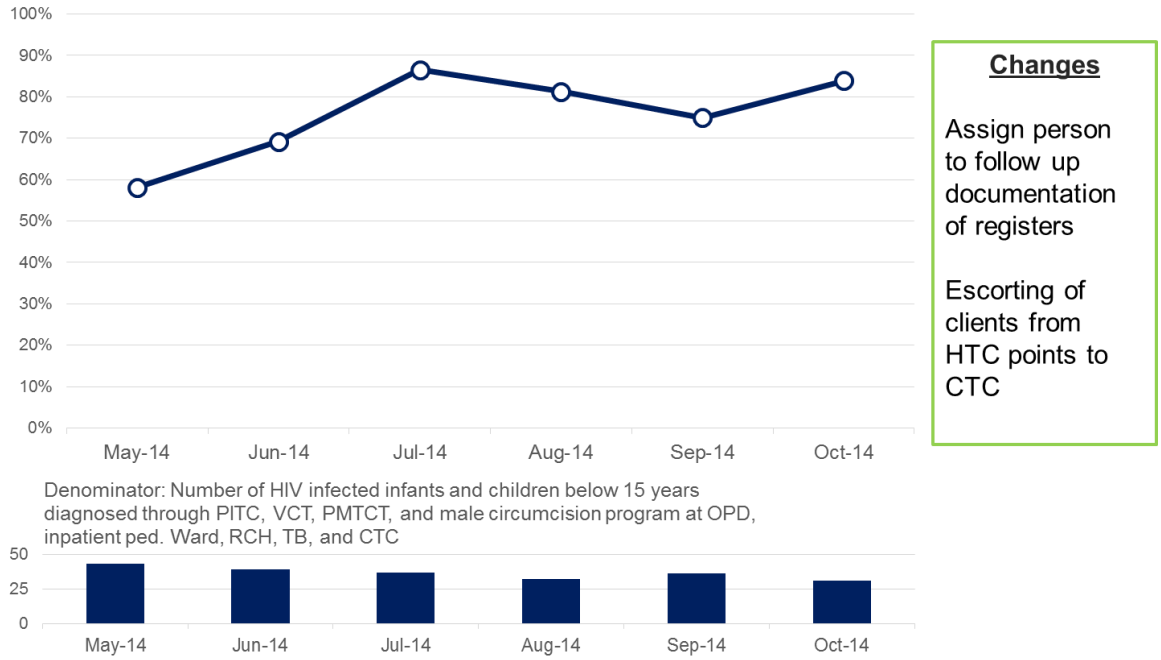
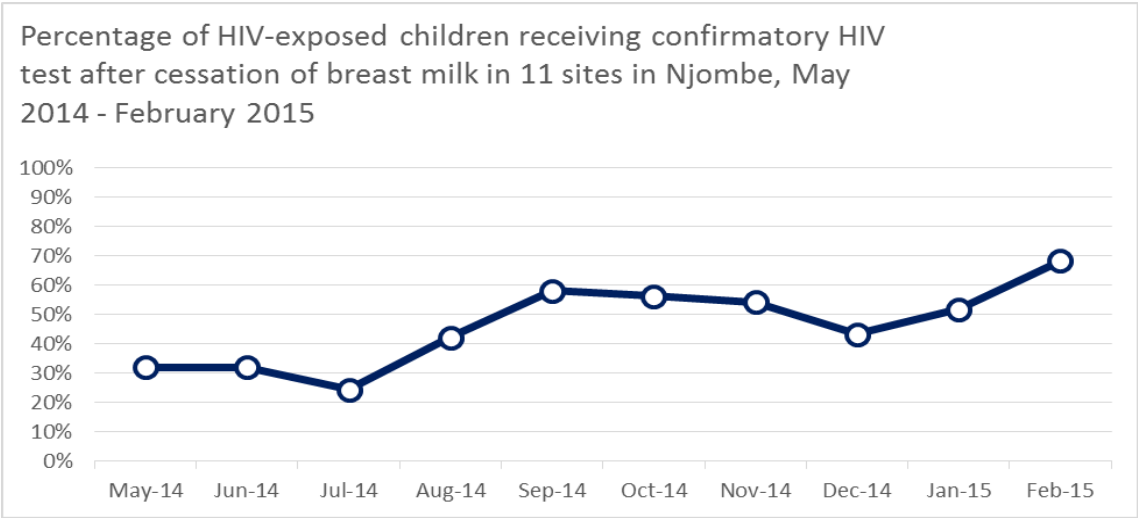


Figure 46. Tanzania: Increase in HIV+ infants and children enrolled in HIV care, 10 sites, Shinyanga Region, (May 2014 – Oct 2014)



- In Njombe Region, the percentage of HIV-exposed children receiving a confirmatory HIV test after cessation of breastfeeding increased from 32% in May 2014 to 68% in February 2015 (**Figure 47**).

Figure 47. Tanzania: Percentage of HIV-exposed children receiving confirmatory HIV test after cessation of breastfeeding, 11 sites, Njombe Region (May 2014 – Feb 2015)



Activity 6. Work with MOHSW and IPs to improve safety, increase quality and the level of integration of Voluntary Medical Male Circumcision services

Overview: ASSIST is collaborating with MOHSW and IPs in applying modern improvement approaches to strengthen the delivery of safe, high-quality, and integrated VMMC and EIMC services. ASSIST will provide technical support to providers to enable them test changes to optimize compliance to the global male circumcision standards. ASSIST will support CHMTs to set up site QI teams that will routinely conduct reviews of work processes to assess and document the extent to which circumcision clients at

every site and everyday receive a package of services. Following every assessment, QI teams will test changes to close identified performance gaps. ASSIST supports improvement of VMMC and EIMC for men above 10 years and 2000 EIMC clients below 61 days of age in Iringa, Njombe, Mbeya, and Shinyanga regions.

Achievements and Results:

- **ASSIST staff attended the preliminary meeting/training for VMMC in Durban, South Africa to start QI activities for VMMC to other staff and supported sites in Tanzania** (November 2014).
- **ASSIST participated in review of National VMMC/EIMC guideline and revision of QI guideline for HIV services to incorporate VMMC and EIMC components** (March 2015). ASSIST supported the MOHSW and IPs by hosting and co-facilitating with the MOHSW a workshop for 20 participants. The participants reviewed: QI training package and incorporated QI for Male Medical Circumcision into the package based on QI standards for MMC, Quality Assessment tools (External Quality Assessment/IQA) and the various SOPs. ASSIST will support the MOHSW and IPs in prototyping, finalizing, and rolling out the package.

Activity 7. Work with MOHSW and IPs to improve effectiveness, efficiency and safety of PITC services

Overview: In FY15, ASSIST is supporting the MOHSW and IPs in designing and managing a QI program for accelerating PITC intervention to achieve local as well as National PITC targets in two learning regions - Njombe and Morogoro. In line with the new PEPFAR vision for accelerating towards AIDS-Free Generation, interventions will be targeted to high-yield sites to ensure efficiency and impact. ASSIST is working with MOHSW structures, IPs, and other technical groups (e.g., lab QA teams, PITC IPs, and related programs, including pediatric ART, PMTCT, VMMC, etc). In addition, attempts will be made to create a forum for dialogue and harmonizing efforts. Applying improvement science, PITC implementation processes will be analyzed to establish implementation gaps following which health care providers will be empowered to test changes, measure and close the performance gaps.

Accomplishments and Results:

- **HIV testing of children increased.** In 11 sites in Njombe Region, HIV testing of children admitted in the pediatric ward increased from 4% in June 2014 to 23% by February 2015. At Makete District Hospital, it increased from 0 to 63% in the same time frame (**Figure 48**).

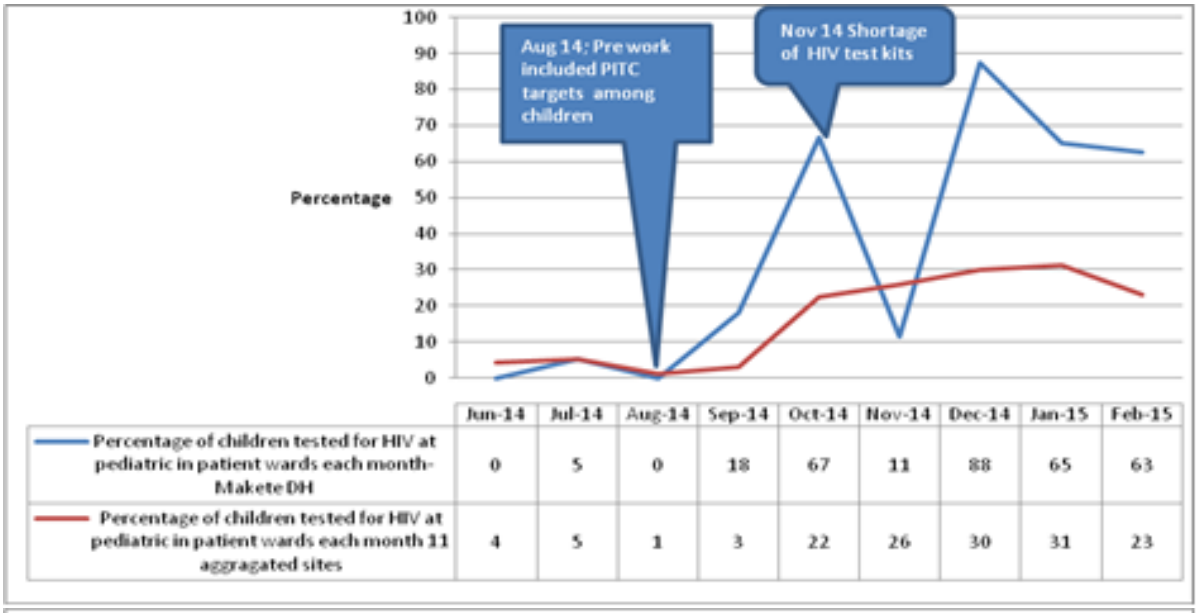
Activity 8. Support MOHSW and IPs to improve continuum of care and retention of PLHIV through strengthening of linkages between community and facility actors

Overview: In FY15, ASSIST is supporting the MOHSW and IPs to improve continuum of care and retention of PLHIV through strengthening of linkages between care sites and community actors as well as systems of feedback and referrals in one district in each region of Ruvuma, Njombe, Iringa, and Morogoro. In each of the sites, ASSIST will: i) strengthen coordination, communication and collaboration of facility and community actors to provide seamless care link from HTC to ART for all HIV-positive clients; ii) promote clients and community involvement in HIV care linkages through tasks sharing and support; and iii) support the RHMTs and CHMTs to improve the information systems to inform on program progress.

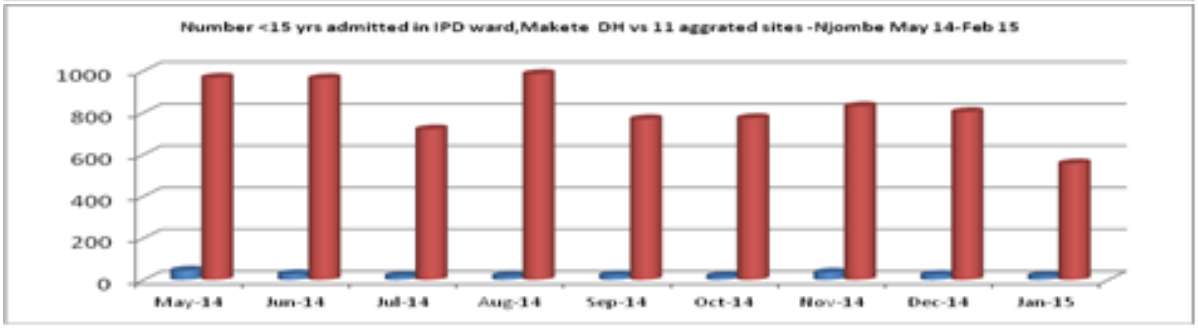
Accomplishments and Results:

Recruitment of key field staff and of field teams in ongoing.

Figure 48. Tanzania: Increasing HIV testing in children admitted in pediatric ward at Makete district hospital compared to 11 aggregated sites, Njombe Region (May 2014 – Feb 2015)



	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15
Percentage of children tested for HIV at pediatric in patient wards each month-Makete DH	0	5	0	18	67	11	88	65	63
Percentage of children tested for HIV at pediatric in patient wards each month 11 aggragated sites	4	5	1	3	22	26	30	31	23



Activity 9: Support MOHSW and IPs to improve quality of integrated PMTCT services in MNCH settings

Overview: In FY15, ASSIST is supporting the MOHSW, IPs, RHMT, and CHMTs in improving quality of integrated PMTCT services in MNCH setting in four regions of Rukwa, Ruvuma, Katavi, and Shinyanga.

Accomplishments and Results:

- The implementation of this activity has started in this reporting period by conducting a quick assessment in seven facilities in Rukwa Region to answer the following questions: Where is each component of the package provided, if not at RCH, what is the linkages and referrals between RCH and where the service is available, and who is responsible at every service delivery point. A quick analysis of the findings revealed that most of the components of the integrated PMTCT and MNCH care package are available at RCH except for TB services and ART services for HIV-positive children. Children identified at RCH as HIV-positive children are referred to the CTC unit, as such as an HIV-positive women receiving ART services at RCH under PMTCT option B+ with an HIV-positive child has to attend two different clinics—one at RCH and another one for the child at CTC. Screening for TB is only done for HIV-positive women at RCH. HIV-exposed children are not screened for TB and are not provided with Isoniazid Preventive Therapy as per national guidelines. HIV testing of women of reproductive age receiving family planning was only done for 7% (243/3302) of women seen from October 2014 to February 2015 in the facilities.

Improvement in Key Indicators

Activity	Indicators	Baseline	Last value
1. To strengthen the capacity of the MOHSW and IPs to continuously improve the quality of PMTCT care and support scaling up PMTCT Option B+ countrywide	% of pregnant women tested and counseled for HIV during ANC period in Magu District, Mwanza	63% (August 2013) 11 sites	55% (Jan 2015) 29 sites
	% of HEI testing for 1st DNA/ PCR between 4-6 weeks each month in Magu District	11% (Oct 2013) 8 sites	56% (Jan 2015) 29 sites
	% HIV-positive pregnant and breast feeding women who receive ARVs treatment for PMTCT and their health in Singida Region	0% (Oct. 2013) 6 sites	100% (July 2014)
	% HIV-positive women (pregnant and breast feeding) receiving lifelong ART for PMTCT and for their health, Lindi Region	27% (Jan 2014) 6 sites	45% (Dec 2015) 5 sites
	% male partners tested and counseled for HIV in Arusha Region	30% (Jan 2014) 18 sites	54% (Feb 2015) 15 sites
	% women from ANC who bring partner in for HIV testing in Kilimanjaro Region	16% (Sept 2011) 13 sites	49% (Feb 2015)
	% of male partners tested and counseled for HIV in Singida Region	37% (Oct 2013) 19 sites	60% (Nov 2014)
	% of pregnant women who book for first ANC by 12 weeks in Singida Region	6% (Oct. 2013) 20 sites	16% (Nov 2014)
	% HIV clients on ART with follow-up CD4 testing (12-month cohort) in Kilimanjaro Region	30% (Jan 2013) 12 sites	86% (Dec 2015)
	% of eligible HIV-positive women of reproductive age receiving family planning methods in Arusha Region	27% (Jan 2014) 13 sites	45% (Feb 2015) 16 sites
	% of women attending FP services and tested for HIV in Singida Region	25% (Oct. 2013)15 sites	50% (Nov 2014)
	% of HIV-exposed children testing for 1st PCR within 4-6 weeks in Arusha Region	63% (Jan 2014)18 sites	75% (Feb 2015) 16 sites
	% of HIV-positive mother-HEI pairs seen at the facility each month in Arusha Region	6% (Jan 2014) 12 sites	60% (Feb 2015) 15 sites
2. To support the MOHSW and IPs to scale up improvement activities for ART services to achieve sustainable patients coverage, retention and clinical outcomes	**% of new sites with quality improvement teams**		
	Singida Region	0% (Oct 2013) 23 sites	100%
	Dodoma Region	0% (Oct 2013) 10 sites	100%
	Mbeya Region	0% (Oct 2013) 10 sites	100%
	% of HIV-positive pregnant and breastfeeding women initiating ART who are prescribed an appropriate first-line ART regimen in Magu District, Mwanza	84% (Oct 2013) 9 sites	100% (Jan 2015) 29 sites
	% of HIV-infected infants initiated on ART (10 sites in each district)		
	Mbeya July 2013 to May 2014	0%	100%
	Nzega April 2013 to July 2014	33%	100%
	Mufindi July 2013 to August 2014	25%	100%
	% of health care providers trained in QI in Singida Region, Iramba District (80 HCWs trained)	0% (Oct 2013) 35 sites	24 high volume sites
	% of HIV-positive pregnant women counseled for family planning at CTC in the month in Kilimanjaro region	1% (Sept 2011)	74% (Dec 2014)
	% of PLHIV who are lost to follow-up		

Activity	Indicators	Baseline		Last value	
	Arusha Region	12% (July 2013) 13 sites)		12 month cohort-53% (Feb 2015) 12 sites	
	Kilimanjaro Region	19% (Jan 2012) 13 sites)			
	% of HIV mother-baby pairs lost to follow-up and then tracked back to care in Nzega Region	0% (Oct 2013)		64% (Dec 2014) 10 sites	
3. To support the MOHSW, MVC, IPs and local structures to strengthen quality of care, support and protection to Most Vulnerable Children through Improvement approaches	**25 sites (Bagamoyo District)**				
	% of MVC with access to two meals in a day	14%		99%	
	% of MVC with access to adequate shelter	46%		89%	
	% of MVC with access to Community Health Fund	0%		35%	
	% of MVCs enrolled and attending school	77%		92%	
	% of MVC reporting to have slept under insecticide-treated bed nets the previous night	60%		98%	
	Proportion of MVC with birth certificates	6%		40%	
5. To support MOHSW and IPs to improve access to testing and linkage to HIV/AIDS care and services for infants and children below 15 years	**Tabora region (11 sites) and Njombe region (11 sites)**				
		Baseline (May 2014)		**Last Value (Feb 2015)**	
		Tabora	**Njombe**	**Tabora**	**Njombe**
	HIV testing among exposed children based on the last year HIV positive pregnant mothers (monthly performances) in Tabora region	8%	9%	17%	9%
	LTF among exposed children 12 months after birth and for those registered at the facility for PMTCT care(cohort performances on monthly basis)	50%	83%	47%	33%
	HIV status confirmation among exposed children after cessation of Breast milk(cohort performances on monthly basis)	10%	34%	26%	68%
	DNA PCR results to exposed children on time	0%	0%	39%	0%
	HIV testing among children under 15 yrs attending OPD services	2%	1%	30%	6%
	HIV testing among children under five attending RCH services		0%	18%	9%
	HIV testing among children under 15 yrs admitted in Inpatient pediatric wards	21%	2%	46%	23%
	HIV care linkages among HIV infected children diagnosed	30%	83%	33%	22%
	Baseline CD4 percent among newly HIV care registered children	19%	31%	0%	25%
	ART initiation among under 2 yrs old	25%	100%	100%	100%
	LTF among children under 15 yrs (quarterly performances)	40%	40%	43% (Oct – Dec 2014)	30% (Oct – Dec 2014)
	LTF among all ages (quarterly performances)	57%	43%	54% (Oct – Dec 2014)	40% (Oct-Dec 2014)

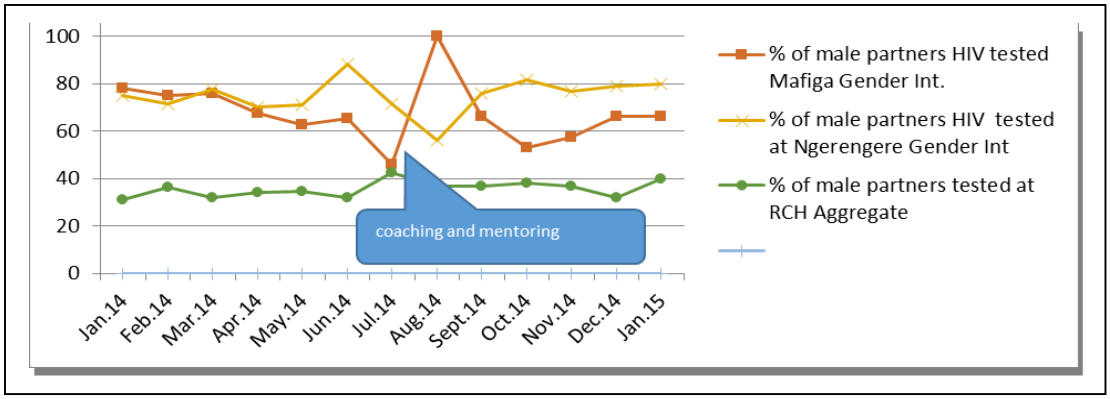
Challenges and Remedies

- Irregular supplies of critical commodities, like test kits and syrup nevirapine, program management tools, such as registers, and lack of adequate personnel, were the most significant barriers to implementation. To help address these challenges, ASSIST worked with the CHMT and the respective IP to maximize use of what was available. We trained CHMTs and facility leaders on the use of program data for quantification of drug needs and placing regular and prompt orders. In Magu Mwanza, through text messages, weekly stocks for critical commodities and supplies in all facilities were reported to district levels and redistribution conducted according to needs. In Morogoro, additional Niverapine syrup was obtained through mobilization of other funds. To address the human resource deficits, we worked with the MOHSW and IPs to improve provider engagement to increase productivity and retention. We are also working with the council health management teams to lead quality and motivate health care workers. In some regions (e.g., Morogoro) we have empowered expert patients to help with some routine work, to enable health care workers time to focus on the more professional work.
- Irregular supportive supervision visits by CHMTs, RHMTs, and managers to the sites has not been able to sustain the momentum to provide quality services at that level. To help address this challenge, ASSIST has encouraged CHMTs to set up comprehensive and integrated supportive supervision that includes QI and is funded through local means.

Improving Equity

Ngerengere and Mafiga sites in Morogoro Region are implementing gender integration and collecting sex-disaggregated data to identify and close performance gaps between males and females to improve health outcomes. QI teams in these sites continued to work on improving male partner HIV testing and counseling at RCH and facilitating enrolment of HIV-positive male partners to CTC. During the reporting period there has been an increase in male partner testing in both sites compared with aggregate data for the region (**Figure 49**). This could have been attributed to the following changes tested at Ngerengere and Mafiga sites: offering free blood pressure and weight check for men escorting their partners to RCH; prioritizing couples at RCH; supporting teams on proper and timely ordering of supplies; and involving community leaders to advocate for male involvement.

Figure 49. Tanzania: Percentage of male partners tested for HIV at RH/PMTCT, Ngerengere, and Mafiga Health Centers (Jan 2014 – Jan 2015)



Teams have also disaggregated data by sex for TB screening, family planning use, and LTFU rates. Large gaps have not been identified in the data collected, but total attendance shows up to a four-fold rise for women receiving care. The most likely explanation for this increase could be due to:

- Disproportionately high number of pregnant and breastfeeding mothers who are now part of CTC following implementation of Option B+. This is not matched with same number of men escorting their female partners for care which fluctuates between 15-20%.
- The number of pregnant and breastfeeding women adds up to non-pregnant/breastfeeding women attending at CTC, which was not the case before Option B+.
- TB screening data is collected on a monthly basis so we expect a smaller denominator for both males and females as opposed to quarterly data for LTFU.

- Pregnant and breastfeeding women initiated on ARVs at diagnosis and not through WHO Clinical staging criteria as with men and non-pregnant/breastfeeding women.

Knowledge Management Products and Activities

- ASSIST, in collaboration with various stakeholders, supported the MOHSW to conduct the first National MVC Conference held in Dar es Salaam from February 18-20, 2015. More than 350 participants gathered to share achievements and challenges in implementation of MVC and CP activities from policy to implementation level. The theme for the conference was "Committed for Action to Keep Children Safe." ASSIST presented on "Enhancing access of services for MVC, through improvement approaches in community settings: A case of Bagamoyo District, Tanzania." ASSIST also participated in implementing the CP Week. The story about the conference and the Child Protection Week could be accessed at http://www.urc-chs.com/news?newsItemID=479.
- In February, ASSIST in collaboration with the MOHSW, EGPAF, Tunajali and Baylor organized a 2nd PHFS National Learning Platform held in Mbeya. Participants included HCWs, community volunteers, Regional and Council Health Management Teams from the three implementation districts namely Mbeya Urban, Mufindi and Nzega districts from Mbeya, Iringa and Tabora regions respectively; IPs and MOHSW gathered to share national level updates related to PHFS; to share experiences and progress of PHFS from the three implementation districts; and to identify potential areas for scale-up.

Planned Activities Next Quarter: April - June 2015

- Coaching and mentoring in Magu (PMTCT), Tabora and Njombe (pediatric activities), Lindi, Mtwara, Singida and Morogoro regions.
- Pre-work for Mara and Kagera Collaborative for PMTCT B+.
- Learning session 2 Tabora and Njombe (pediatric activities); Nzega, Mbeya urban and Mufindi districts (PHFS), Morogoro (pediatric HIV and patient-centered care), Ruvuma, and Rukwa regions.
- Tanzania National Pediatric ART QI conference (June 2015).
- Initiation of NACS activities in Mbeya in 10 sites through baseline assessment and learning session.
- Initiation of research activity in Morogoro Region through training, data collection and analysis.
- Adult PITC stakeholders meeting and pre-work.

UGANDA

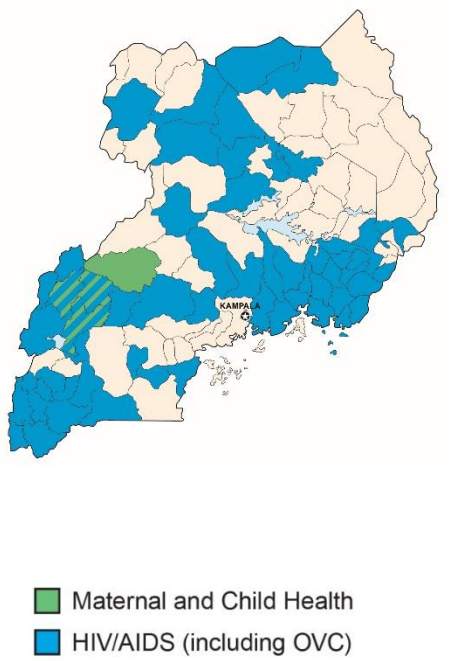
Background

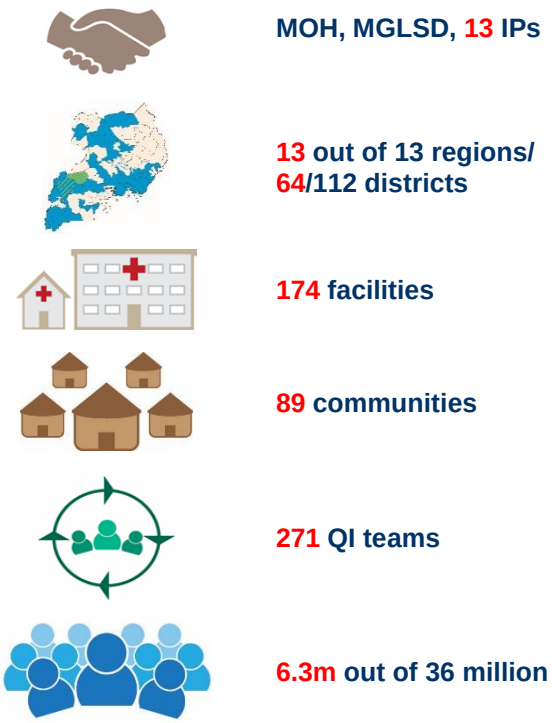
The USAID ASSIST Project began working in Uganda in October 2012, following on support provided for health care improvement since 2005 under QAP and then HCI. ASSIST is supporting the Ministry of Health (MOH), districts, implementing partners (IPs), and health facilities to improve the HIV continuum of response, improve the quality of safe male circumcision services, improve TB case detection and treatment, and implement the Partnership for HIV-Free Survival (PHFS) initiative. The project also supports the MOH to apply improvement methods to improve maternal and newborn health services, integrate family planning services into primary care and referral facilities, and apply lessons learned from pilot facilities to other sites. In addition, ASSIST Uganda is working with the Ministry of Gender, Labor and Social Development (MGLSD) and IPs to apply standards to improve services for orphans and vulnerable children (OVC).

Institutionalization/Sustainability Strategy

ASSIST is supporting the MOH in Uganda to coordinate and institutionalize quality improvement in the health sector. To do this, ASSIST helps to convene national QI coordination committee meetings to provide a strategy for institutionalizing QI; supports the review, development and roll-out of the national quality improvement framework and strategic plan (QIF&SP) (2011-2015); and is working to develop a new QI framework for the MOH. ASSIST is also working with the MOH to develop a national QI performance monitoring plan and indicators and support the development of a national QI training manual and curriculum. At the district level, ASSIST continues to support the MOH to participate in quarterly mentorship and support supervision visits and gathering best practices from the field.

Scale of USAID ASSIST's Work in Uganda





Program Overview

What are we trying to accomplish?	At what scale?
1. Support MOH to coordinate and institutionalize quality improvement in the health sector	
• Support the institutionalization of QI into the health sector through providing direct technical support to the Quality Assurance Department (QAD) of MOH in overseeing and coordinating QI activities	National
2. Support to the MGLSD to coordinate and oversee implementation of national OVC quality improvement plans and strategies	
• Improve coordination of QI activities in MGLSD • Support MGLSD in supervising and mentoring district and lower structures, implementing and monitoring use of the national toolkit for OVC quality assessments, and instituting quality improvement interventions • Train district, sub county, and lower level committees to deliver quality OVC services	National, 13 districts
3. Build capacity of USG implementing partners to improve quality of HIV and AIDS, TB, MNCH, nutrition and OVC services	
• Build capacity of IPs for delivery of quality HIV and AIDS Continuum of Response (COR) interventions through basic training, joint work plans, joint coaching, and learning sessions	8 USG IPs in 56 health facilities (HFs), 30 villages and 41 districts
• Build capacity of IPs for delivery of quality Safe Male Circumcision services	10 IPs in 49 HFs and 38 districts
• Build capacity of IPs to deliver quality EMTCT and nutrition services (PHFS)	4 USG IPs in 22 HFs in 6 districts in the demonstration phase and 47 COR sites
• Build capacity of IPs to deliver quality TB services	1 IP in central region and 16 HFs
• Build capacity of IPs to deliver quality maternal and newborn services under the Saving Mothers Giving Life (SMGL) initiative	15 IPs in 20 high-volume HFs in the demonstration phase and 10 additional sites and one new IP in the scale-up phase
• Build capacity of partners to integrate FP into SMGL activities	15 IPs in 18 sites in the SMGL demonstration districts
• Build the capacity of USG implementing partners and civil society organizations (CSOs) to deliver quality OVC services	2 IPs and 10 CSOs in the 4 demonstration districts and same 2 IPs and another 10 CSOs in 9 scale-up districts
4. Improve HIV Continuum of Response	
• Improve the processes of HIV testing, linkage to pre-ART care, ART eligibility assessment, ART initiation, and ART retention • Support roll-out of QIF&SP • Ensure that HIV-positive adults and children are retained in care, including the TB/HIV co-infected and receive standard treatment through better care organization, health workers' decision support systems, and patient self-management. • Document and share improvement work	2 health regions Districts: 41 Facilities: 55 8 USG IPs 18 villages in 3 districts and 3 health facilities implementing HIV COR activities

What are we trying to accomplish?	At what scale?
5. Improve quality and safety of safe male circumcision (SMC)	
• Support MOH efforts to improve the quality of SMC services • Generate and share new knowledge related to SMC through conducting research to understand gender integration in SMC and vfigurealue-added of knowledge management strategies, and developing change packages, success stories, cases studies and blogs	All regions Districts: 38 out of 112 Health facilities: 49
6. Ensure that HIV-exposed babies are alive, thriving and free from HIV at 18 months of age	
• Ensure that HIV-exposed babies are alive, thriving and free from HIV at 18 months of age • Generate, document, and share new knowledge on PHFS	Districts: 6 22 facilities and spreading to 52 COR sites
7. Improve the quality of TB care	
• Improve the process of intensified case finding (ICF) to identify TB suspects, evaluate TB suspects, and screen household contacts for active TB • Ensure every TB patient receives a complete TB care package at USAID ASSIST-supported health facilities • Increase the proportion of TB patients that receive a complete TB and or TB/HIV care package that includes: standard TB drugs, HIV testing, drug adherence assessment, and treatment response assessment. • Generate new knowledge regarding improving TB care through harvesting and systematically documenting best practices	Central region in 16 Kampala Capital City Authority (KCCA) health facilities (Phase 1 in 6 and phase 2 in 10 facilities)
8. Reduce maternal and newborn morbidity and mortality	
• Improve early detection and management of prolonged and obstructed labor using a partograph • Improve routine delivery of the essential newborn care package, targeting early neonatal infection, hypothermia, hypoglycemia, and bleeding. • To implement Kangaroo Mother Care (KMC) and the use of Antenatal Corticosteroids (ACS) in preterm births • To develop and disseminate knowledge management products	20 intense supported and 10 light supported facilities in 4 Saving Mothers Giving Life (SMGL) learning districts, and 10 facilities in the 6 SMGL scale-up phase II districts found in 2 health regions
9. Integrate family planning into MNCH and ART services	
• To improve health education and individual counseling • To improve availability of FP contraceptives, skilled health care workers and privacy for counseling and dispensing of contraceptive methods	18 sites in 4 SMGL districts of western Uganda Working with the MNCH, Maternity, and OPD and ART clinics, targeting women 15-49 years attending
10. Improve the wellbeing of vulnerable children	
• To improve the quality of OVC care	4 demonstration and 9 scale-up districts; 45 villages

= Improvement Activity = Cross-cutting Activity

Accomplishments and Results by Activity (October 2014 – March 2015)

Activity 1. Support the Ministry of Health to coordinate and institutionalize quality improvement in the health sector

Overview: To contribute to the institutionalization of quality improvement in Uganda, the USAID ASSIST Project is supporting the implementation of the National Health Sector Quality Improvement Framework (NQIF) 2010 - 2015 in the Rwenzori Region of western Uganda. ASSIST is doing this in partnership with the QAD at the MOH to establish and functionalize the QI coordination structures at regional, district, health sub district (HSD), and health facility levels.

Accomplishments and Results:

- **Held a harvest meeting to systematically capture experiences of the district QI committees (QICs) in implementing quality improvement through the structures of the NQIF** (Nov 2014). The information captured is to be used to develop a guide for QIF implementation at district level and a set of case studies on functionalization of district QICs.
- **Conducted a regional QI coordination meeting for the Rwenzori Region** (Feb 2015). During the meeting, regional QI roles were discussed to create common understanding in reaction to the observations made at the harvest meeting in November 2014. In addition, feedback was sought about the implementation of the Rwenzori Region QI sustainability strategy that had been adopted at the regional QI coordination meeting in August 2014. A positive development was the fact that Kabarole District included a session on the QI strategy in the induction training for 80 new health workers in February 2015.
- **ASSIST supported the MOH Quality Assurance Department to hold a quarterly QI coordination meeting** (February 2015). The key achievements were:
  - The Ministry was able to review the composition of the membership; some inactive members were replaced, and new members seconded to the committee
  - ASSIST presented the findings and recommendations from the health care improvement information market research study to the MOH QAD TWG. The next step is for these recommendations to be approved by the eHealth TWG.
- **ASSIST worked with the MOH to take stock of certified national QI trainers. Uganda now has 84 certified national QI trainers.**
- **Held meetings with MOH top managers in February 2015 and agreed on mutual issues to further strengthen collaboration between the MOH and ASSIST.** Agreed to support the Director General and Commissioner of QA to attend a senior health leaders policy seminar and the IHI-British Medical Journal (BMJ) International Forum on Quality and Safety in Healthcare, with the aim to improve commitment of top managers in implementing QI initiatives especially through advocacy and allocation of resources. Three additional staff were proposed to implement the QI mandate in QAD and office of the Director General of Health Services.
- **ASSIST supported the MOH to conduct technical support supervision for two quarters in Northern and Eastern Uganda** (Oct to March 2015). All three regional QI committees have been formed. All 27 districts have formed district QI committees. About 46.5 % (194/417) of the targeted health facilities have QI teams; however most of these QI committees are not functional (i.e., could not access the minutes of meetings, very few had selected QI projects and were monitoring them on documentation journals).
- **National level leading spread of PHFS guidance documents:** At the national level, the MOH took the lead in sharing the three PHFS guidance documents/change packages that had been developed by ASSIST in 2014 and in getting buy-in from PMTCT stakeholders. The change packages were shared with the MCH technical working group in the MOH and subsequently with District Health Officers (DHOs) at the national PMTCT stakeholders' meeting held from 26-28 February 2015.

Activity 2. Support to the MGLSD to coordinate and oversee implementation of national OVC quality improvement plans and strategies

Overview: USAID ASSIST organized a series of meetings to plan the spread. The spread districts were selected and a joint work plan was developed.

Accomplishments and Results:

- **Facilitated a partners meeting** (Oct 2014): ASSIST facilitated a partners' meeting chaired by the MGLSD attended and attended by Sustainable Comprehensive Responses (SCORE), Uganda Private Health Support Program (UPHS), ASSIST, and SUNRISE to discuss spread of OVC improvement activities to 10 new districts. A joint work plan for the quarter was agreed on, and the partners and Ministry committed to participating in the joint activities.
- **Conducted a stakeholders meeting** (Oct 2014): ASSIST facilitated a stakeholders' meeting targeting local government leaders from the 10 spread districts. The meeting was attended by 37 local government leaders, three officers from UPHS and SCORE, and four MGLSD officers. ASSIST discussed the QI spread strategy and roles of all the stakeholders, and the district teams committed to participating in the QI activities and allocation of resources whenever possible.
    - **Districts:** ASSIST engaged the districts to activate the district improvement teams to work on improving reporting through the OVC MIS and selected performance indicators. Teams were supported to make improvement plans to ensure better coordination of the service providers and compile performance indicators to inform the district about services for vulnerable children. Districts that have improved in reporting have used the quarterly service providers' meeting, phone calls, and supervision to get the reports from CSOs (Bugiri and Nakasongola). Other districts have used the chief administration's office to write to CSOs to remind them of their obligation to report.
    - **Institutions:** We conducted one quarterly assessment and developed performance indicators for improving processes of care for children in institutions. Work at the four institutions initially focused on improving adherence to national standards, and we have moved on to work with the institution teams to improve process of care to ensure children are resettled back to the communities in at least six months.

Activity 3. Build capacity of USG partners to improve quality of HIV/AIDS, TB, MNCH, nutrition, and OVC services

Overview: During this reporting period, ASSIST focused on spreading improvement activities and lessons learned from four demonstration districts and 24 districts to 10 districts and 45 villages supported by two partners (SCORE and UPHS).

Accomplishments and Results:

- **ASSIST staff participated in organizing a QI workshop for six Strengthening Decentralization for Sustainability (SDS) supported districts** (Feb 2015). During the two-day workshop, ASSIST shared with SDS and its supported districts the experience of QI implementation with specific emphasis on the district coordination role. The participants were introduced to key QI tools such as the documentation journal, the QI reporting template, QI minutes template, the team evaluation form, and action planning template. It is hoped that SDS will continue to support the districts to utilize the tools for QI implementation.

Activity 4. Improve HIV Continuum of Response

Overview: During October 2014 - March 2015, the USAID ASSIST Project supported six implementing partners (STAR E, STAR EC, STAR SW, UPHS, Mildmay, and Walter Reed) to implement quality improvement initiatives in 56 health facilities in 46 districts of Uganda in the HIV Continuum of Response. The 56 facilities for joint support with USG partners are all providing HIV care at level of HC IIIs and IVs and general hospitals.

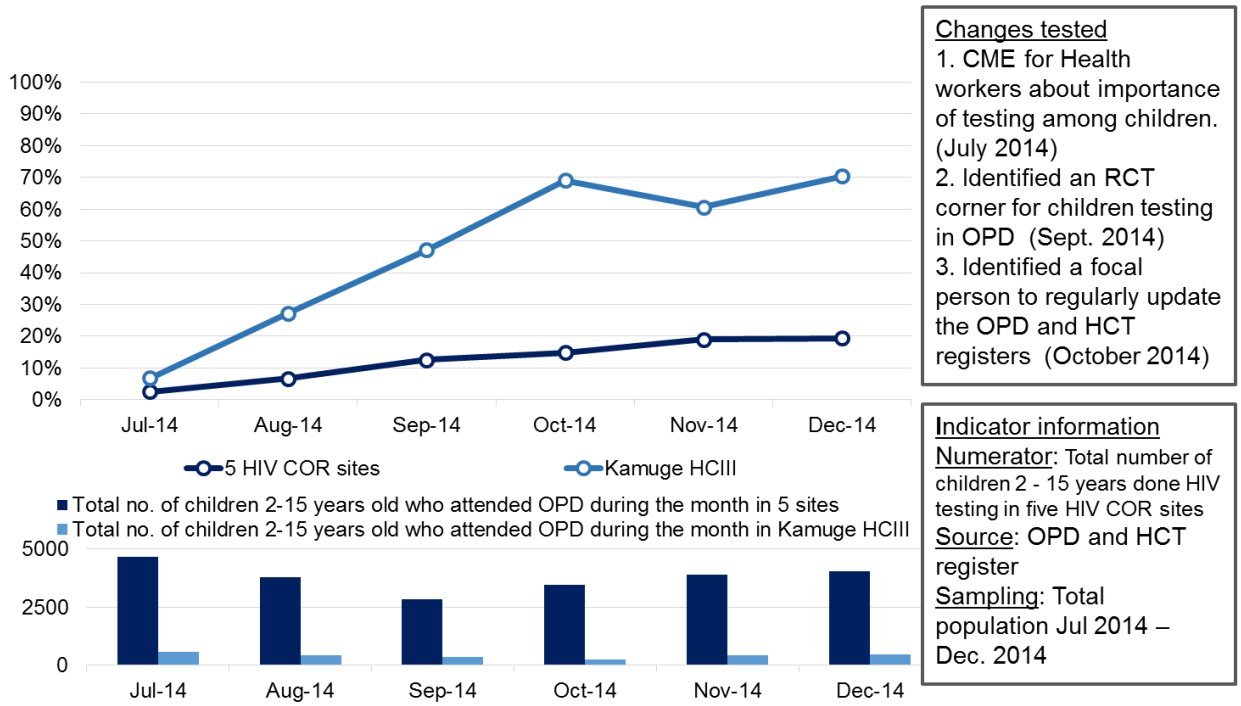
Accomplishments and Results:

- **ASSIST conducted three facility-level coaching visits in 50 facilities with the IPs and the DHTs in the 43 districts of Uganda** (Dec 2014- Feb-2015). However, in the six new UPHS facilities in March 2015, only one joint coaching was conducted with the partner.
- **ASSIST conducted coaching visits in 18 villages and 3 health facilities in 3 districts (Kamuli, Bugiri and Mitooma) in East Central and South Western regions** (November 2014 – March 2015). ASSIST worked with community level improvement teams in 18 villages to improve community-level

follow-up for HIV patients on ART. At health facilities, ASSIST staff worked with expert patient teams to improve appointment keeping and linkage of HIV patients to community level resources. As a result: 1) 180 community personnel and 30 facility-based expert clients were reached with improvement skills; 2) the number of PLHIV linked to community level care and support improved from 181 in Oct. 2014 to 842, of whom 798 (95%) are still active on ART.

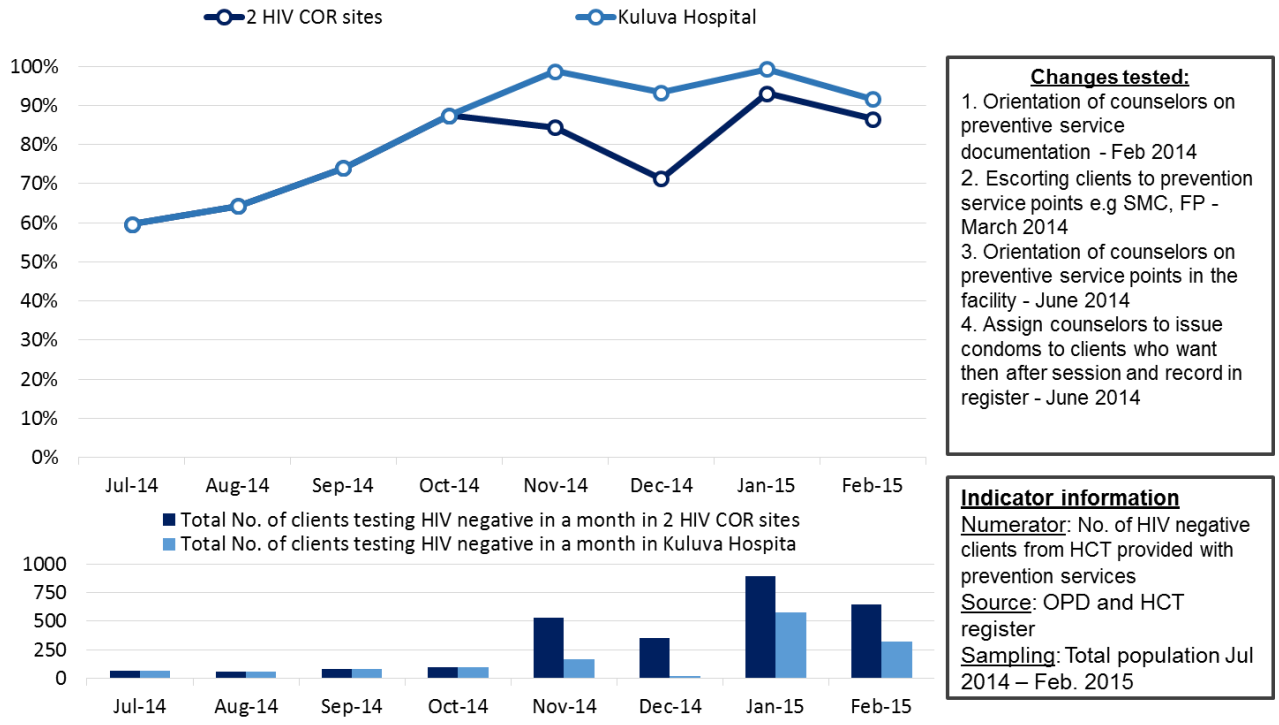
- Sites were also supported during the coaching visits to provide a standard care package to ART clients by focusing on improving the following areas: MUAC measurement, weight measurement, CD4, Monitoring, adherence assessment for ARVs and for Cotrimoxazole. 33/56 sites have been engaged and have improvement projects to address the above areas identified as gaps.
- As shown in **Figure 50**, site teams have been supported to start testing changes to improve HIV testing for children under 15 years in OPD and the pediatric ward. The sites include Kamuge, Masafu, Lunyo,Kinyara and Itojo Hospital. It has been observed that the change in the hospital setting differ from the changes in the smaller health facility however they all result into improvement. There has been an increase in the number of children attending the OPD who had the HIV test done.

Figure 50. Uganda: Percentage of children 2-14 years attending OPD during the month and had an HIV test done, 5 HIV COR sites, Kamgue Health Center (July – Dec 2014)



- **Improving preventive care among HIV-negative clients.** The HIV Continuum of Response can only be completed if HIV-negative clients are provided with preventive care services to remain negative. Some of the services include condom distribution for both males and females, Voluntary Medical Male Circumcision (VMMC), and youth corner and post-test clubs where behavior change activities are conducted. **Figure 51** summarizes the result from two facilities: Kuluva Hospital and Kasanda HC IV. Kasanda HCIV did not start monitoring this indicator until October 2014 as compared to Kuluva which started in July 2014.

Figure 51. Uganda: Percentage of HIV-negative clients provided with prevention services, Kuluva and Kasanda hospitals (July 2014 – Feb 2015)



Activity 5. Improve quality and safety of safe male circumcision (SMC)

Overview: The VMMC component of USAID ASSIST HIV work started in December 2012. At the beginning, we were providing intensive technical support to the Ministry of Health and to three facilities supported by each of 10 USG implementing partners. Since beginning the work, the number of SMC IPs has been reduced to eight because one closed and one had its funding suspended. In June 2014, we expanded our intense support to 19 additional health facilities, totally 49 facilities receiving intensive technical support from ASSIST.

Accomplishments and Results:

- **Improved the follow-up of clients at 48 hours post-operatively and reduction in rate of adverse events. Figure 52** shows the percentage of clients who returned for review within 48 hours after circumcision and the proportion of clients who experienced adverse events. It shows that there has been improvement in client follow-up since February 2013, from 32% to 100% in February 2015. In addition, **Figure 52** the graph shows the percentage of clients who experience moderate to severe adverse event (AE) after circumcision. At the start of technical assistance, few AEs were identified because staff did not know how to grade them and would only record the severe AEs. After sensitization and mentorship in recognition, grading and reporting of AEs, the rate of AEs rate worsened (Feb – May 2013). Teams tested changes including reviewing each adverse event to understand why it occurred and how it could be prevented from recurring, improving client follow up, and conducted health education for minors. The rate since July 2013 then been maintained below 1%. There is an inverse relationship between the client follow up and rate of adverse events.
- **Improved percentage of SMC clients who returned for follow-up at initial and scale-up sites. Figure 53** shows the scale-up of technical support provided from 9 health units to 13 health units in northern Uganda. It shows that whereas improving client follow-up at the phase I sites took a while, at the phase II scale-up sites it took a much shorter time, which is consistent with other literature of scale-up. The rapid improvement in the phase II sites was achieved through sharing the lessons learned from the phase I sites.

Figure 52. Uganda: Percentage of clients who return for review within 48 hours after circumcision and percentage of clients who experience moderate to severe adverse events after circumcision, 30 sites (Feb 2013 – Feb 2015)

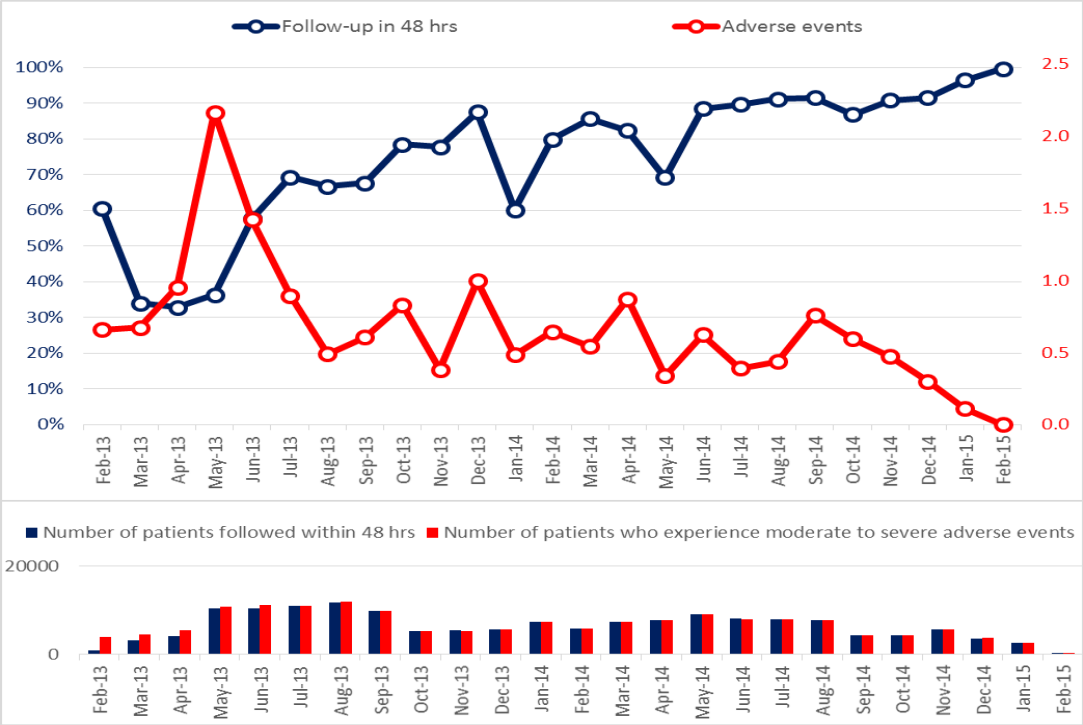
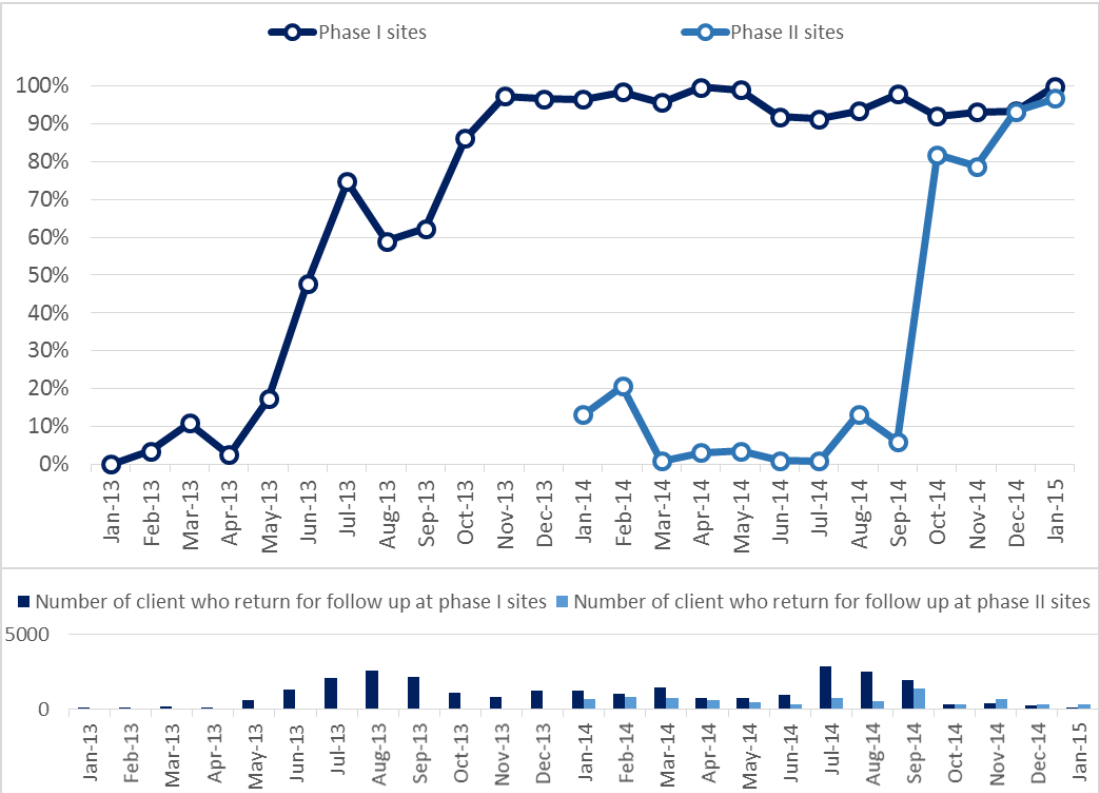


Figure 53. Uganda: Percentage of SMC clients who return for follow up, 9 phase I sites and 4 phase II sites (Jan 2013 – Jan 2015)



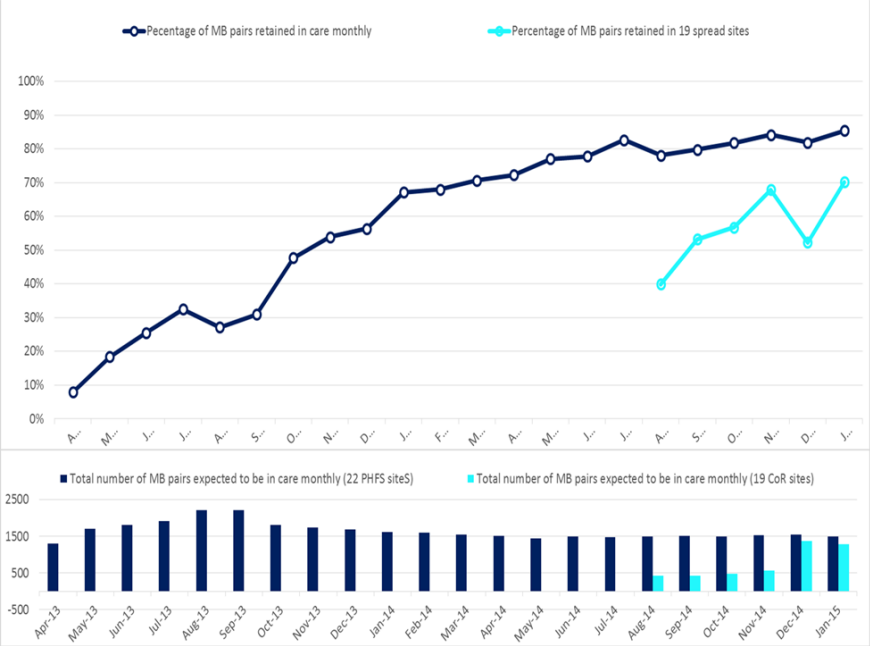
Activity 6. Ensure that HIV-exposed babies are alive, thriving and free from HIV at 18 months of age

Overview: One of the goals of the PHFS work is to contribute to global learning and ensure that the lessons learned from the demonstration phase are scaled up and spread at both national and global levels. Between October 2014 and March 2015, the USAID ASSIST team started spreading key learning from the demonstration sites to spread sites within the six districts and to other sites supported by ASSIST in the Continuum of Response collaborative. The key learnings were spread through the change packages that were developed.

Accomplishments and Results:

- **Supported IPs TASO and SPRING to spread the PHFS work to additional sites within the six demonstration districts** (Oct 2014 – present). The IPs have been supported to scale up PHFS to additional sites. The IPs were provided with the change packages and a list of coaches to support the sites. ASSIST has also provided direct support by facilitating learning sessions and knowledge handover meetings between the old and new sites. Currently SPRING has spread the PHFS work to 31 sites in three districts, and TASO has spread to 39 sites in three districts.
- **USAID ASSIST is spreading the key learnings from the PHFS work directly to health facilities supported under the Continuum of Response** (Oct 2014 – present)**.** The change packages have been shared with the improvement teams at these sites, and 19 of these focused on the retention of mother-baby pairs in care.
- **Held PHFS coaches' meeting on spread** (Oct 2014). The meeting was attended by both district and regional coaches, the MOH, and implementing partners. The purpose of the meeting was to determine the roles of the coaches in the spread phase, agree on what indicators would be measured for spread, and understand how the change package was going to be applied in the spread phase. During the meeting, it was agreed that spread sites would be supported to improve the quality of data reported through DHIS2 so that this data can be monitored. The coaching teams also agreed on which indicators to monitor for spread.
- **Conducted PHFS exchange visit with the Lesotho team** (Feb 8-14, 2015)**.** As part of the global learning agenda, the Uganda PHFS teams hosted a team from Lesotho. The objectives of the visit were to share and learn from programmatic successes and challenges among the two PHFS countries, discuss changes tested and implementation strategies that can be adapted by the visiting country, and identify lessons and action steps from the visit. The Lesotho team visited health facilities and interacted with the health improvement teams, asking questions and observing their work.
- **Conducted fifth peer-to-peer learning session for the 22 PHFS demonstration sites and four spread sites that are participating in the PHFS study** (Oct 2014). The objectives of the learning session were:
    - To discuss and understand the challenges that are preventing sites from making progress with the percentage of HIV-exposed infants who get their first dried blood spot (DBS) at six weeks and results being given to the care givers.
    - To introduce and strengthen the community-facility linkage component as a means of improving identification and referral of pregnant and lactating women as well as exposed babies.
    - To discuss with teams how best to improve linkage of HIV-positive mothers and their babies to the ART clinic after 18 months in mother-baby care service delivery points.
    - To develop plans that will improve nutrition care and support services for mother-baby pairs.
- **Retention of mother-baby pairs in 22 demonstration and four spread sites: Figure 54** shows the percentage of mother-baby pairs retained in care each month reached 84% in the 22 PHFS demonstration sites (January 2015). From Oct 2014 – January 2015, sites focused on involving community structures to identify mother-baby pairs who were lost and bring them back to care. The sites that had the highest number of lost mother-baby pairs identified the villages where most of these mothers came from and followed them up through community linkage facilitators.

Figure 54. Uganda: Percentage of mother-baby pairs retained in care, 22 demonstration and 4 spread sites (April 2013 – Jan 2015)



Changes tested
1. Pair mother and baby cards (Aug. 2014)
2. Synchronize mother and baby appointment dates
3. Phone call reminders to clients before clinic day
4. Home visits by peers to clients who missed app
5. Health education to emphasize app. keeping
6. Assign focal person to check all the tools
7. Write app dates on client medicine containers
8. Mentorship of staff on completion of tools

Indicator information
Numerator: No. of mothers who got ART and have babies are in EID
Source: EID register
Sampling: Total population Aug. 2014 – Feb. 2015

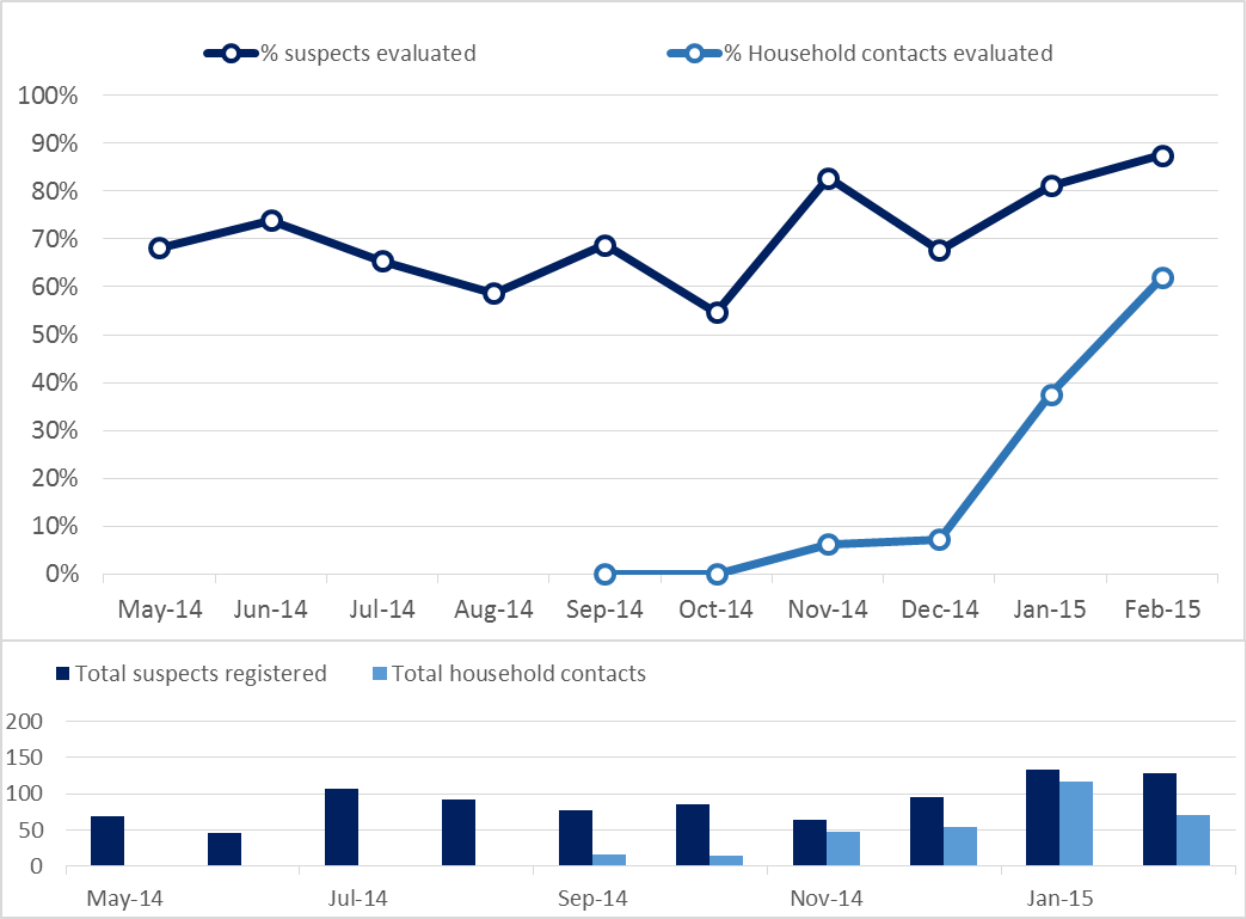
Activity 7. Improve the quality of TB care

Overview: Over the last six months, USAID ASSIST worked with TRACK TB at 16 facilities: six phase I one and 10 phase II. Our main objectives in this reporting period were to support roll-out of changes to improve data quality from phase I to phase II sites and for phase II sites to improve TB case identification and TB/HIV co-infection management. At six sites (2 phase I - Kisenyi and Kisugu HCIV - and four phase II sites - Rubaga, Namugona, Kitebi and Joy Medical Centre), the focus was put on improving documentation and case identification and TB/ HIV management.

Accomplishments and Results:

- TB case identification was enhanced at phase II sites by screening patients using ICF tools at all waiting areas at the health facility. In the community, household contacts of TB patients in the intensive phase were targeted. Community case identification through screening all household contacts in the community by visiting contacts at their homes and organizing community meetings/outreaches was done by community supporters. They also carried out sputum sample collection from the communities during outreach and delivered them to the health facility laboratory for evaluation. This increased from 0% to 62% the proportion of household contacts evaluated for active TB as illustrated in **Figure 55**. This was as a result of a combined effort of health providers and community supporters.

Figure 55. Uganda: Percentage of OPD patients and household contacts evaluated for active TB



Activity 8. Reduce maternal and newborn morbidity and mortality

Overview: Uganda's maternal mortality ratio stands at 438/100,000 live births[1] which is substantially higher than the 162/100,000 needed to achieve Millennium Development Goal 5 in 2015. Most of the maternal deaths occur in the first 24 hours from the onset of labor, and yet high-impact, low-cost, evidence-based interventions exist that can be employed to reduce this. Among these interventions are active monitoring of progress of labor, active management of third stage of labor (AMTSL), and prompt management of complications such as hemorrhage, prolonged/obstructed labor, pre-eclampsia/eclampsia, abortion complications, and infection. Similarly, over half of the total newborn deaths occur in the first week of life, mainly in the first 24 hours. The common causes of neonatal deaths in Uganda include birth asphyxia, infections and complications of pre-term birth, accounting for 90% of all newborn deaths[2]. ASSIST has supported 20 high-volume facilities in the four SMGL implementing districts to improve the processes of maternal and newborn care services through improving partograph utilization, use of AMTSL during delivery, and provision of a package of essential newborn care and has systematically documented emerging best practices and lessons learned. During FY15, ASSIST is building on the QI work done in the 20 demonstration facilities to scale up lessons learned to an additional 10 facilities in the 4 SMGL learning districts and 20 facilities in the six new SMGL scale-up districts.

---

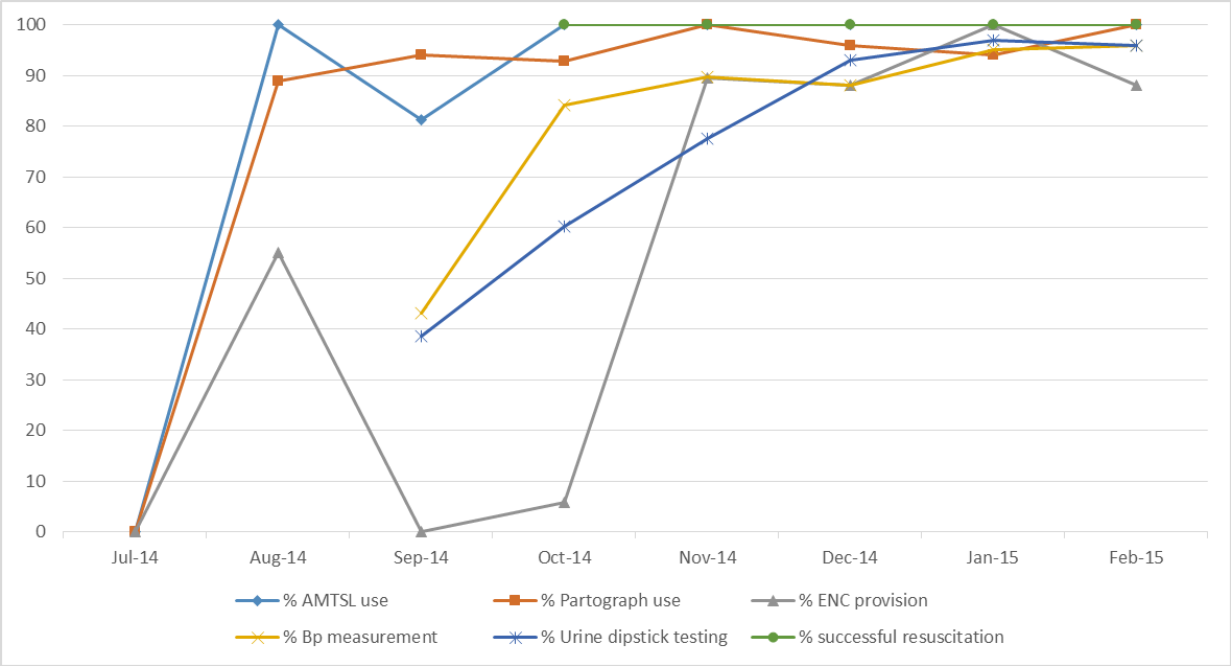
[1] Uganda Demographic and Health Survey (UDHS), 2011.

[2] Ministry of Health.Situation analysis of newborn health in Uganda. Current status and opportunities to improve care and survival.Kampala: Government of Uganda.Save the Children,UNICEF,WHO:2008.

Accomplishments and Results:

- **Conducted coaching visits**
  - District coaches conducted two independent coaching visits in December 2014 and January 2015 to 30 facilities of the four SMGL implementing districts of western Uganda.
  - USAID ASSIST conducted one joint coaching visit with the district coaches in the 20 facilities of the four SMGL implementing districts in November 2014.
  - QI teams were supported to perform maternal and perinatal death reviews during the site visits. Teams were supplied with Maternal and Perinatal Death Review books from the MOH and supported to report to the MOH through the DHOs.
- **ASSIST conducted a baseline quality of care and training needs assessment with the district health team representatives in 20 high-volume delivery facilities (5 hospitals, 8 HCIVs, and 7 HCIIIs) in the new six SMGL phase II districts of northern Uganda** (Feb 2015). Results from this assessment were used to guide the technical and QI trainings for health care providers in March 2015.
- **Conducted three monthly QI TWG meetings involving Baylor Uganda, PACE, IDI, UHSC and USAID ASSIST** (Oct. and Nov. 2014, Jan 2015)**.** USAID ASSIST shared MOH QI tools (documentation journals and reporting forms) with the partners and conducted a joint coaching visit in 8 facilities of Kibale district with IDI (Nov 2014).
- **Conducted a SMGL peer-to-peer learning/stakeholders meeting involving facility and district health leaders in improvement work** (Feb 2015). This involved frontline health care providers, facility in-charges, and DHO representatives. During this meeting, knowledge cafes were organized and successful changes harvested with evidence of improvement from the 30 demonstration facilities.
- **Conducted a SMGL stakeholders meeting for the six SMGL scale-up districts of northern Uganda** (Feb 2015). This involved the technical and political leadership of the 6 SMGL phase II implementing districts. Leaders were oriented about the SMGL initiative, discussed the mode of implementation, and the roles of the different stakeholders in the SMGL initiative.
- **Capacity building of staff in MNCH services** (March 2015). Trained 10 medical officers and 96 midwives from 20 facilities of the 6 SMGL districts of northern Uganda in essential obstetrical and newborn care integrated with quality improvement approaches during two five-day trainings in the first two weeks of March 2015.
- After two and half years of improvement work in 20 demonstration facilities of the 4 SMGL implementing districts of western Uganda, a harvest meeting was conducted in June 2014 and a package of best practices and lessons learned was developed. These were scaled up to 10 HCIIIs in the same four SMGL implementing districts. This package included: application of all the three components of 3rd stage of labor to prevent PPH, adherence to partograph use to detect and manage prolonged/obstructed labor, routine screening for pre-eclampsia through blood pressure measurement and urine dipstick for proteinuria, routine delivery of a package of essential newborn care, and resuscitation of all asphyxiated babies at birth. This was spread in a phased approach.
  - **Figure 56 shows the progress achieved in one of the spread sites in Kyenjojo District.** Butunduzi HCIII has exhibited a faster uptake of best practices through monthly onsite support of the local district coaches and replication of best practices from the demonstration facilities.
- The northern region of Uganda, where SMGL phase II is being implemented, has a facility-based maternal death rate of 143/100,000. Like the rest of the country, the top causes of maternal deaths are post-partum hemorrhage, hypertensive disorders of pregnancy, and uterine rupture.
- The ASSIST SMGL Phase I work focused on tackling these same problems and has evidence-based and tested changes that have led to prevention of maternal and newborn deaths. Starting in February 2015, USAID ASSIST is building on the learning gained on what was effective in terms of improvement in SMGL phase I and is supporting improvement teams in northern Uganda to adopt the changes that led to improvement and also test new changes to attain further improvements and impact.

Figure 56. Uganda: Successful spread of MNCH best practices at Butunduzi HC III (July 2014 – Feb 2015)



SMGL Work in Northern Uganda

USAID ASSIST's objective is to contribute to the accelerated reduction of maternal and new born mortality by improving the quality of maternal and newborn health care services provided in all public, PNFP and private health facilities in the six districts of northern Uganda (Lira, Gulu, Apac, Nwoya, Pader and Dokolo) by September 2017. USAID ASSIST is implementing this in 118 facilities (101 public, 15 PNFP and 2 private) who reported deliveries through DHIS2 in FY 13/14[3].

Activity 9. Integrate family planning into MNCH and ART services

Overview: Globally, FP is recognized as a key life-saving intervention for mothers and their children (WHO 2012). In Uganda, the unmet need for FP has increased to 34% with the maternal mortality rate (MMR) at 438/100,000 and 6.4 HIV prevalence (UDHS, 2011). Sixteen women die every day due to childbirth-related complications. Reducing unintended pregnancy among HIV-positive women of reproductive age is one of the four crucial components of effective elimination of mother-to-child transmission of HIV programs according to WHO. Thus incorporating FP and HIV care with other health care services increases access to life-saving services and improves health outcomes. Provision of family planning information and services helps individuals as well as couples make informed decisions that will help them prevent unintended pregnancies and sexually transmitted diseases, including HIV. Lessons learnt in the integration of FP into MNCH and HIV care will be used to rapidly improve FP services in the scale-up sites.

Accomplishments and Results:

- **Held a learning session for the 18 facilities, a list of changes was generated, and driver diagrams on improving FP counselling and contraceptive prevalence were drawn up** (Oct 2014). This knowledge management product will be utilized to make quicker improvement in the quality of family planning services as we scale up to the additional entry points of HIV clinics and other sites.
- **Conducted on-site coaching in all the 18 participating sites** (Oct 2014, Nov 2014, Jan 2015).This

[3] District Health Information System

was intended to:

- Follow-up on the implementation of the action plans developed during the second learning session and provide technical support in the FP MNCH/HIV improvement process.
- Review and support data collection and update the dash board and data base to track improvement in the 18 participating sites
- Provide support to coaches and FP-MNCH QI teams to synthesize their learning from improvement efforts and prepare them to share the emerging best practices at the learning session related to the integration of family planning into immediate post-obstetric care, immunization, and extended postnatal care services.
- **Results noted during the learning session were:** 78% of the participating sites have improved FP-HIV care integration data quality through appropriate use of the FP column and counselling session of the ART care card. Sites have started journals to monitor performance. Teams have initially focused on the mother-baby care points for the integration.

- **Changes introduced to improve family planning education/counselling among women attending the immunization and postnatal clinics included:**
  - Provision of FP/ RH health services at the immunization clinic before vaccination of the babies starts (this change was introduced in April 2014 at all the supported sites).
  - Use of village health team members who are already using family planning contraceptives to conduct group education and share their experiences in using contraceptives starting May 2014
  - Conducting two group education talks to reduce on those who miss the morning session started in June 2014 across all sites.
  - Provision of family planning contraceptives during the EPI outreach activities starting July 2014
  - Conducting community sensitization and education sessions aimed at addressing the misinformation regarding the use of modern contraceptives starting August 2014.
  - Allocation of midwives to provide family planning/reproductive health services to women referred from the immunization and postnatal clinics in October 2014
  - In November 2014, FP contraceptives were dispensed at the same service point as immunization.
- **As a result, the percentage of women 15-49 years attending the immunization and postnatal clinics who received family planning counselling and were provided with a modern contraceptive method of their choice improved from 41% in Sept 2014 to 67% in March 2015 in 13 SMGL participating sites** (**Figure 57**).

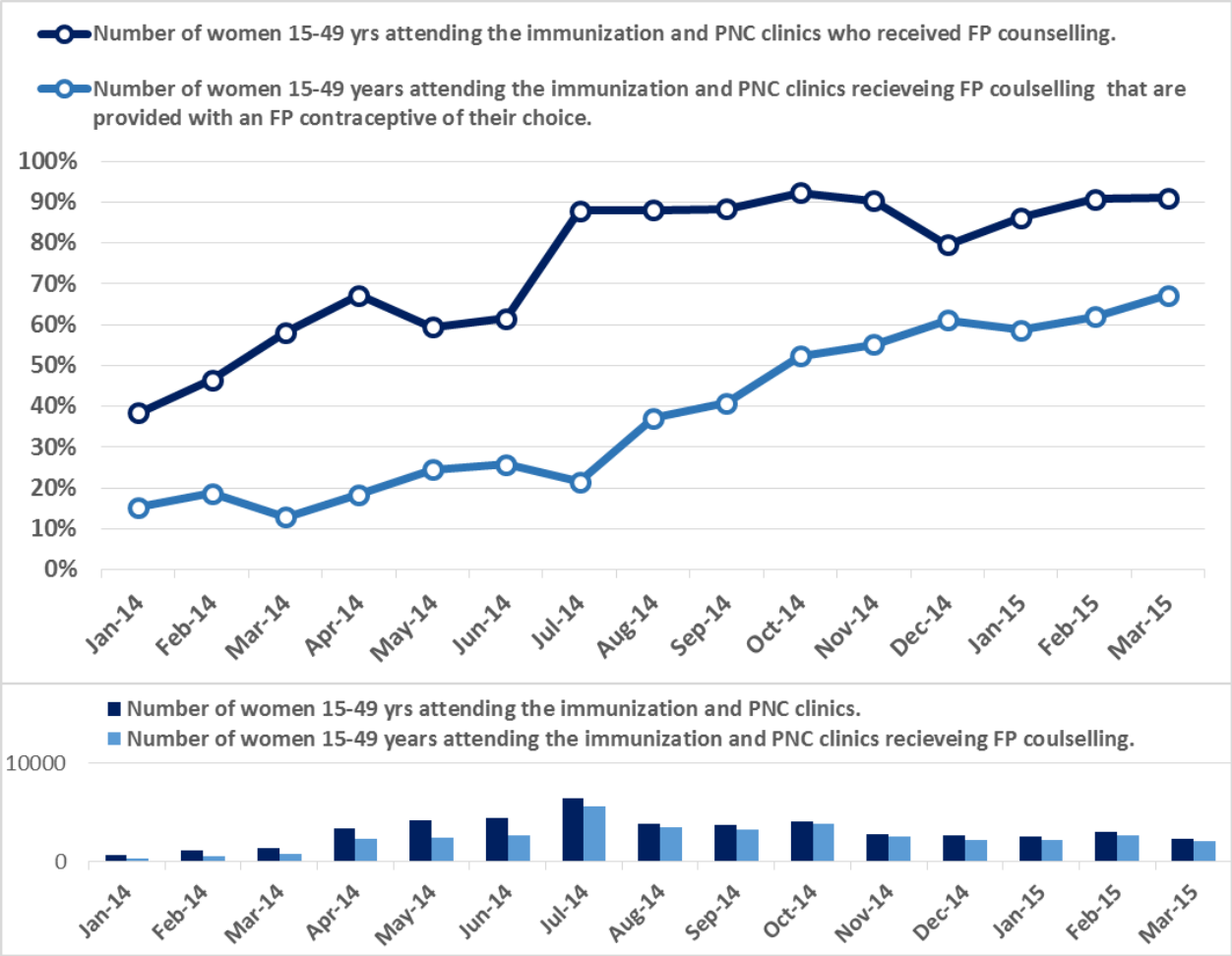
Activity 10. Improve the wellbeing of vulnerable children

Overview: During this reporting period, ASSIST focused on spreading improvement activities and lessons learned from four demonstration districts and 26 villages to 10 districts and 45 villages supported by two partners (SCORE and UPHS).

Accomplishments and Results:

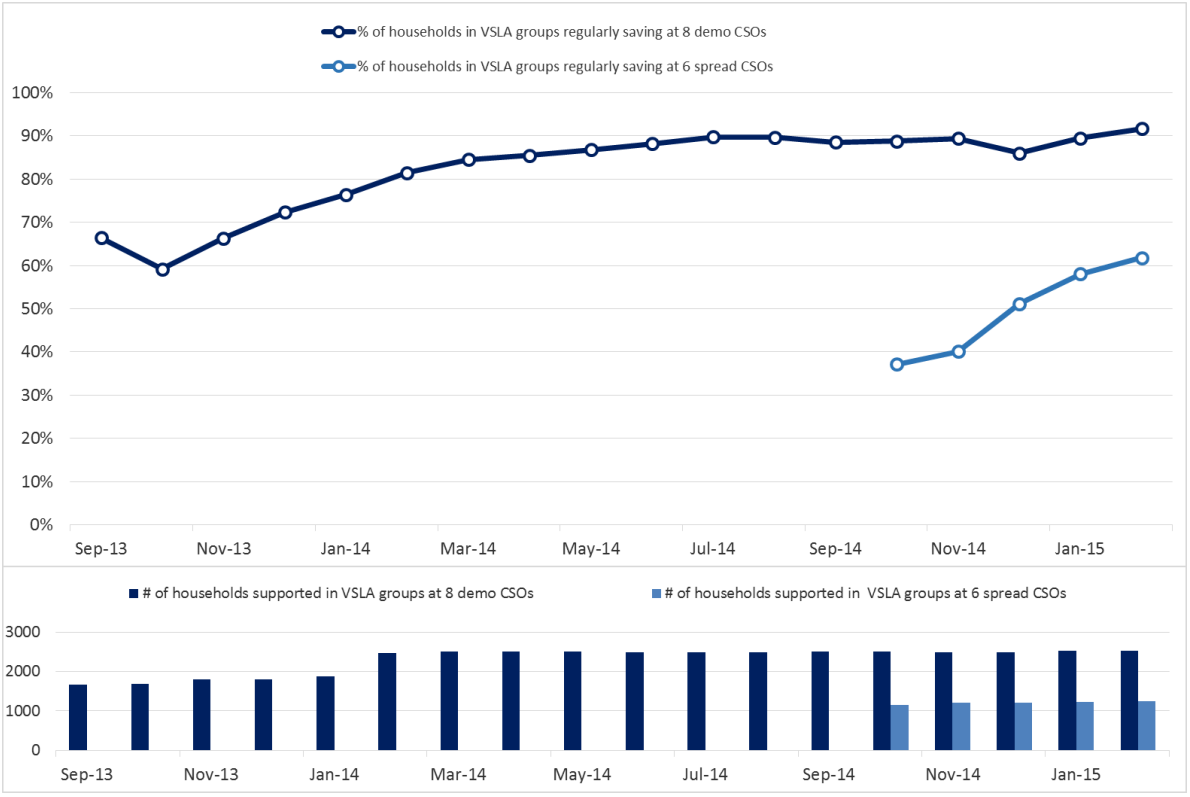
- **Conducted a QI orientation workshop** (Oct 2014): The workshop was conducted regionally and attended by three representatives of each of the 10 new SCORE and UPHS supported spread CSOs. Each spread CSO compiled baseline data on the core program area outcome indicators and used the data to prioritize three areas to start improvement work.
- **Conducted three coaching sessions to both demonstration and spread CSOs** (Nov 2014, Jan and Feb 2015). The focus of the two quarters' activities was to spread lessons learned in the demonstration phase at both the CSO and village levels. In the demonstration sites, CSO teams were supported to improve new focus areas such as improving percentage of beneficiaries with known HIV status and documenting changes while with the spread sites, support focused on improving the quality of data and the percentage of supported households saving regularly.

Figure 57. Uganda: Successful spread of MNCH best practices at Butunduzi HC III (July 2014 – Feb 2015)



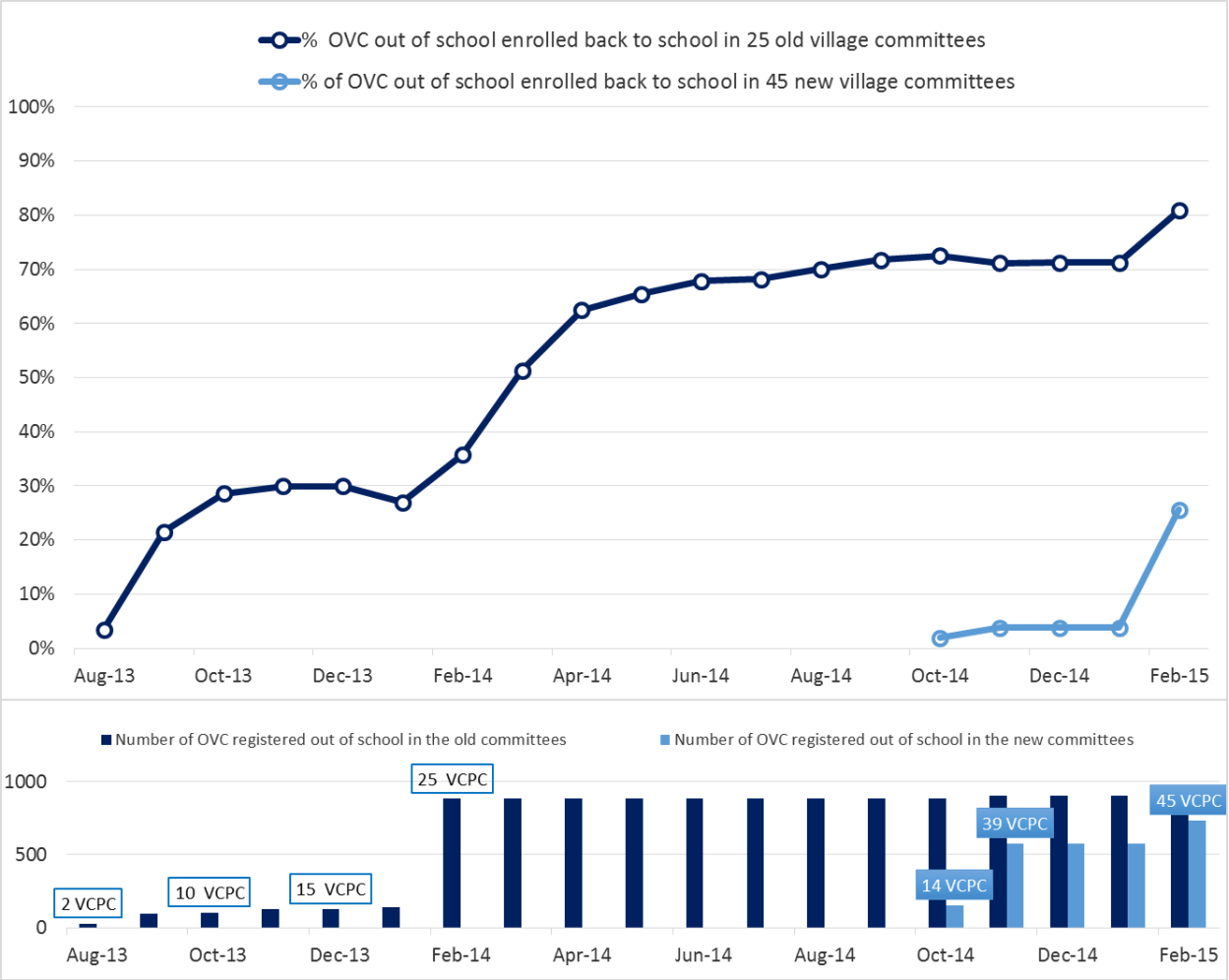
- **To improve saving among vulnerable households, the spread sites allocated field officers to train caregivers in village saving and loan association methodology with ongoing support to the saving groups at least once a month to provide guidance on how to document and address challenges within the saving groups. Figure 58** shows the results so far achieved. Other specific changes include:
  - Forming saving groups at village level for easy coordination (Caritas Kasana, KORD)
  - Forming saving groups with members that can read and write (KORD)
  - Setting fines for the members who miss meetings and fail to save as per group constitutions (SEPSPEL)

Figure 58. Uganda: Percentage of households in village savings and loan association groups regularly saving, households supported by demonstration CSOs compared with households supported by spread CSOs (Sept 2013 – Feb 2015)



- ASSIST facilitated the community development officers to conduct knowledge handover sessions aimed at sharing experiences of functionalizing the village child protection committees (VCPC) to deliver services for vulnerable children and families. By the end of February 2015, 49 new VCPC had been formed, of which 45 are active and reporting. The new committees have registered 3108 vulnerable children, 1540 (49.5%) of whom are female. 734 of the 3108 (23.6%) children registered by the new committee were reported out of school, and the majority of these – 464 (63.2%) -- are from Amuru District's 16 villages. By the end of February 2015, 188 out of 734 (26%) vulnerable children were enrolled back in school, and 729 out of the 3108 (23%) have been linked to needed services. Meanwhile, the demonstration communities have continued to work with the Community Development Officers (CDOs) to ensure linkage of 1962/2994 (66%) vulnerable children to services of need between August 2013 to February 2015 (**Figure 59**).

Figure 59. Uganda: Percentage of OVC linked to services of need by 25 old VCPC and 45 new VCPC (Aug 2013 – Feb 2015)



Improvement in Key Indicators

Activity	Indicator	Baseline	Last value
Improve HIV Continuum of Response	Percentage of HIV patients on ART linked to community services	0% (Sept 2013) 0 villages	96% (Feb 2015) 18 villages
	Percentage of HIV patients on ART followed up for appointment reminders in the community	29% (Oct 2013) 7 villages	93% (Feb. 2015) 18 villages
	Percentage of HIV patients on ART in the targeted villages keeping HIV appointments	54% (Oct 2013) 7 villages	90% (Feb 2015) 18 villages
	Percentage of HIV patients on ART keeping HIV appointments at health facilities overall	51% (Nov 2013 -April 2014)*	98% (Feb 2015) 18 villages
		**data for 2 out of 3 health facilities*	
Improve quality and safety of	Percentage of SMC that meet the minimum quality standards at 30	10% (May 2013)	77% (Feb 2015) 22 sites

Activity	Indicator	Baseline	Last value
safe male circumcision (SMC)	health units supported by USAID ASSIST	N.B This was from 4 sites	
	Percentage of SMC that of clients that experience moderate to severe adverse events at 30 health units supported by USAID ASSIST	0.5% (Oct 2012) N.B This was from 8 sites	0.1% (Jan 2015) 22 sites
	Percentage of clients that counselled tested and receive HIV test result within SMC setting	73% (Oct 2012) 14 sites	88% (Feb 2015) 22 sites
	Percentage of clients that are assessed for sexually transmitted infection prior to circumcision at 30 health facilities supported by USAID ASSIST	81% (Jan 2013) 19 sites	100% (Feb 2015) 22 sites
	Percentage of SMC clients with documented informed consent prior to circumcision at 30 health facilities supported by USAID ASSIST	83% (Jan 2013) 19 sites	100 % (Feb 2015) 22 sites
	Percentage of clients of safe male circumcision that return for review within 48 hours after circumcision at 30 health facilities supported by USAID ASSIST	58% (Oct 2012) 7 sites	96% (Jan 2015) 22 sites
Ensure that HIV-exposed babies are alive, thriving and free from HIV at 18 months of age	% of HIV-negative women retested for HIV as per national guidelines	12% (April 2013) 5 sites	97% (Jan 2015) 22 sites
	% of HIV-exposed babies who were given ART prophylaxis	12% (April 2013) 15 sites	100% (Jan 2015) 22 sites
	% of HIV-positive pregnant women initiated on ART	83% (April 2013) 20 sites	90% (Jan 2015) 22 sites
	% of HIV-positive mothers who receive infant and young child feeding (IYCF) counselling at each visit	24% (April 2013) 15 sites	100% (Jan 2015) 22 sites
	% of HIV-positive mothers who receive maternal nutrition counselling at each visit	23% (April 2013) 15 sites	100% (Jan 2015) 22 sites
	% of exposed infants reporting to be adhering to recommended IYCF practices	73% (April 2013) 20 sites	96% (Jan2015) 22 sites
	% of HIV positive pregnant and lactating mothers who receive nutrition assessment every month	20% (April 2013) 19 sites	99% (Jan 2015) 22 sites
	% of exposed infants who receive nutrition assessment every month	32% (April 2013) 16 sites	100% (Jan 2015) 22 sites
	% of HIV-positive mothers who are found to be malnourished	0.88% (April 2013) 11 sites	0.8% (Jan 2015) 22 sites

Activity	Indicator	Baseline	Last value
	% of exposed infants found to be undernourished and receive therapeutic or supplementary feeding support	100% (April 2013) 3 sites	71% (Jan 2015) 22 sites
	% of HIV-positive mothers found to be undernourished and receive therapeutic or supplementary feeding support	0% (April 2013) 1 site	6.35% (Jan 2015) 22 sites
	% of exposed infants who are found to be malnourished	5% (April 2013) 1 site	1.13% (Jan 2015) 22 sites
	% of mother-baby pairs retained in care each month	8% (April 2013) 1 site	85% (Jan 2015) 22 sites
Reduce maternal and newborn morbidity and mortality	% application of AMTSL during delivery	5% (Jan 12) 10 sites	97% (Feb 2015) 25 sites
	% use of a partograph for labor monitoring	4% (Jan 12) 10 sites	79% (Feb 2015) 24 sites
	% delivery of a complete package of ENC	1% (Jan 12) 10 sites	85% (Feb 2015) 23 sites
	% successful resuscitation of asphyxiated babies	No baseline data	79% (Feb 2015) 22 sites
	% blood pressure measurement of mothers during labor and delivery	No baseline data	68% (Feb 2015) 22 sites
	% urine dipstick testing for mothers during labor and delivery	No baseline data	49% (Feb 2015) 13 sites

Challenges and Remedies

- Many CSOs had challenges implementing the planned activities due to delays in requesting and or release of funds. To address this, the OVC team has discussed with the persons in charge of budgeting to make schedules for budgeting and follow those. For other CSOs which have a long and complicated process of acquiring funds, the OVC team has discussed with the partner focal person to raise this concern with the IP management. CSOs with alternative sources of funding such as Agape Nyakibale were able to continue with the improvement work, as they used alternative sources to cover for the budget deficits. This underscored the need for CSOs to diversify sources of resources.
- The revision of data collection tools at short intervals has made it challenging supporting the teams to adapt to using one version before another version is circulated again. Delay in availing these revised versions of the data tools to some of the health facilities has also made supporting the teams a challenge since data on some indicators may not be clearly captured.
- Facilities with no implementing partner supporting SMC work at their site had delays in addressing the gaps, which required external inputs like availability of surgical kits. ASSIST has encouraged sites to borrow consumables from other facilities and has continued with the coaching. The ideal, of course, would be to streamline the VMMC program and make sure that the commodities are provided through the MOH and the national medical stores, but since the VMMC program is led by donors, USAID is in the process of procuring an IP to support these sites.
- At some health facilities, there were inconsistent QI team meetings to review performance, identify gaps, and test changes due to inappropriate allocation of roles and responsibilities of members. For example, in some cases the facility in-charges were allocated roles of team leaders and due to their other commitments were unable to organize regular meetings. These called for supporting the teams

to re-allocate roles of members and guide them on the expectations of each member at a team meeting. To address this, ASSIST helped facilities put a plan in place to assign another team member to lead QI team meetings, in case their team leader has another engagement.

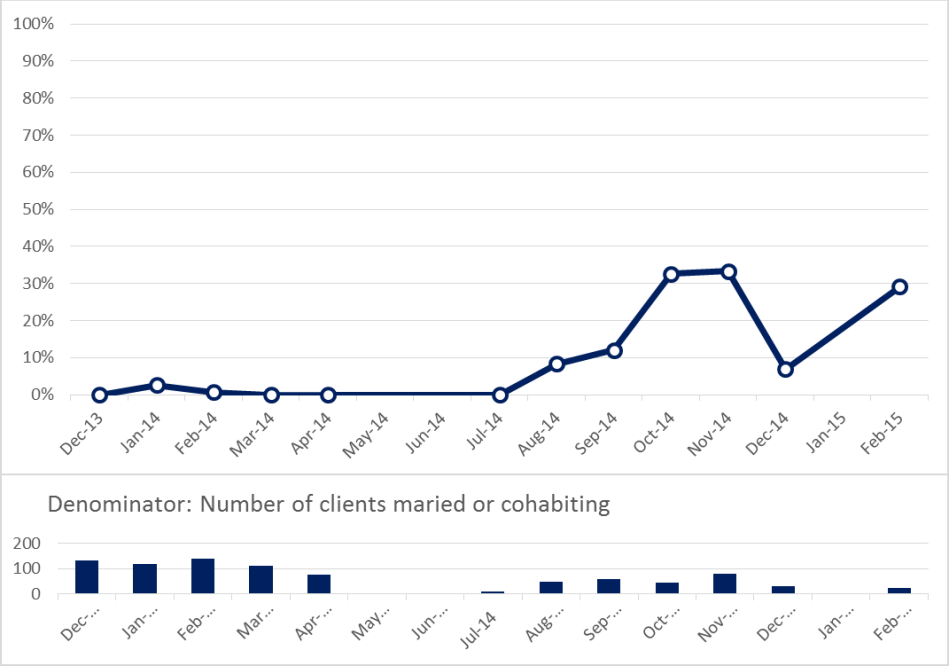
- High staff turnover at some of the facilities like the military health facilities has made sustainability of improvement difficult. It is important to ensure that more than one person is able to perform a task so that key services are not affected.

Improving Equity

The team continued to work towards improving gender integration in SMC by sensitizing clients to come with their partners for SMC. All sites have tried to improve the proportion of clients and their partners attending SMC group education by obtaining a register for capturing all clients who attend group education. Other sites are testing innovations of mobilizing the clients prior to the SMC community outreaches, to come with their partners so that they too can benefit from HIV counseling and testing services. This effort has seen increased uptake of SMC in some facilities.

At Kibuku HCIV, the team realized that partner involvement was not being emphasized during the community mobilization, and the SMC QI team decided to sensitize the mobilizers (VHTs) about the benefit of partner involvement using VHTs to do pre-activity mobilization, including door-to-door mobilization emphasizing the need for women to escort their husbands for SMC for those who are married or cohabiting. The mobilizers would then communicate to the health care workers who provided transport to collect all clients who had accepted to be circumcised including the couples. The results are shown in **Figure 60**.

Figure 60. Uganda: Percentage of SMC clients who attend group education with their partners, Kibuku HCIV (Dec 2013 – Feb 2015)



Regarding the COR, the ASSIST team collected and analyzed sex-disaggregated data, identified that more women than men were being initiated on ART among TB/HIV co-infected clients, and identified gender issues causing this gap. The team has proposed changes to test to increase ART uptake among males. In PHFS more than 20+ clinics utilized gender-related interventions: encouraging male partner involvement, involving male community leaders/volunteer health workers, utilizing family support groups, and offering male-focused services. The work is focusing on isolating the effects of gender interventions on increasing retention rates of HIV-positive mothers and their babies.

In the OVC program, the team is responding to gender gaps in school re-integration for male and female vulnerable children and gender issues identified in economic strengthening efforts, including the potential increase of gender-based violence.

Knowledge Management Products and Activities

- SMC: Developed an Implementation Guide to improving the quality of SMC in Uganda (Feb 2015)
- SMC KM Research Study:
  - We disseminated the guide with a formal presentation to all the 15 study sites (March 2015)
  - Held pre-handover meetings with 10 study sites (March 9-13, 2015)
  - Held the SMC Handover meeting with 10 study sites (March 18-19, 2015)
- SMGL change packages: Have developed 3 change packages
- Blogs: 4 blogs have been developed and published onto the ASSIST website by OVC, Chronic care, and SMC
- Chronic care toolkit has been drafted that includes: i) a comprehensive **case-study** to illustrate the application of QI to improve each of the Chronic Care Model (CCM) key components, ii) HIV/AIDS Chronic Care **quality of care process indicators** and CCM process indicators, iii) a **change package** (quality improvement changes that lead to improved uptake, quality of and retention of HIV/AIDS care and treatment services including patient self-management skills and motivation; iv) Potential **scale-up strategies** that use QI approaches to spread sustainable, high quality chronic-care services; and v) a **Guide** on designing and implementing an expert patient program to enhance patient self-management for HIV and other chronic conditions

Planned Activities Next Quarter: April – June 2015

- Conduct bi-monthly coaching visits and in some instances, monthly coaching visits
- Conduct a learning session for SMGL for 20 facilities of the six northern Uganda districts.
- Conduct the 4th HIV COR learning session and 3rd harvest meeting with a focus on improvement of mother-baby pair retention and provision of standard care package.
- Quarterly coaching to the seven DQICs to support their ability to perform the expected roles and responsibility with a focus on those that promote functionality of the lower level coordination structures.
- Hold a regional QIC coaching visit
- Finalize the development of the guide on QI implementation.
- Conduct a dissemination meeting for the QI implementation guide.
- Carry out coaching visits to the 5 SMC study sites in the coaching arm
- QI training will be conducted for 8 UPHS-supported CSOs
- Spread-related activities:
  - Support the MOH technical team to present the PHFS change packages to the senior management of the MOH for endorsement so that there is further buy-in
  - Work with 55 health facilities in Northern Uganda to improve eMTCT services using the change packages and coaching visits
  - Conduct PHFS harvest meeting to synthesize tested changes for special visits.
  - Conduct quarterly coaching visits in light supported sites
  - Conduct training for the district coaches of the light supported sites

ZAMBIA

Background

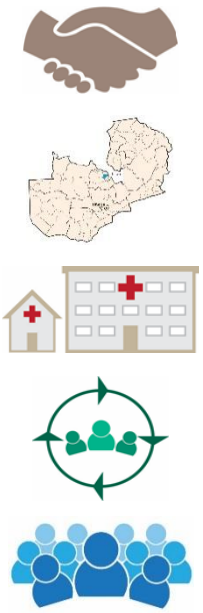
Building on HCI's experience supporting nutrition services for HIV clients in Uganda, Kenya, and Malawi, since September 2014 the USAID ASSIST Project is supporting the continued adoption, adaptation, and scale-up of NACS as a *standard of care* within the national HIV/AIDS program in Zambia, in line with USAID and PEPFAR goals. NACS supports improving the health and quality of life for PLHIV, their families, and vulnerable children by improving nutritional status, reducing household food insecurity among families and children affected by HIV, and strengthening the integration of nutrition support with health systems at the clinic and community levels. ASSIST's work in Zambia is being conducted in collaboration with the MOH and two other centrally funded projects in Zambia – FANTA III Project and the LIFT II Project.

Institutionalization/Sustainability Strategy

The starting point for the QI model is for the facility teams to define the problems in their work and develop solutions which would improve services to patients. This model by design strengthens staff capabilities and system capacity to continuously improve, thereby increasing sustainability of improvement work. The role of the MOH national and district coaches is to continuously provide support to facility teams via monthly coaching visits. ASSIST strengthens the capacity of these coaches to be able to plan and conduct visits to support the teams using the available government resources.

ASSIST conducts all its work in partnership and collaboration with the two ministries, the Ministry of Health and Ministry of Community Development, Mother and Child Health (MCDMCH). Working with these ministries and partners, ASSIST is working on a process to include nutrition indicators in the data system, which will be managed by the MOH. ASSIST is working with the MOH and MCDMCH to enhance the reporting structure and use of data from the system.

Scale of USAID ASSIST's Work in Zambia



MOH, MCDMCH, 2 IPs (FANTA and LIFT)

1 out of 104 districts

8 facilities

8 QI teams

30k out of 88k

NACS

Program Overview

What are we trying to accomplish?	At what scale?
1. Integrate nutrition services into HIV clinics to improve nutritional status of HIV clients	
Improve management and nutritional status of malnourished PLHIV	Integrate NACS in 8 selected facilities in Kitwe District; spread to 22 sites in July/August 2015

Improvement Activity

Accomplishments and Results by Activity (October 2014 – March 2015)

Activity 1. Integrate nutrition services into HIV clinics to improve nutritional status of HIV clients

Overview: ASSIST supports NACS implementation and scale-up by applying quality improvement techniques to strengthen health systems that deliver nutrition services for PLHIV. Through delivery of NACS services, ASSIST aims to get all ART patients assessed and categorized for malnutrition and those needing them, referred to services that provide therapeutic or supplementary foods, with the ultimate goal of managing and reducing malnutrition among PLHIV.

Accomplishments and Results:

- **Provided support for coaching visits in eight health facilities** (October 2014 – March 2015)**.** To improve the assessment and categorization of PLHIV, ASSIST continued to provide coaching to ensure that the standard package of care for all PLHIV clients (including HIV care and support, nutrition assessment, and an appointment for the next visit) is being implemented at all eight health facilities.
- **Held second learning session** (December 3rd – 4th 2014). The session was facilitated by Ms. Linley Hauya, Nutrition Advisor for ASSIST Malawi, and Mr. Robert Musopole, Resident Advisor for ASSIST Zambia. The objectives were to review improvement plans on assessment and categorization and to promote peer-to-peer learning on what worked and what did not work. The facility teams also developed action plans for their sites.
- **ASSIST gender specialist Elizabeth Silva of WI-HER LLC traveled to Zambia to provide gender technical support to the NACS project** (March 2015)**.** Activities conducted by the gender specialist and the Zambia Resident Advisor Robert Musopole included:
  - TA in sex-disaggregated data collection and analysis
  - Providing a gender integration in improvement training at Copperbelt University
  - Meeting with FANTA and LIFT representatives to brief them on ASSIST's gender integration approach and the importance of integrating gender into NACS activities
  - Providing guidance to FHI 360 Social and Behavior Change (SBC) Advisor Mary Packard to integrate gender into an SBC two-day workshop that took place the week of March 23rd
  - Meeting with ASSIST partner Thrive's Chief of Party (COP) Rick Henning to brief him on gender issues in NACS and ASSIST's innovative gender approach, and to discuss how ASSIST and Thrive can collaborate to improve NACS services for women, men, girls and boys.
- **ASSIST is currently working in eight sites**. The following results are from six sites only after two initial sites had to be replaced (in Miseshi, an initial plan to introduce an ART clinic at the site in October 2014 did not materialize, and in Mwekera the only health care worker providing HIV services left the facility to continue her studies). Improvement work in the two new facilities started in mid-February 2015.
- **The six sites have shown good progress towards assessing and categorizing 100% of their clients for nutrition status.** All the sites started out at 0%, but with continued coaching and efforts of the QI teams, the majority of sites are at or close to 100% as of March 2015 (**Figure 61**). The QI process of one site in particular, Kamfinsa Clinic, is also shown in **Figure 61**. One of the most effective changes tested in that site was involving volunteers in conducting the assessment and

categorization of clients. Previously, only HCWs were doing this work. This change caused an increase from 12% in September 2014 to 83% in October 2014.

- **Since the NACS program began, the sites have begun identifying clients who are severely or moderately acutely malnourished and providing them with supplementary foods as well as nutrition counseling and review**. Previously, these clients' nutrition needs were not known and therefore not being met (**Figure 61 and Figure 62**).

Figure 61. Zambia: Percentage of clients assessed and categorized for nutrition status, 6 sites, and one health center, Kitwe District (June 2014 – March 2015)

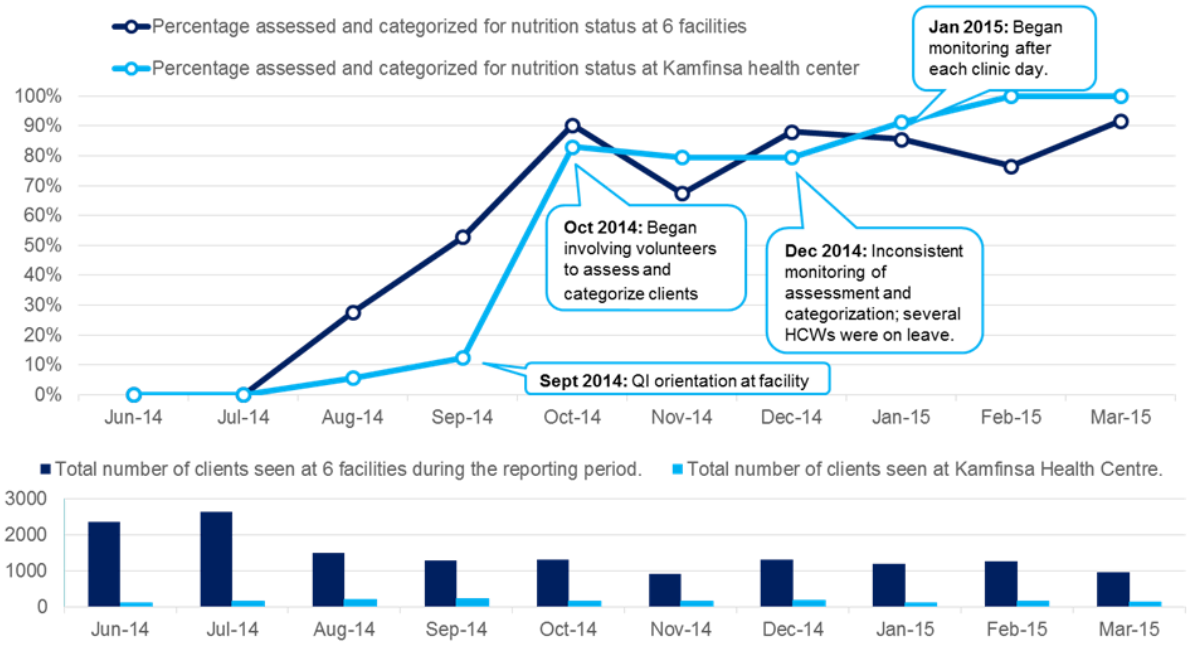
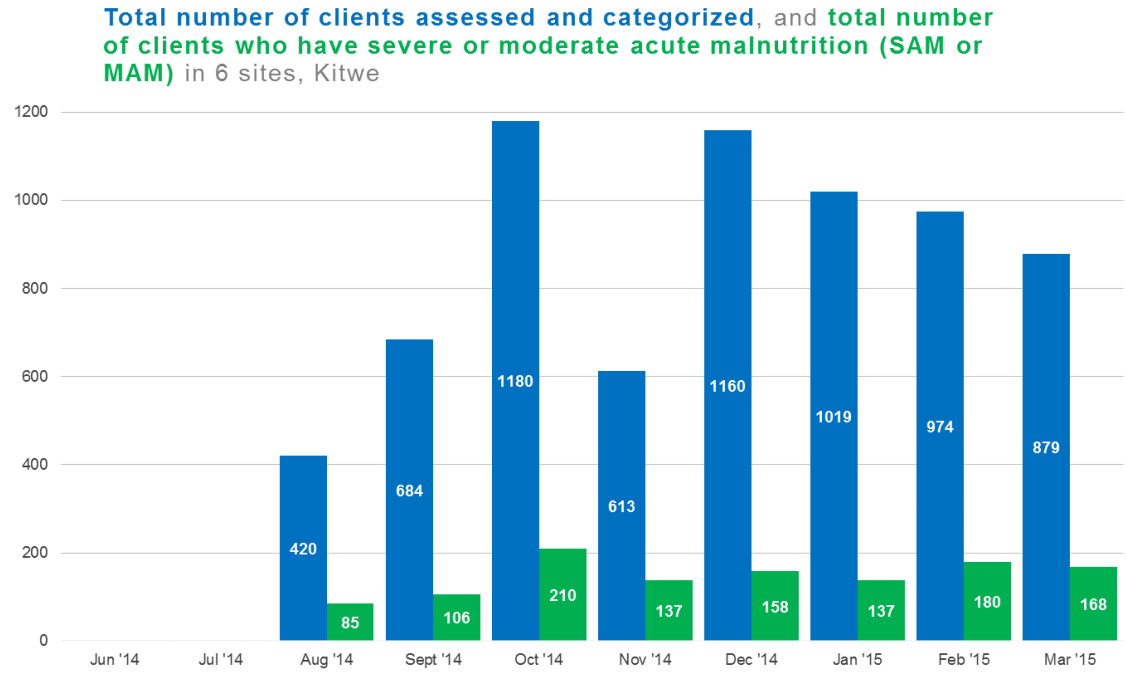


Figure 62. Zambia: Number of clients who have severe or moderate acute malnutrition, 6 sites, Kitwe District (June 2014 – March 2015)



Improvement in Key Indicators

Activity	Indicator	Facility	Baseline (June 2014)	Last Value (March 2015)
Improve management and nutritional status of malnourished PLHIV	% of patients assessed and categorized for nutrition status (Denominator: Total # of patients seen at the facility during the reporting period)	Kamitondo	0% (0 out of 316)	97% (424 out of 435)
		Ipusukilo	0% (0 out of 134)	78% (242 out of 309)
		Tinna Medical Centre	0% (0 out of 72)	100% (48 out of 48) (Feb 2015)
		Copperbelt University Clinic	0% (0 out of 81)	97% (69 out of 71)
		Mulenga	0% (0 out of 1,716)	97% (433 out of 445) (Feb 2015)
		Kamfinsa	0% (0 out of 120)	100% (144 out of 144)

Challenges and Remedies

- Not all patients assessed are categorized for nutrition status. ASSIST staff are working with the teams to ensure that the number of assessed patients who are also categorized is at 100%.
- Terminology differences between ASSIST and national QI approaches can create confusion. National guidelines use a different approach of quality improvement. ASSIST uses the national guidelines terminology to avoid confusion and streamline the language.
- Getting buy-in from volunteers and HCWs who were not part of the QI training, including sisters-in-charge. One way to mitigate this issue is to involve those staff/volunteers in not only the facility-level QI meetings, but also the learning sessions.
- Very few district level MOH staff are involved in QI. Those that are involved are often unable to participate in NACS activities (i.e., coaching visits and learning sessions), and NACS is not a key priority for them.

Improving Equity

Preliminary gender issues identified during the March 2015 TA visit:

- Health-seeking behaviors of males make them less likely to access services, but they experience improved nutrition substantially quicker than women once in treatment due to food allocation within families.
- Women can be more likely to share food supplements with family members.

These findings were derived from the sex-disaggregated data analysis done and the follow-up interviews with the health care workers and volunteers.

ASSIST will continue to collect and analyze sex-disaggregated data where feasible and appropriate to identify gaps in how males and females access and benefit from nutrition services, to identify differences in the rates of malnutrition among males and females, and to respond appropriately towards improving nutrition and health outcomes.

Planned Activities Next Quarter: April - June 2015

- Third learning session (April 14-15 2015)
- Monthly coaching visits (ongoing)

ASIA

CAMBODIA

Background

In the health system of Cambodia, five health professions are regulated by independent Councils including the Medical Council of Cambodia (MCC), Dental Council of Cambodia (DCC), Pharmacy Council of Cambodia (PCC), Cambodian Council of Nurses (CCN), and the Cambodian Midwives Council (CMC). Together with the MOH, they seek to ensure that health professionals meet minimum standards for competence, health, and professional conduct for the provision of safe, ethical and effective care. In February 2014, the USAID ASSIST Project was requested by the USAID Mission to provide technical assistance to strengthen health profession regulation in Cambodia. The requested activity scope was broadened in consultation with USAID and key stakeholders to go beyond supporting the MCC in order to holistically strengthen the health professions' regulatory system. By broadening the scope of the activity to strengthen the regulatory system, the project would seek to address the issues of: (1) weak and variable effectiveness of health profession regulation; (2) limited authority, capacity, structure and powers of health profession Councils to regulate health professionals in Cambodia; and (3) limited connections between health professions regulation with other mechanisms in the Cambodian health system.

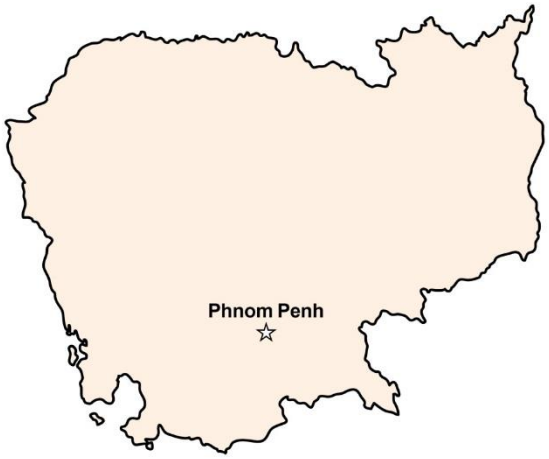
The principles underpinning this ASSIST Project include co-design; on-going development of the activity; enabling improvements rather than implementing them; and encouraging systems to better utilize and/or mobilize available resources within the system. It is anticipated that these principles will:

- strengthen stakeholder ownership and capacity to develop, test, lead and implement sustainable solutions
- harness Cambodian expertise and draw from lessons learnt
- connect stakeholders with the best international technical expertise
- support the development of relationships and collaboration with regulatory peers and globally

Institutionalization/Sustainability Strategy

Given the lack of comprehensive information on the status and performance of health profession regulation to inform an appropriate activity design that would meet priority needs, ASSIST worked with the MOH and the health profession councils to design a rapid baseline assessment. Assessment findings were utilized as part of a structured consultative process to identify strengths, weaknesses and set strategic priorities for improvement in October 2014. Both the findings and the consultative process feed into a national five-year strategy for health professions regulation.

Scale of USAID ASSIST's Work in Cambodia



All health profession Councils: Medical, Dentistry, Pharmacy, Nursing & Midwifery

Population of Cambodia: 15,707,673

Estimated total number of health professionals: 20,000+

Program Overview

What are we trying to accomplish?	At what scale?
1. Create national five-year strategic plan for health profession regulation	
• Strengthen health profession regulation for all five health profession councils through a shared FY15 – FY20 strategic plan • Inform the FY15 ASSIST activity design	Focus on all health professionals and the public at the national and regional level and in all 24 provinces of Cambodia
2. Establish and implement a plan of action for the councils' three priority strategic objectives	
Establish and implement a plan of action for three of the councils' strategic objectives: • Strategic Goal #1: Organizational Redesign • Strategic Goal #2: Legislative Review and Reform • Strategic Goal #3: Registration	Focus on all five health profession councils at national, regional and provincial levels

Cross-cutting Activity

Accomplishments and Results by Activity (October 2014 – March 2015)

Activity 1. Create national five-year strategic plan for health profession regulation

Overview: The creation of a shared five year national Strategic Plan 2015 - 2020 for all five health profession councils, in partnership with the Ministry of Health, is to guide the implementation and evaluation of priority improvements to health profession regulation in Cambodia. This Strategic Plan determines the required strategic objectives with associated strategies and timeframes to improve the councils' regulatory performance in assuring safety and quality and to address the following areas:

1. Legislation (advocacy and responsiveness)
2. Organizational (and internal governance)
3. Public Accountability (and external governance)
4. Responsibilities and Functions

The Strategic Plan provides for a shared understanding between the councils, the Ministry of Health and key stakeholders of the key priorities required to strengthen health profession regulation in Cambodia, informed the ASSIST activity design for FY 2015, and facilitates the opportunity for health development partners to understand the approach and contribute to strengthening health profession regulation that meets the needs of Cambodia.

Accomplishments and Results:

- **A meeting hosted by WHO and the councils with health development partners on October 21, 2014 provided the opportunity to share**: the outcomes of the National Consultation Workshop; councils' progress to date in developing a shared national strategic plan; health development partners current role and activities and to discuss with health development partners on the suggested next steps for strengthening health profession regulation in Cambodia.
- **The Councils prioritized and finalized the strategic objectives and timeframes in January 2015 and approved that the official launch of the Strategic Plan FY2015-2020 be on June 8, 2015.**
- **USAID funds for FY15 were obligated to URC by the contracts office in Washington, DC on March 21, 2015.**
- **The ASSIST Country Improvement Plan for Cambodia has been completed and is in review with the USAID Mission.**

Activity 2. Establish and implement a plan of action for the councils' three priority strategic objectives

Overview: The establishment and implementation of a detailed action plan for each of the councils' three priority strategic objectives for FY15 provides the mechanism by which technical assistance can be provided for the various health profession regulatory system reforms required that are effective, efficient and sustainable. Councils will be able to share these action plans with the government of Cambodia, all health development partners and stakeholders to obtain the required support and assistance to achieve the desired outcomes.

Accomplishments and Results:

Strategic Goal #1: Organizational Redesign: Review and redesign the health profession councils' governance arrangements and organizational structure with sound financial modelling to deliver the five councils' regulatory systems and processes over a 3 - 5 year timeframe

- ASSIST will provide the technical advice and support to the councils, in partnership with the Ministry of Health, to develop a comprehensive business plan that will provide clear financial arrangements to source the funds to establish a shared office and employ sufficient number and quality of staff to undertake the required regulatory work during the next 3-5 years.
- A scope of work is currently being negotiated with an ASSIST partner to work with the councils to develop a comprehensive business plan and a business case for suitable office premises.

Strategic Goal #2: Legislative Review and Reform: Review of the existing laws and preparation of amendments or development of a new law for all health profession councils over a two-year period; FY2015 - FY2016.

- **ASSIST developed an options paper for the councils and the Ministry of Health and select stakeholders to consider and determine the legislative reform that is required to effectively regulate the five health professions and meet the needs of Cambodia** (April 2014)**.**
    - The Cambodian government's support to either amend the existing legislation or develop new legislation will then be sourced. ASSIST will then engage legal expertise internationally and locally to facilitate the drafting of legislation against an approved plan and timeframe that will subsequently be presented to the Council of Ministers to pass into law.

Strategic Goal #3: Registration: Achievement of full compliance with registration requirements and full awareness amongst stakeholders and health professionals of registration requirements and obligations over a two year period; FY2015 - FY2016.

- **ASSIST will provide technical assistance to support the five councils:**
    - In the development and trial of a harmonized system and process for registration of all health professionals that is robust, cost-effective and timely with the target of 100% of health professionals being registered by 30 September 2016.
    - In the development and oversight of an implementation plan for a 3 month trial of registration across a large, medium and small province. This includes shared policy and procedures; standardized forms; a communications plan and monitoring and evaluation of the outcomes. Training activities will be developed and implemented during May/June 2015 by the Councils during for Council staff and members and key stakeholders on the changes and new registration processes for the three-month pilot.
- **Councils have identified representatives to work with the ASSIST team in April/May 2015 to map the registration process for each council in and then prepare a proposed shared registration process all councils for consideration and approval by councils for a trial.**

Challenges and Remedies

- The time to gain agreement for the ASSIST team to co-locate with three of the five councils in their temporary office location at the University of Health Sciences (January 2015) and the unavoidable delay in the appointment of the Program Manager – ASSIST (30 March 2015) slowed the progress of the project.
- The lack of council human and physical resources combined with reliance on council members who hold senior full-time positions within the MOH means that the capacity to undertake the councils'

regulatory work at both national and provincial level is severely limited. The focus of health development partners on funding technical advice and assistance and physical resources means the councils will need to identify innovative approaches to source alternative funds for the human resources required to deliver the regulatory functions.

- The limited availability of council members and the language barrier pose ongoing difficulties in coordinating meetings and require that an interpreter and translator be available. While English is the common language for the younger generation, the older generation is either fluent in Khmer only or Khmer and French. Translation of documents into Khmer is important to enhance understanding. However, the limitations of Khmer as a language and the complexity of English and the regulatory language can result in translations that do not accurately reflect the meaning. Regular scheduled monthly meetings; the appointment of a Cambodian national with good Khmer and English to the Program Manager – ASSIST position and Blanket Purchase Agreements for two interpreters and translators have helped to mitigate these issues.
- The number of health development partners with existing regulatory projects; that have longstanding relationships with the Ministry of Health and/or the councils and are highly influential with the Cambodian Government requires a sound understand of each project, ongoing dialogue and negotiations by the ASSIST team. This is to ensure the work of the health development partners is complementary and adds value. ASSIST has been liaising closely with the Japan International Cooperation Agency (JICA) and the councils in relation to a recent decision by the Ministry of Health to support the JICA Cambodia office to develop a new law on health professionals relating to registration and licensing of health professionals in the public and private sector. This new law will facilitate the implementation of JICA's 5 year *Project for Strengthening Human Resources Development System of Co-medicals (*HRD Project) with the Ministry of Health. ASSIST has worked with, and will continue to work with the councils to provide feedback on the proposed new law to ensure it will complement the legal reform activity within the USAID ASSIST Project.

Knowledge Management Products and Activities

- Strengthening Health Profession Regulation in Cambodia Fact sheet: National Consultative Workshop (13-14 October 2014)
- Strengthening Health Profession Regulation in Cambodia Fact sheet: Councils' Strategy Review Meeting (16 October 2014)
- Development of the first of two journal articles for publication in an international human resource journal titled: *Improving quality and safety: strengthening health professions regulation in Cambodia, a Rapid Assessment.* Currently in process of seeking concurrence for peer review of the first journal article.

Planned Activities Next Quarter: April - June 2015

Activity 1. Create national five-year strategic plan for health profession regulation

- Continued promotion of five-year strategic plan to all key stakeholders – Cambodian government, health development partners, public and private health services; education institutions
- Development of a communications plan to promulgate the councils' five-year strategic plan for health professions regulation and provide regular updates with the focus on all the health professionals and the community
- Implementation and monitoring of the Action Plans for each strategy for FY15

Activity 2. Establish and implement a plan of action for the councils' three priority strategic objectives

<u>Strategic Goal #1</u>

- Continued development of a shared business plan for approval by the five councils and the MOH that includes the financial arrangements to support a shared Secretariat; identification of affordable office premises for the five councils and the human and physical resources required for the next five years to deliver the regulatory functions for all five health professions.
- Translation of the business plan to Khmer.

- Identification of available and additional resources required to demonstrate to the Cambodian Government; health development partners and philanthropic entities the resources required to fund the establishment and maintenance of delivering the regulatory functions in a cost-effective and timely manner.
- New office premises determined to house the staff for all five councils.

Strategic Goal #2

- Translation of the options paper to Khmer.
- Webinar presentation and discussion forum for the five councils, Ministry of Health and other key stakeholders on the translated options paper to facilitate a sound understanding of the legal options and enable a decision to be made on the preferred option by the councils and MOH.
- Stakeholder identification and engagement to inform and obtain feedback and determine an action plan for the agreed legislative reform.
- Recruitment of one or more Cambodian nationals to lead the writing of the amendments/new law with oversight by an international Technical Legal Adviser and regular engagement with the five councils, MOH and key stakeholders.

Strategic Goal #3

- Process mapping of five councils' registration process to determine the most efficient and effective approach for registration of health professionals.
- Stakeholder engagement for feedback via national and/or regional and/or provincial meetings with councils to determine solutions for identified registration issues.
- Development of shared policy and procedures for approval by all councils
- Contract Technical Adviser to work on agreed registration data base requirements
- Development of harmonized registration implementation plan including identified provinces for 3-month pilot; includes development of common forms; communication plan; and monitoring and evaluation activities.
- Train council staff and members and key stakeholders on the changes and new registration processes for 3-month pilot.

INDIA

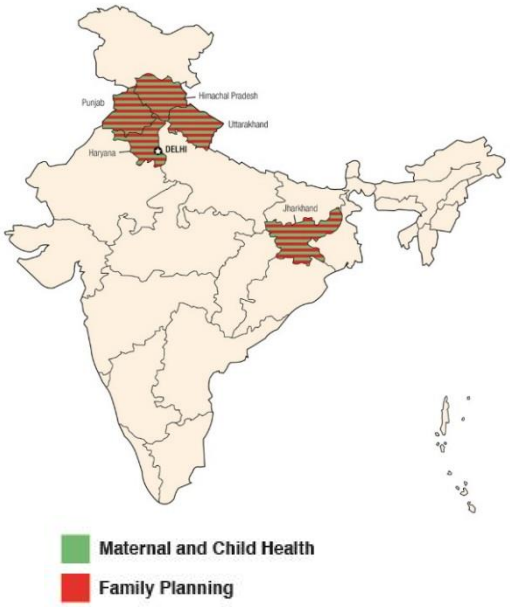
Background

USAID ASSIST started working in India in August 2013. The project is working in the six USAID-supported states to build improvement capability by enhancing the commitment and capability of leaders at the national, state and district levels to lead health care improvement. In addition, the project is working to develop the capacity to conduct improvement among health care workers, at national, state, and district levels, in public and private facilities, and at community levels along the continuum of reproductive health, maternal, neonatal, child, and adolescent health (RMNCH+A).

Institutionalization/Sustainability Strategy

Some districts have already started using their own resources to spread improvement work to new facilities. ASSIST is providing technical assistance as they build their capacities to do this independently. The central government is extremely interested in improvement and is putting additional resources into learning more about improvement and to developing plans to support improvement.

Scale of USAID ASSIST's Work in India



MOHFW

6 out of 36 states

327 facilities

349 QI teams

32 million out of 1200 million

Program Overview

What are we trying to accomplish?	At what scale?
1. Enhance improvement capability in the Indian health system through conducting improvements in the "RMNCH+A" continuum in public and private entities	
• Improve care along the R-MNCH+A continuum in priority USAID districts • Develop the capacity to conduct improvement among health care workers at community, facility, district, state and national levels • Enhance commitment and capability of leaders at the community, facility, district, state and national levels to lead health care improvement	6 USAID-supported states, all 27 of the USAID-supported districts, and one "block" in each of the selected districts: • Delhi: 2 districts, 2 blocks • Himachal Pradesh (HP): 4 districts, 6 blocks • Punjab: 5 districts, 5 blocks • Uttarakhand: 3 districts, 3 blocks • Jharkhand: 6 districts, 10 blocks • Haryana: 7 districts, 7 blocks Total number of facilities: 349

Improvement Activity

Accomplishments and Results by Activity (October 2014 – March 2015)

Activity 1. Enhance improvement capability in the Indian health system through conducting improvements in the "RMNCH+A" continuum in public and private entities

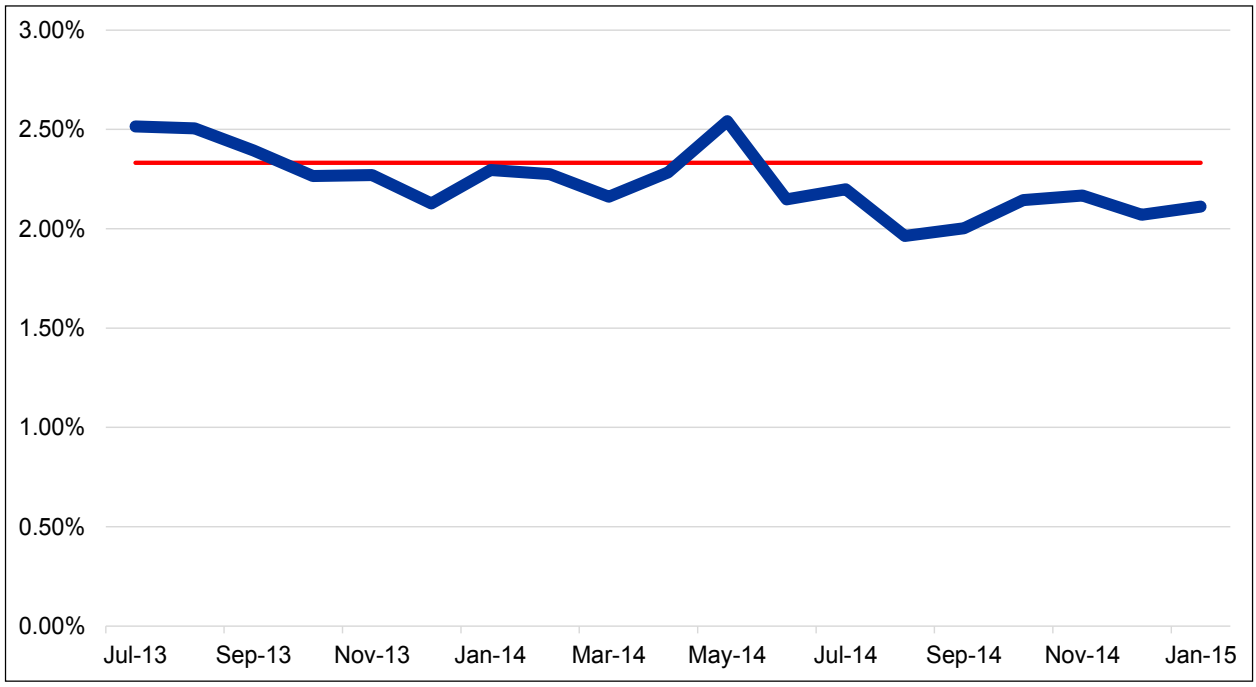
Overview: Approximately 800,000 babies per year die in their first month of life in India. This is more than 50% of all child deaths. Three hundred thousand of these deaths are in the first 24 hours. Progress on neonatal survival and particularly early neonatal survival has been slower than progress in other age groups. ASSIST is working across the RMNCA+A continuum but is paying particular focus on the intrapartum and early neonatal period since this is the most efficient strategy to save lives.

Accomplishments and Results:

All facilities have made improvements in routine intrapartum and post-natal care and are now moving onto improving care for complicated cases.

- **Neonatal mortality reduction**: Our main outcome measure for our work on neonatal mortality is to reduce the perinatal mortality rate – an aggregate of stillbirths and in-hospital neonatal deaths. Perinatal mortality in ASSIST supported facilities was 2.35% in the six months before we started working (July to December 2013) and was 2.07% 12 months later (July to December 2014) (**Figure 63**

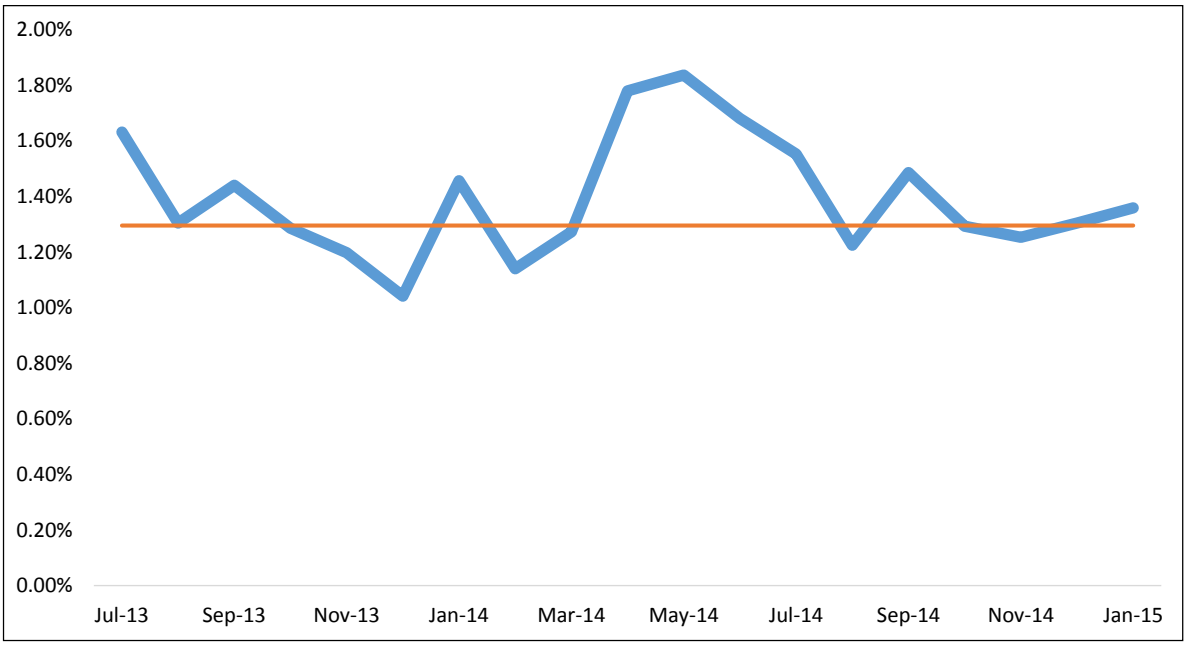
Figure 63. Perinatal mortality rate in all ASSIST supported facilities which deliver 12,000 to 17,000 babies per month (July 2013 – Jan 2015)



We are currently investigating the reasons for the decrease. Possibilities include: inaccurate data, different interventions currently operating under the government's RMNCH+A strategy, possible 'gaming of the system' (for example, very ill neonates are referred out to make the data from the facilities we support look better), and that some components of ASSIST support are responsible for the improved neonatal survival.

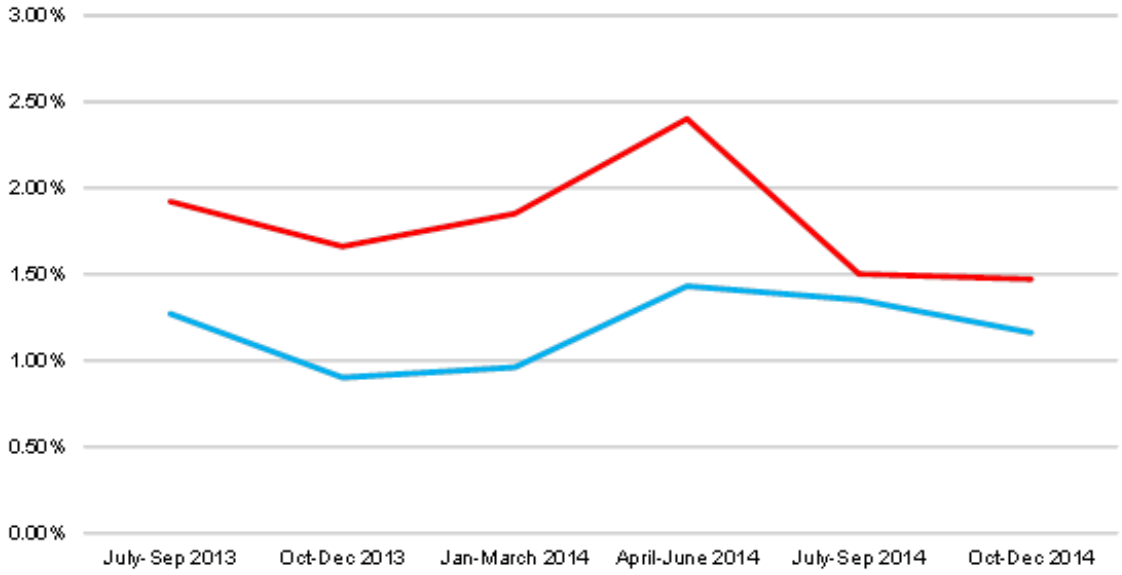
- **Data quality: Figure 64** shows the findings of our data quality study. Reporting of stillbirths and neonatal deaths was 100% concurrent with observed data (5 stillbirths and 1 neonatal death) in 461 deliveries. Anecdotally, we know that there are issues with neonatal deaths being misclassified as stillbirths, which is why our main indicator of interest is perinatal mortality. We are continuing to investigate any other data quality issues that could have led to this result.

Figure 64. Percentage of stillbirths in all private and public facilities, 5 districts, Punjab (July 2013 – Jan 2015)



- **Secular trends:** ASSIST is working high priority districts, which are receiving focused support from other partners as well as from the government. It is therefore possible that this improvement would have happened without ASSIST support. To investigate this further we are collecting data from non-ASSIST supported sites. At this point, we have data from Punjab. There has been a 1% reduction in perinatal mortality in these districts. This is related to a 14.8% reduction in perinatal mortality in ASSIST supported sites and a 13.0% increase in perinatal mortality in non-ASSIST supported sites (**Figure 65**).

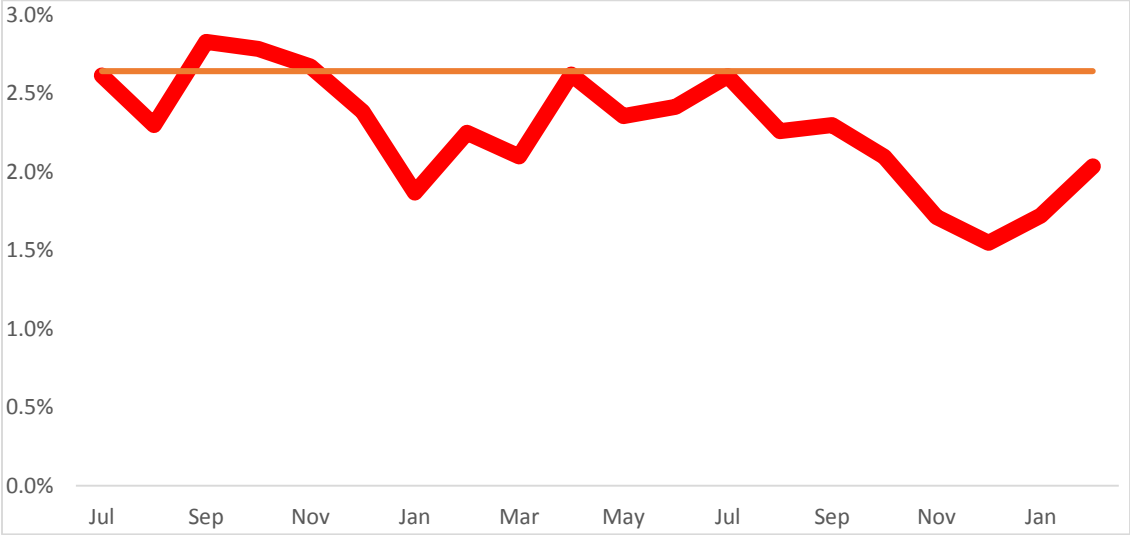
Figure 65. Percentage of stillbirths in all ASSIST vs. non-ASSIST supported sites, 5 districts, Punjab (July 2013-Dec 2014)



- **Gaming the system:** One possible solution to decrease neonatal deaths is to refer sick or dying babies to other facilities or to home. We have no evidence that sick or dying babies are sent home and anecdotal evidence that families would not tolerate this. To investigate the possibility that

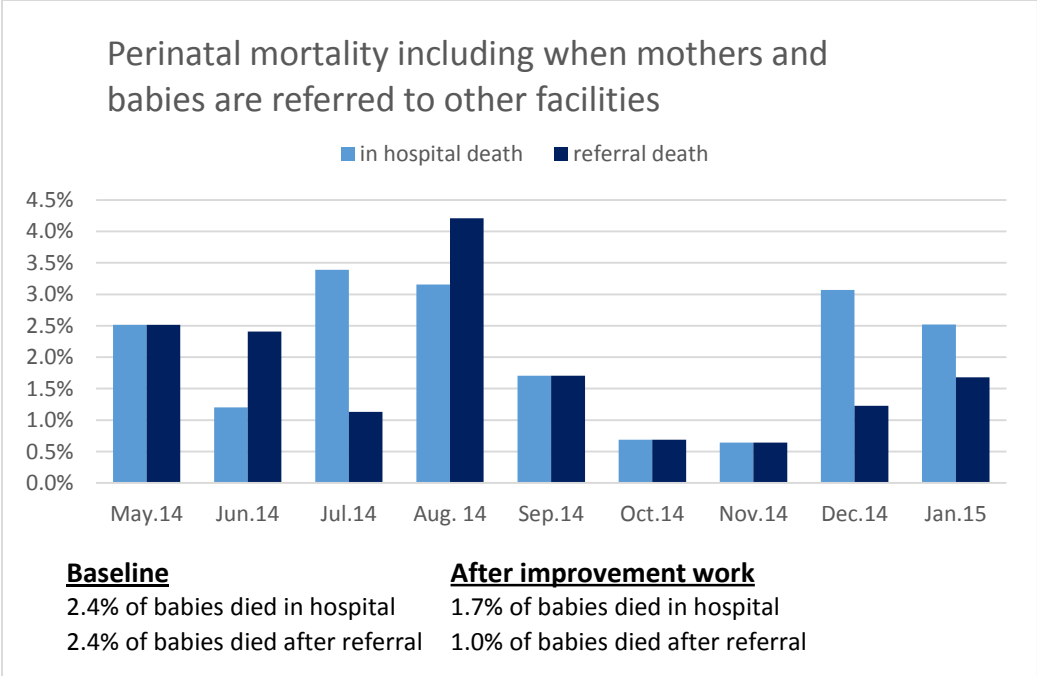
moribund babies are being referred at an increased rate from ASSIST supported sites we are tracking the proportion of referrals out as a balance measure. There has been a decrease in neonates referred from ASSIST supported facilities (**Figure 66**).

Figure 66. Sick neonates being referred out from all 327 ASSIST supported facilities in India (July 2013 – Jan 2015)



- **ASSIST support is leading to improved survival:** We have compelling evidence from individual facilities that ASSIST support is contributing to improved survival. For example in Jama Community Health Centre in Jharkhand, since the team started working on better identification of danger signs during labor and on improving neonatal resuscitation, they have seen a 40% reduction in perinatal mortality. The bulk of this improvement is due to the facility staff managing prolonged labor and asphyxia better at their facility; mortality has dropped the most in babies referred out from the facility (**Figure 67**).

Figure 67. Perinatal mortality rate at Jama Community Health Centre (May 2014 – Jan 2015)



Improvement in Key Indicators

Activity	Indicators	Baseline (March 2012) Approximately 100 sites	Last value (Feb 2015) Approximately 200 sites
Enhance improvement capability in the Indian health system through conducting improvements in the "RMNCH+A" continuum in public and private entities	Proportion of newborns who were assisted for breathing out of total newborns reviewed*	17% *	6%
	Proportion of newborns made dry and provided warmth immediately after birth out of total newborns observed	47%	99%
	Proportion of newborns who were provided sterile cutting and clamping of cord out of total newborns reviewed	47%	95%
	Proportion of newborns breastfed within one hour of birth	87%	91%
	Proportion of newborns given injection of vitamin K at birth	55%	99%
	Proportion of vaginal deliveries for which oxytocin was administered within one minute of birth of baby	16%	98%
	Average number of times vitals (both blood pressure and pulse) checked and recorded within first 6 hours post-partum	0.8	3.3
	Proportion of ANC visits during which hemoglobin of pregnant woman was checked and documented	59%	82%

**Data quality issues related to indicator definition at start or project. Some facilities were recording proportion 'assessed' rather than proportion 'assisted' for breathing*

Improving Equity

ASSIST has been supporting 'exposure visits' for pregnant women to come to health facilities to learn about what will happen if they come to the facility for delivery. This innovation was developed by a QI team working in an area with a minority group who was very distrustful of the health service and in which over 80% of women did not deliver at the facility. This intervention addresses discrimination based on ethnicity and caste and also allows women to better negotiate with their family to get the best health care that they can. After piloting it in one facility (23 women came, 9 were identified with severe anemia and treated, and 18 have delivered, including 12 who delivered in the facility). This has now been taken up by two districts who are encouraging all facilities to organize exposure visits.

ASSIST India also responded to gender-related challenges leading to inadequate detection of postpartum complications by engaging and educating family members about warning signs of postpartum complications and informing male family members about the importance of ANC and PNC. This was done through meetings with decision-makers including husbands and mothers-in-law, and couple's counseling. The team conducted a qualitative research study in FY14 to determine the effects of family, community, and gender norms on the work of Indian community health workers, the findings of which contributed to the planning of a Training of Trainers on gender and social inclusion for community QI teams to take place in Q3 in Delhi. Three staff members from ASSIST also participated in a USAID Gender, Policy and

Measurement Program workshop about topics which included gender integration and combatting gender-based violence.

Knowledge Management Products and Activities

- Change packages for ANC, intrapartum care, ENC and post-partum care were developed in January 2015
- Qualitative study: Incentives of ASHA Workers in Two Districts in India: Learnings from a Qualitative Study submitted for publication in March 2015.
- Completed a data validation study to identify any data quality issues. For this study, external assessors visited 12 facilities (1 district hospital and 1 CHC in 6 states). Twelve trained researchers having medical qualifications observed 461 deliveries and reviewed the facilities' self-reported data as well as data from individual patient records. We also analyzed the data to identify predictors of care quality and data quality. Report will be submitted to USAID in the next quarter.
    - The study found that self-reported data from facilities is significantly different from data gathered by external observers and overestimates actual care provided to clients. This is especially true in the case of data required by the government (early breastfeeding). Discrepancies between observed care and self-reported data were smaller than discrepancies between observed care and what was recorded in medical records. Despite the significant difference between self-reported and observe data, from a management point of view the differences are unlikely to change how an improvement team would function. We believe that the reason for the large discrepancy in the breastfeeding data is due to the fact that sites reporting poor breast feeding data are scolded so the system has in-built incentives which negatively affect data quality. We plan to redo this survey in the future to see if the continuing QI support has any effect on data quality.
    - After controlling for all factors thought to influence care practices and data quality, actively working on an improvement aim is associated with better breastfeeding practice and postpartum vitals check in the first half hour. It is also associated with better reporting of practices like dry and wrap and cord care, which is generally unreported in health facilities. The effect of other variables on quality of care and quality of data are mixed. Level of facility, cadre and staff, years of experience and time of day are all associated with better quality on some indicators and worse quality on others.

Planned Activities Next Quarter: April - June 2015

- Complete investigations into reduced perinatal mortality
- Work with government on scale-up plans for new blocks and districts
- Continue to work on improving care for complex issues

INDONESIA

Background

In January 2014, USAID ASSIST began working with local partners at the University of Indonesia (UI) Center for Family Welfare (CFW) to conduct a mid-term and end line evaluation to compare the quality of care provided in hospitals accredited by the Joint Commission International (JCI) with that in hospitals accredited by the Indonesian Hospital Accreditation Commission (KARS) and those not undergoing hospital accreditation (NHA). The midline phase of the data collection was completed in FY2014; data analysis and report writing began in October 2014 and are ongoing. It is expected that the finalized midline summary report will be made public in Q3FY15. It has been translated into Bahasa Indonesia and is in review with the USAID Indonesia mission. The full report in English has been drafted and is expected to be available for release shortly.

Planning for dissemination of the results from the midline report were underway in Q2 and will be finalized and started in Q3 FY15. This is planned as an exercise to maintain cooperation from the hospital participants in the study while not providing so much information that might significantly change their institutional behavior and therefore act as a contaminant to the study.

Program Overview

What are we trying to accomplish?	At what scale?
1. Hospital Accreditation Process Impact Evaluation (HAPIE)	
• HAPIE: Evaluating the quality of care provided in hospitals undergoing Joint Commission International (JCI) and the Indonesian Hospital Accreditation Commission or *Komisi Akreditasi Rumah Sakit* (KARS) accreditation in Indonesia	9 hospitals were selected in three provinces: 3 hospitals are pursuing JCI accreditation 2 hospitals are pursuing KARS accreditation 4 hospitals are not seeking hospital accreditation until 2015 (NHA)

Cross-cutting Activity

Accomplishments and Results by Activity (October 2014 – March 2015)

Activity 1. Hospital Accreditation Process Impact Evaluation (HAPIE)

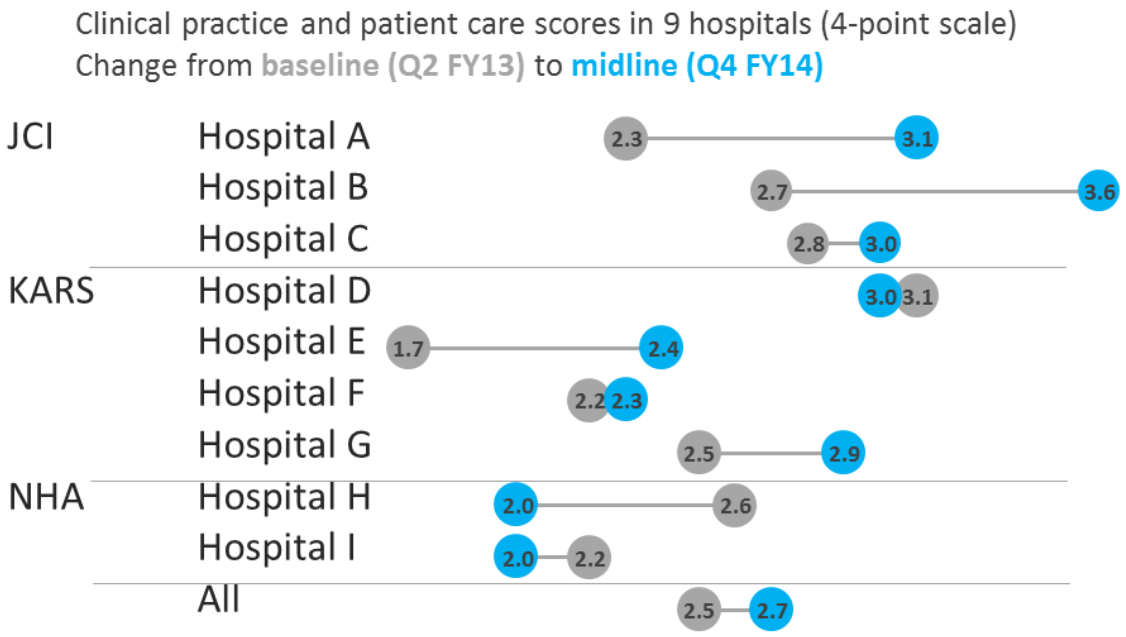
Overview:

This study is of great importance to the MOH of Indonesia, the USAID Mission, WHO and other stakeholders because of the major effort underway of the last three years on reforming and improving the function of the hospital accreditation system in the country. The organization most responsible for hospital accreditation, KARS (Indonesian acronym: Komisi Akreditasi Rumah Sakit) is undergoing changes reflected in the results of this study and the future of the quality of hospital care in the larger facilities in the country will be influenced by KARS reforms and the HAPIE Study's result.

Accomplishments and Results:

- **Analysis of data collected in FY14 for the midline assessment was completed and the first draft of the write-up was submitted to the USAID contact for initial comments (Q1FY15)**. A Bahasa Indonesia version of the report summary has been developed and will likely be the write-up most widely circulated in Indonesia.
- **A plan for wider dissemination of the results from this phase of the study was agreed to and the execution of this is currently being planned.**
- **Clinical practice and patient case scores in 9 hospitals show an improvement in scores from hospitals undergoing accreditation from JCI, a smaller increase in those undergoing KARS accreditation, and a decline in scores from hospitals not yet seeking accreditation (Figure 68).**

Figure 68: Clinical practice and patient care scores in 9 hospitals (Q2 FY13 – Q4 FY14)



Challenges

Data collection for this midline phase has corresponded with introduction of the JKN/BPJS universal national health insurance system, which has been a major confounder in the study. While all hospitals participating in the study have been affected, their responses have been different. While the implementation of the national health insurance system will definitely have a significant effect on the results from this HAPIE study, it will not necessarily lessen the impact of the study because response to implementation of the universal health system is an important part of the quality performance of hospitals. Witnessing and analyzing these changes may also have an impact on some policies that control the payment for claims to hospitals under JKN/BPJS.

Planned Activities Next Quarter: April - June 2015

- Dissemination of the results from the HAPIE midline evaluation to the nine participating hospitals by UI/CFW to be commenced
- Publication of the Bahasa Indonesia report summary
- Development of an outline for a peer-review publication based on selected findings from the midline report
- Development of an international dissemination plan which will include abstract submission for international conferences on hospital quality performance

EUROPE AND EURASIA

GEORGIA

Background

The USAID ASSIST Project started full-scale activities in August 2014, building on work carried out under HCI from 2011-2014. ASSIST is working with the Ministry of Labor, Health and Social Affairs (MoLHSA), and other stakeholders in Georgia to address quality, consistency, and continuity of medical care; to improve access to and use of evidence-based medical information by physicians; and to enhance the availability of modern evidence-based treatments in one region. ASSIST is supporting hospital and primary care facilities to improve the quality of cardiovascular disease, asthma, pneumonia, and chronic obstructive lung disease prevention and treatment. Respiratory tract infections are the most frequent cause of seeking medical care in children. According to WHO, globally, pneumonia remains to be a leading cause of under 5 mortality. By focusing on improving the quality of respiratory tract infection care (including pneumonia) among children and addressing rational use of medications (including antibiotics to prevent antibiotic resistance), ASSIST contributes to prevention of child death in Georgia.

ASSIST also addresses the problem of the increasing share of cardiovascular diseases and their risk factors as indirect causes of maternal mortality by improving quality of cardiovascular disease (CVD) prevention and treatment services and integrating them into established maternal antenatal and post-partum care. Most maternal deaths and serious morbidity due to indirect causes of maternal mortality can be prevented through applying high-impact CVD prevention and/or treatment interventions.

Activities also support implementation of the Georgia Health Strategy (GHS) strategy and USAID CDCS for 2013-2017 and contribute to increasingly stable, integrated, and healthy society through individual, institutional, and systems capacity building and improved quality of health service delivery.

In addition to the country's development strategies, ASSIST is supporting the Equitable Utilization of Quality Health Care Services (Focal Area #1 of the USAID Mission's Global Health Initiative) by improving quality of care for leading causes of adult and child mortality and morbidity in Georgia and supporting improved access to and use of evidence-based medical information and development of different tools to institutionalize and spread the best quality improvement practices countrywide. ASSIST also contributes to the USAID Mission's second strategic priority, individual, institutional, and systems capacity building (Focal Area #2 of Mission's Global Health Initiative) by strengthening human resources for health and generating, collecting, analyzing, and using strategic information for evidence-based decision making at different levels of the health system in Georgia.

Institutionalization/Sustainability Strategy

The ASSIST Georgia team supports institutionalization of best practices though use of different policy, regulatory, or financial tools nationwide. These include: incorporating high impact best practices in public and private programs/benefit packages; developing national protocols with audit criteria; and supporting medical record standardization at the national level.) Our hope is to create the capacity of medical facilities in the country (particularly those involved in the project) to implement quality improvement activities without external assistance and to make improvement a permanent integral part of their health care services. During February-April 2015, the project developed an institutionalization, sustainability, and scale-up strategy for sharing with key counterparts.

Scale of USAID ASSIST's Work in Georgia

MOLHSA, 15 Implementing Partners

1 out of 11 regions

20 facilities

19 QI teams

154,683 out of 4.5 million (ambulatory) 1,295,000 out of 4.5 million (hospital)

Program Overview

What are we trying to accomplish?	At what scale?
1. Improve quality, consistency and continuity of medical care	
• Improve timeliness, continuity, effectiveness, efficiency, and patient- centeredness of provided services and their consistency with clinical guidelines through the improvement collaborative approach • Strengthen capacity of medical providers to provide safe, timely, continuous, effective and efficient medical care • Improve awareness on quality improvement experiences countrywide • Strengthen health information system to support development of evidence-based decisions on improvement quality of medical care • Ensure equitable access to priority "best-buy" high impact medical services in demonstration regions	• Regions: 1 out of 11 (Imereti) • Facilities in catchment area: 20 - 3 out of 40 hospitals - 4 out of 42 polyclinics - 13 out of 212 village doctors • Catchment population facilities/communities served: 154,683 out of 4.5 million (ambulatory) 1,295,000 out of 4.5 million (hospital) • QI Teams: 19
2. Improve access and use of evidence based medical information and treatments	
• Improve access to evidence-based medical literature (guidelines, manuals, pathways, protocols) of Georgian physicians • Enhance the use of evidence-based clinical guidelines, protocols and pathways in clinical practice • Strengthen capacity of professional associations in developing and adapting international guidelines and evidence-based literature to Georgian context	• Dissemination of evidence for priority conditions to all physicians countrywide

Improvement Activity Cross-cutting Activity

Accomplishments and Results by Activity (October 2014 – March 2015)

Activity 1. Improve quality, consistency, and continuity of medical care

Overview:

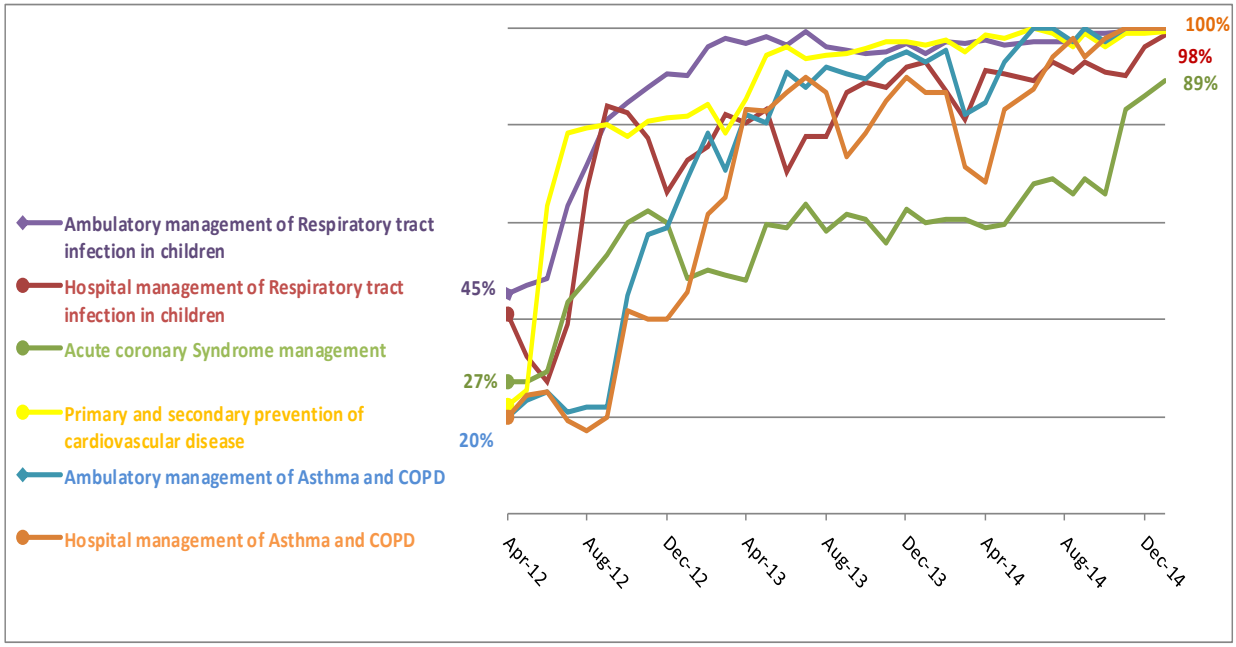
ASSIST continued to improve quality, consistency, and continuity of clinical care in 17 ambulatory clinics and village solo practices and three hospitals in Georgia's Imereti Region, with a population of almost 700,000 people. The clinical focus areas remained the same as in FY14: *Adult*: CVD, chronic obstructive pulmonary disease (COPD), asthma and their cross-cutting behavioral and physiological risk factors; *Child*: respiratory tract infections and asthma. This activity supported the Government of Georgia's strategic priority to improve the quality of medical services in the country.

To spread and scale up improvement practices from one region to the whole country, as well as expand the priority clinical content areas, the ASSIST team shared the QI initiatives, tools, interventions, and experiences through several communication channels (including project web- and Facebook page and stakeholder meetings). In addition, the USAID ASSIST team continued their successful collaboration with medical corporations (Geo-Hospitals and EVEX), that own more than two-thirds of hospital facilities in Georgia, including three hospitals and one ambulatory facility supported by the project. By providing regular feedback to the corporations' management teams on progress made in project-supported facilities and involving their quality improvement structures working with all facilities of the corporations in project interventions, ASSIST initiated the spread of the best QI practices throughout these medical networks.

Accomplishments and Results:

- **Continued clinical, quality improvement, and other needs-based training and coaching of ASSIST supported medical facilities** (October 2014-March 2015). The ASSIST team continued support to quality improvement teams of facilities in the Imereti Region to test and implement changes in their care processes to improve prevention and treatment of CVD, asthma, COPD and Respiratory Tract Infections (RTIs). During the reporting period, the ASSIST Georgia team conducted three field trips and 488 provider-hour trainings, including:
  - 60 provider-hours in quality improvement
  - 197 provider-hours in CVD risk factor screening and modification
  - 128 provider-hours in ACS management
  - 62 provider-hours in pediatric pneumonia/acute RTI management
  - 84 provider-hours in asthma/ COPD management
- **After 34 months of project QI interventions, routine monitoring shows sustained improvement of best care practices in all project priority clinical areas from baseline (April 2012) to January 2015 (Figure 69).** Particularly:
  - Average compliance with evidence-based best practices on screening, prevention and management of CVD risk-factors, reached 99% in January 2015 and increased by 77% from baseline
  - Average compliance with Management of Acute Coronary Syndrome best practices reached 89% and improved by 62% from baseline
  - Average compliance with Respiratory Tract Infection management best practices in ambulatories and hospitals improved by 55% and 57% respectively
  - Average compliance with asthma and COPD management best practices in ambulatories and hospitals improved on average by 80%

Figure 69: Georgia: Average compliance with all percentage process indicators per clinical focus area, Imereti Region (April 2012 – January 2015), average 343 monthly charts reviewed



Routine monitoring results in each clinical focus area complemented the results of the ASSIST assessment of "Effectiveness and Cost-effectiveness of QI Interventions in Ambulatory and Hospital Facilities". This study included an assessment of medical charts and interviews with managers, providers and patients (parents) as well as key inputs assessments. Along with intervention facilities, similar sites were chosen in different regions of Georgia to serve as a control group. The baseline assessment was conducted from April-August 2012 and the endline assessment from August-December 2013. The key results of the assessment are summarized below for each clinical area.

a) Ambulatory screening and modification of cardiovascular disease risk-factors:

Figure 70, **Figure 71**, and **Figure 72** illustrate statistically significant improvement in compliance with best practices after 18 months of quality improvement interventions.

Figure 70. Georgia: Percent medical charts with improved documentation of screening and counselling on CVD behavioral risk factors (n=562) (April 2012-Sept 2013)

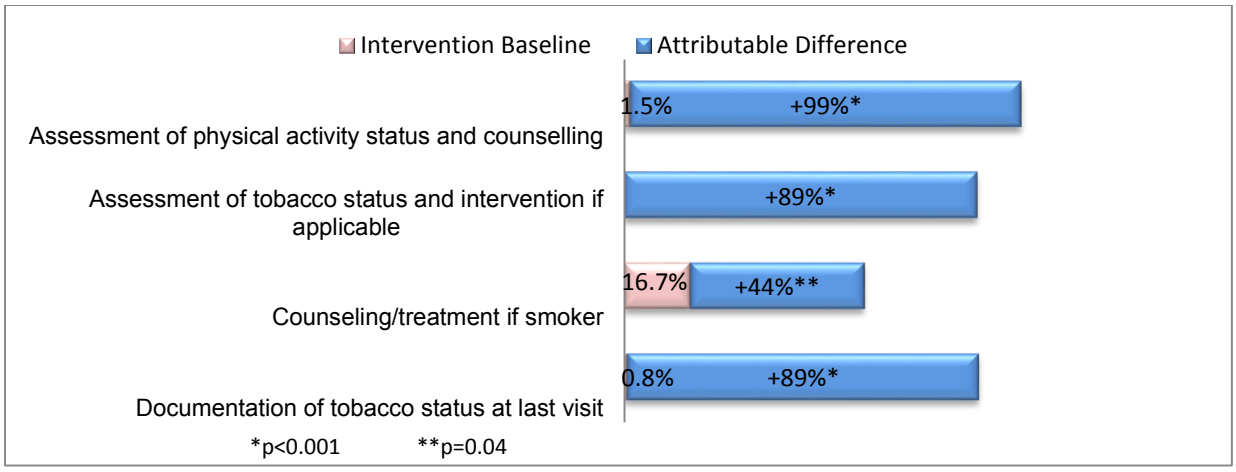


Figure 71. Georgia: Percent medical charts with improved screening and modification of CVD physiologic risk factors (n=562) (April 2012-Sept 2013)

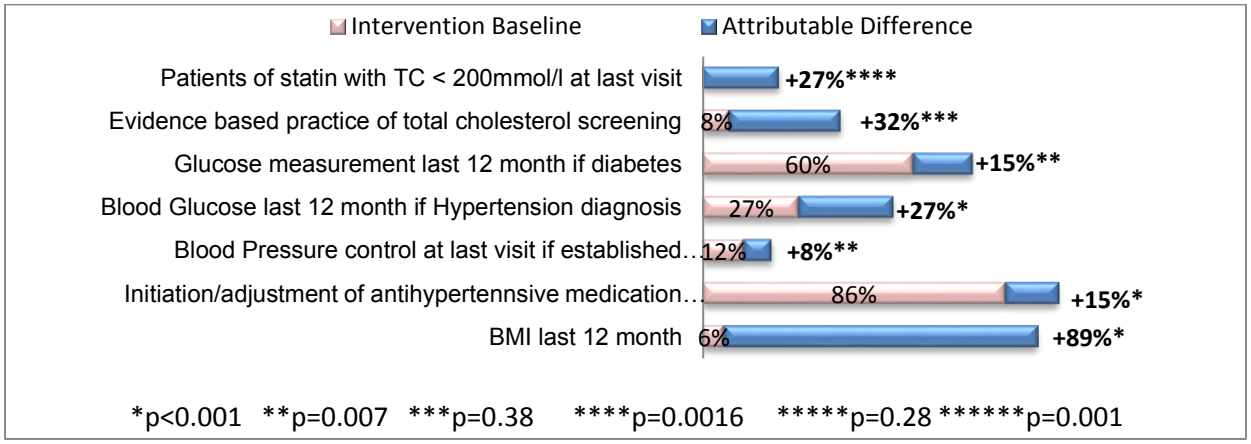
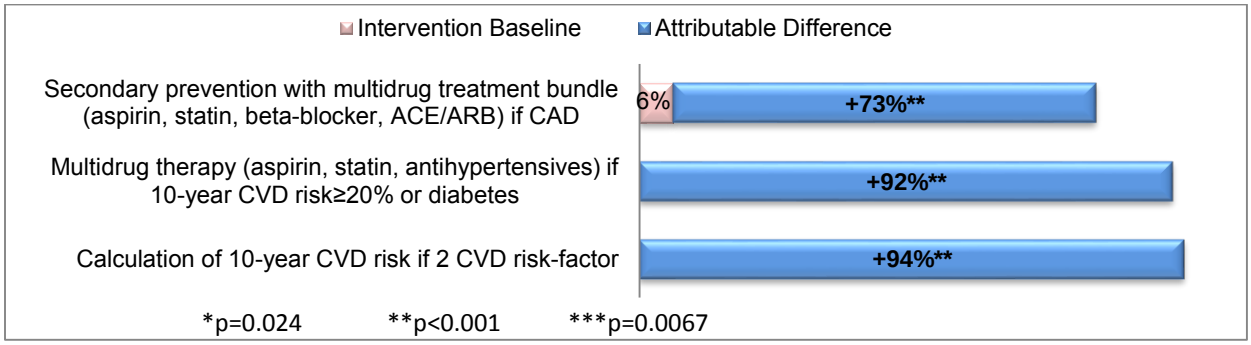


Figure 72. Georgia: Calculation of 10 year CVD risk and primary and secondary prevention of CVD (n=562) (April 2012-Sept 2013)



b) Hospital Management of Acute Coronary Syndrome:

Despite the high toll of CVD death among Georgian population according to NCDC in 2013 acute ischemic conditions account only for 0.5% of all registered diseases, manifesting problem with access to timely care, diagnosis and quality of health data. **Figure 73**, **Figure 74**, and **Figure 75** illustrate statistically significant improvement in compliance with best practices after 18 months of quality improvement interventions.

Figure 73. Georgia: Increasing compliance with ACS initial assessment best practices: results of baseline assessment and attributable difference at the endline (n=564) (April 2012-Sept 2013)

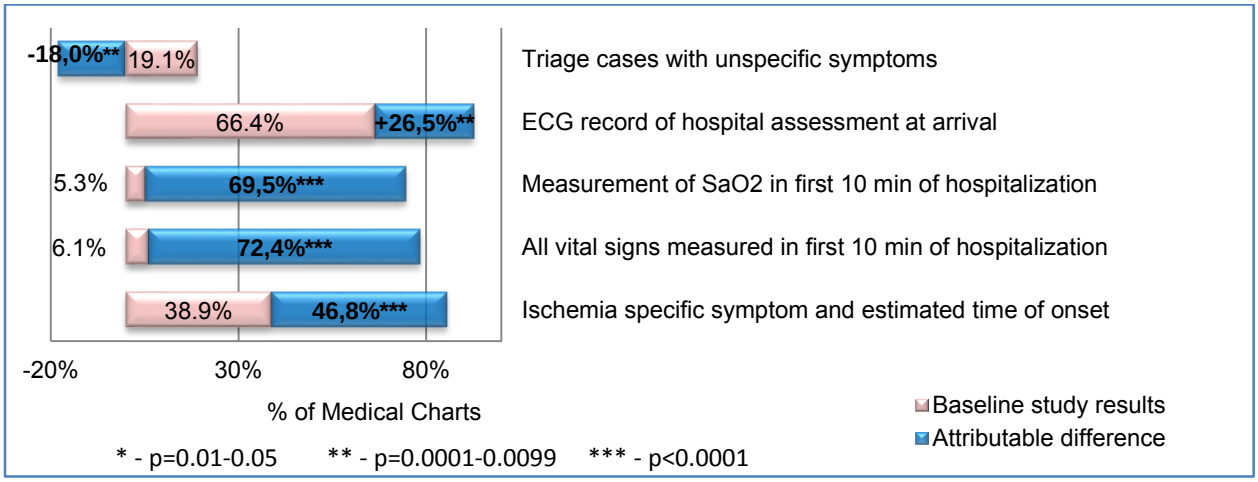


Figure 74. Georgia: Improved compliance with initial (n=264) and ongoing (n=218) medication treatment and discharge medication prescription (n=217) with evidence base ACS treatment practices (April 2012-Sept 2013)

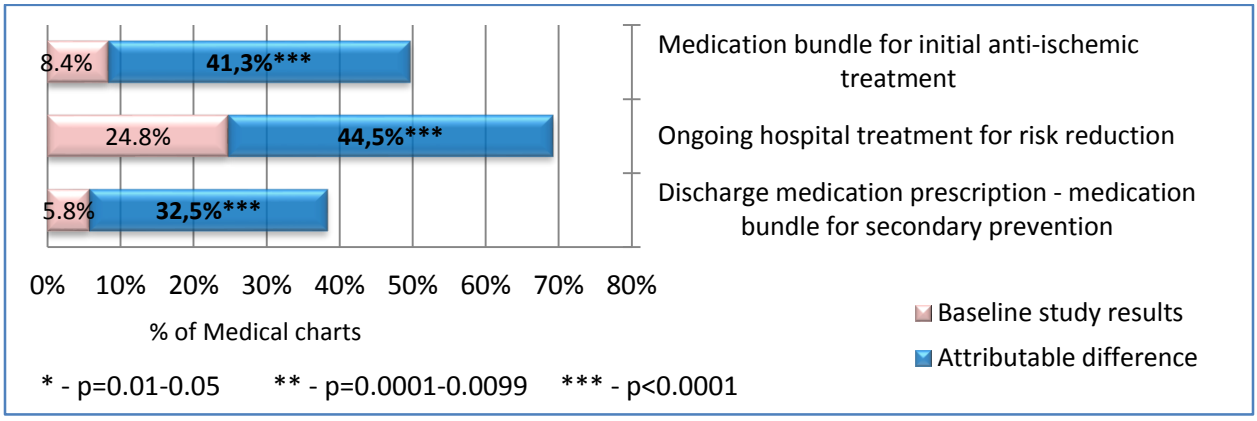
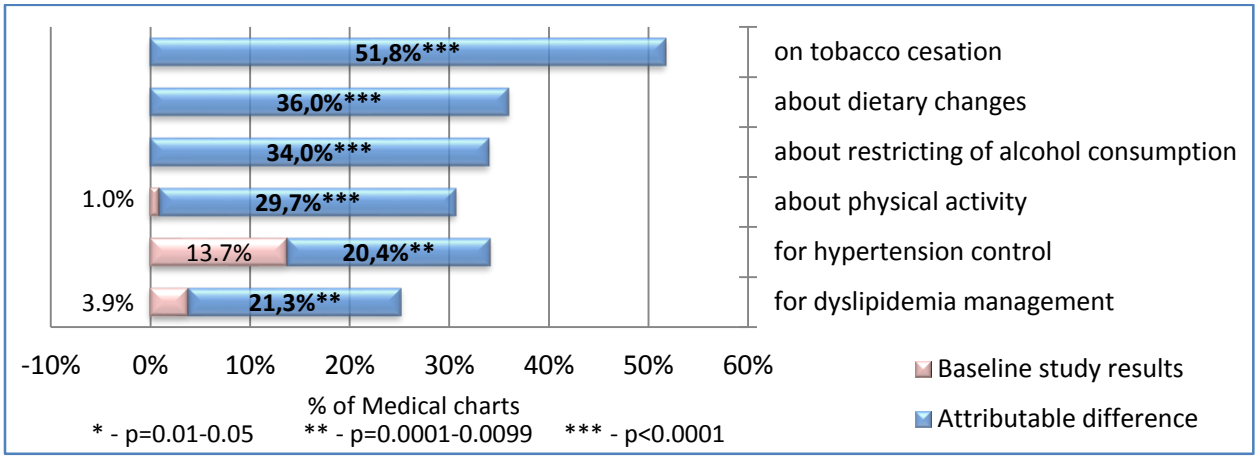


Figure 75. Georgia: Increased CVD risk factor assessment and modification best practices in patients with ACS at hospital discharge (n=217), (April 2012-Sept 2013)



c) Management of Chronic Respiratory Conditions:

Figure 76, **Figure 77**, **Figure 78**, and **Figure 79** illustrate statistically significant improvement in compliance with best practices after 18 months of quality improvement interventions.

Figure 76. Georgia: Percent of charts with evidence-based (EB) prescription practices of ambulatory management of COPD (n=109) (April 2012-Sept 2013)

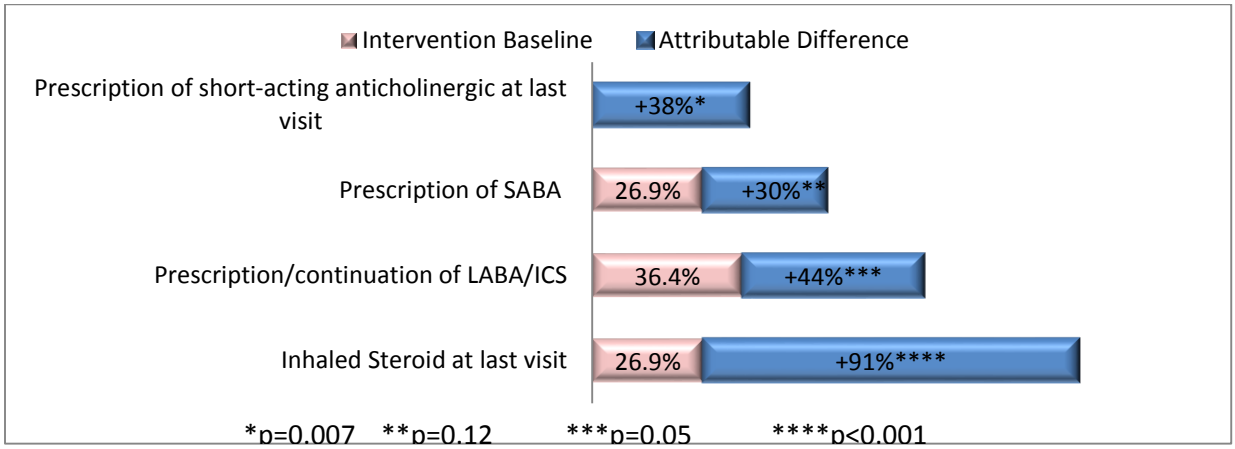


Figure 77. Georgia: Percent of charts with EB prescription practices of ambulatory management of Asthma. (n=225) (April 2012-Sept 2013)

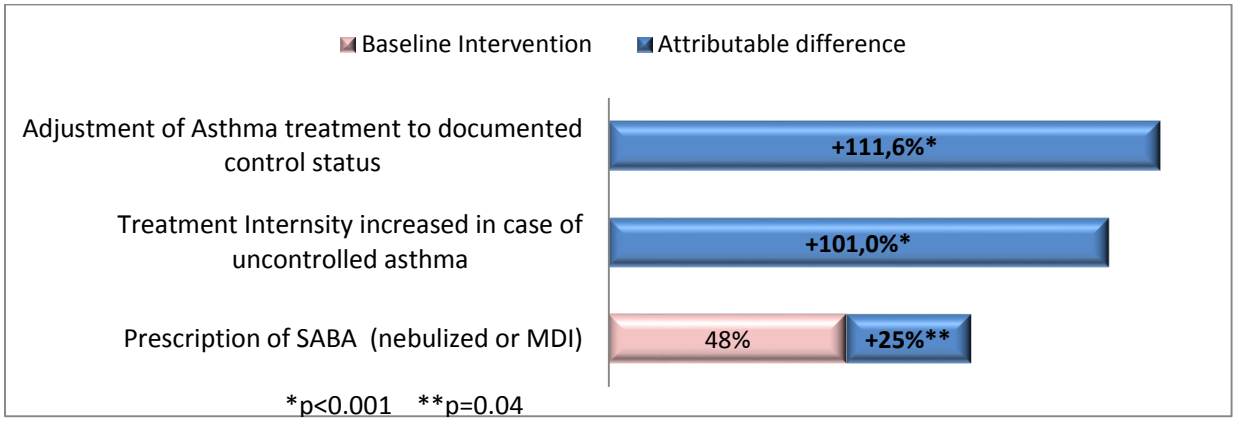


Figure 78. Georgia: Percent of charts with EB medication administration practices of hospital management of COPD exacerbation (n=143) (April 2012-Sept 2013)

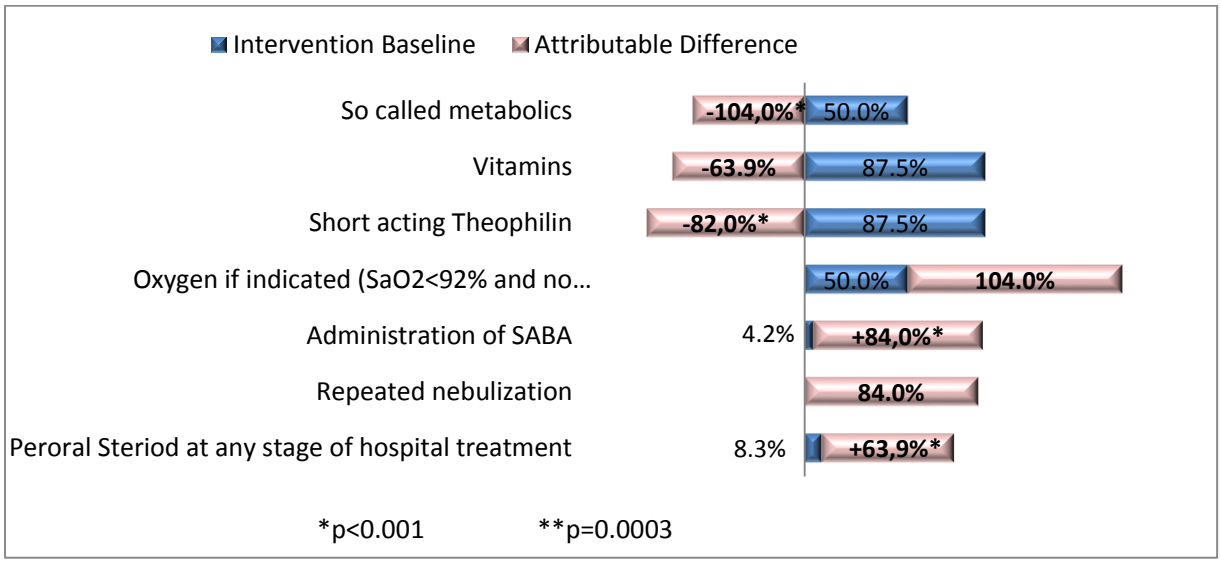
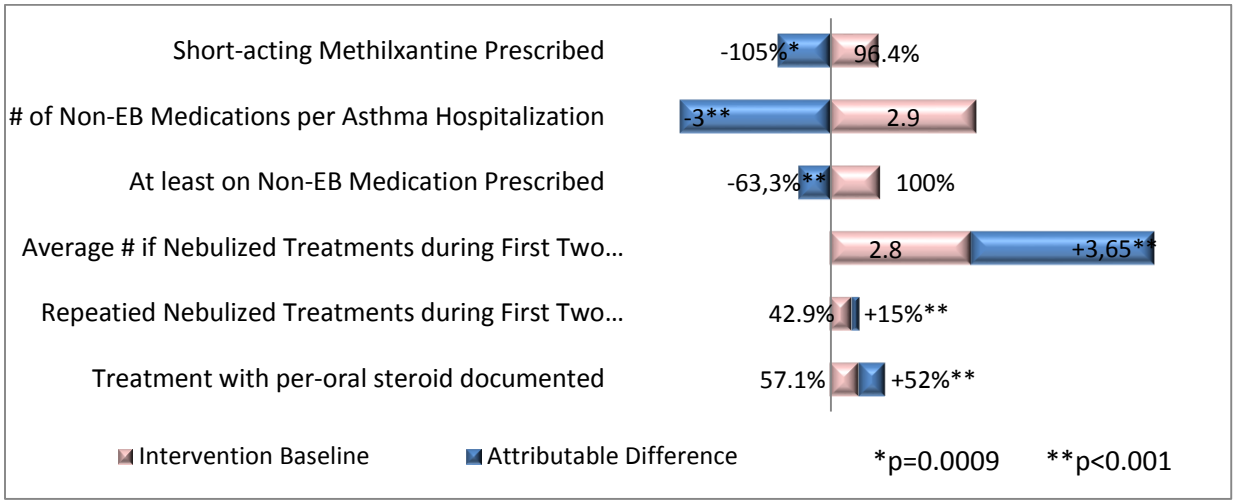


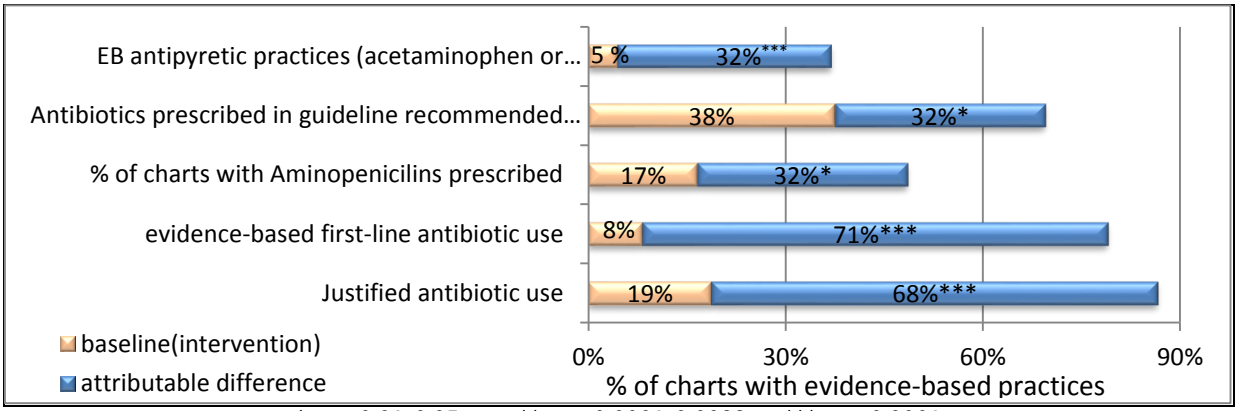
Figure 79. Georgia: Percent of charts with EB medication administration practices of hospital management of asthma exacerbation (n=117) (April 2012-Sept 2013)



d) Management of Pediatric Respiratory Tract Infections:

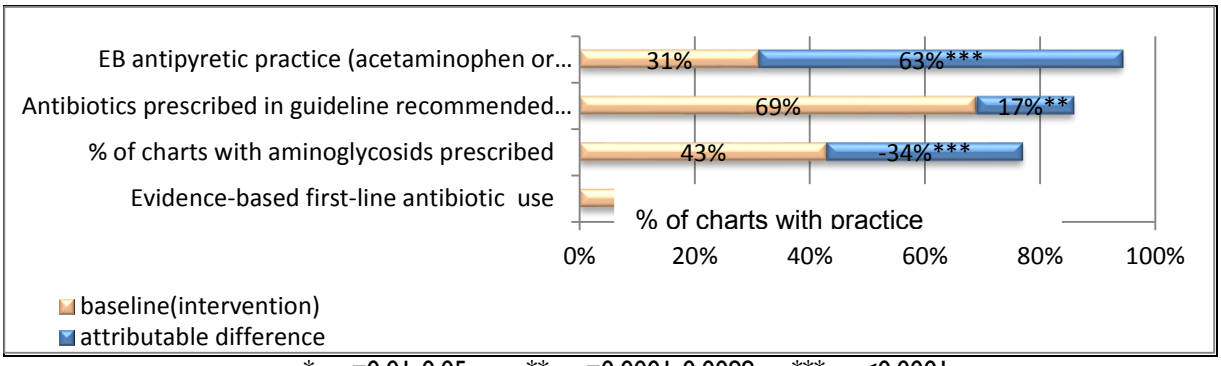
Respiratory tract infections are the most common diagnosis for seeking medical care in children. In contrast from many other developing countries, the core reason of inappropriate care is not access but overutilization of non-evidence based (non-EB) medications, particularly antibiotics. **Figure 80**, **Figure 81**, **Figure 82**, and **Figure 83** illustrate statistically significant improvement in compliance with best practices after 18 months of quality improvement interventions.

Figure 80. Georgia: Improved compliance with EB practices: Baseline and attributable improvement in compliance with EB practice to treat pediatric respiratory infections at ambulatories (n=212) (July 2012-Dec 2013)



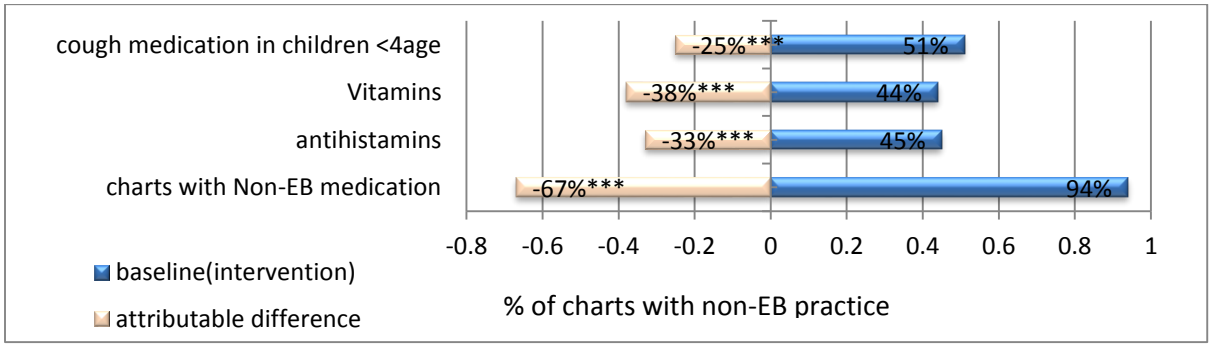
* - p=0.01-0.05 ** - p=0.0001-0.0099 *** - p<0.0001

Figure 81. Georgia: Improved compliance with EB practices: Baseline and attributable improvement in compliance with evidence-based practices to treat pediatric pneumonia in hospitals (n=274) (July 2012-Dec 2013)



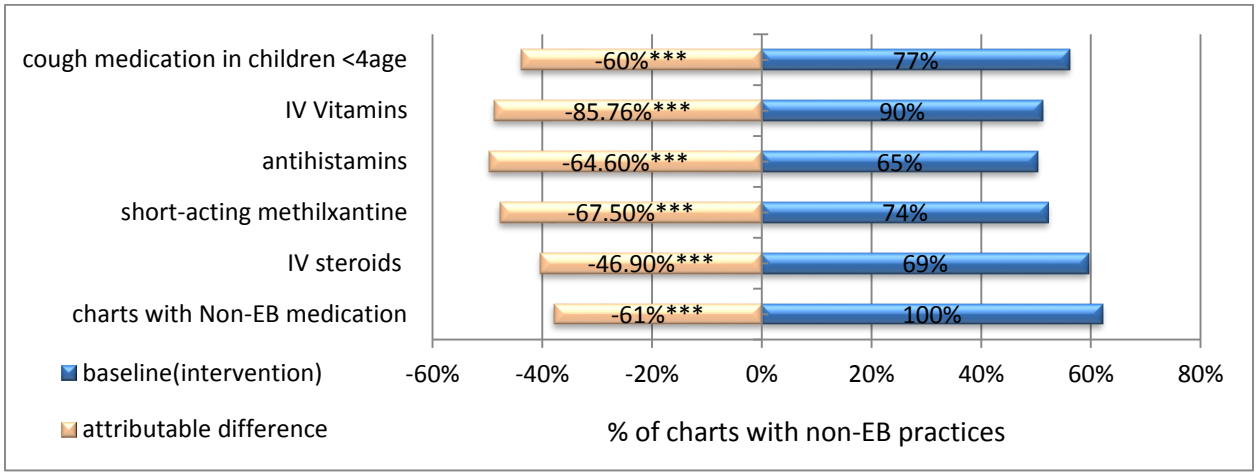
* - p=0.01-0.05 ** - p=0.0001-0.0099 *** - p<0.0001

Figure 82. Georgia: Decreased use of non-EB practices: Baseline and attributable improvement in prescription of non-EB medications for pediatric patients with respiratory infections at ambulatories (n=212) (July 2012-Dec 2013)



* - p=0.01-0.05 ** - p=0.0001-0.0099 *** - p<0.0001

Figure 83. Georgia: Decreased use of non-EB practices: Baseline and attributable improvement in administration of non-EB medications for pediatric patients with pneumonia at hospitals (n=274) (July 2012-Dec 2013)



* - p=0.01-0.05 ** - p=0.0001-0.0099 *** - p<0.0001

The figures above also indicate that in addition to improved compliance with care practices there were also statistically significant decreases in use of non-evidence-based medications and diagnostic tests in all project priority clinical areas. In addition to the improved safety and rational use of medications, these results create the important opportunity to decrease the cost of treatment for payers (patients, insurance companies, medical care facilities, employers) and the associated economic benefits for society.

The medical chart review results from the abovementioned assessment corroborate not only with routine monitoring results but also with the interview results of care providers and patients. For example, provider interview results demonstrate improved knowledge and practices in management of project priority diseases (**Table 4**).

Table 4. Georgia: Knowledge and self-reported practices of medical care providers, managing project priority diseases in intervention ambulatory care clinics and hospitals (April 2012 – Dec 2013)

Indicator	Baseline (April – July 2012)	Endline (Sept – Dec 2013)	Attributable improvement
Acute Coronary Syndrome			
% of providers who correctly answered questions on ACS treatment medications	0 n=10	61.11% n=18	+61.11% *p*<0.001
Average number of correctly answered questions on ACS management (mean, 95%CI)	8.7 95%CI (3.99-13.40) n=10	35.66 95%CI (34.5-36.8) n=18	+28.25 *p*<0.001
Average number of incorrectly answered questions on ACS management (mean, 95%CI)	44.9 95%CI (39.7-50.1) n=10	9.5 95%CI (8.2-10.8) n=18	-37.25 *p*<0.001
Ratio of correctly and incorrectly answered knowledge questions on ACS management (mean, 95%CI)	0.21 95%CI (0.08-0.3) n=10	4.07 95%CI (3.4-4.7) n=18	+3.93 *p*<0.001

Indicator	Baseline (April – July 2012)	Endline (Sept – Dec 2013)	Attributable improvement
Asthma/COPD			
% of providers correctly answered questions on stepwise treatment of asthma	31.3% n=67	78.1% n=64	+47.93% p<0.001
% of providers correctly answered questions on tobacco cessation medications	16.9% n=53	61.8% n=55	+30.8% p=0.006
CVD			
% of providers self-reported confidence on tobacco counseling and treatment	24% n=34	15% n=34	-27.8 p=0.059
% of providers correctly answered questions on secondary prevention of CVD	9% n=34	76% n=34	+48.4 p=0.001
% of providers correctly answered questions on diagnostic criteria of hypercholesterolemia	41% n=32	56% n=34	+45.9 p=0.003
RTI /Pneumonia management			
% of ambulatory care providers answered correctly all four knowledge questions on RTI management	3.57% n=28	76.92% n=26	+81% p<0.001
Average number of irrelevant assessment procedures reported by providers managing hospital Pneumonia in pediatric patients	3.4 95%CI (1.98-4.82) n=28	0 n=26	-
% of providers mentioning 4 essential treatment and counseling interventions (antibiotic, oxygen, antipyretic, and vaccination counseling) of pneumonia management	0 n=28	100% n=26	+70%

e) Economic Evaluation of Quality Improvement Interventions:

- As part of the cost-effectiveness assessment, the project conducted economic evaluation of QI interventions. An incremental cost-effectiveness evaluation was conducted using decision-tree analysis on each of the variables used to indicate the quality of care provided at each level of care and clinical focus area. Analysis focused on incremental cost-saving from decreased utilization of non-evidence based medications and diagnostic tests (**Table 5**).
- Economic evaluation of the project's QI interventions, summarized in **Table 5**, found that while total cost of intervention was $147,258 during 18 months, **intervention saved 4 times more** ($584,000) on decreased prescription/administration of non-evidence-based medications and diagnostic tests. The analysis of incremental cost-savings from decreased utilization of non-evidence-based practices demonstrated that except hospital treatment of asthma and COPD (where number of patients benefitted from improved care was low), QI intervention dominates on business-as-usual model from cost-effectiveness perspective and simultaneously, significantly increases the probability of receiving better quality of care.
- Analysis of the results of the economic evaluation of QI interventions show that interventions directed to improve vertically and horizontally integrated care delivery of high burden adult and pediatric conditions at primary care and hospital level is more efficient than quality improvement interventions focused on single-disease management and one level of care since some direct (e.g., travel) and indirect costs (e.g., administrative costs, infrastructure maintenance costs,etc.) of an intervention can be significantly reduced. Analysis also shows that investment i**n improving quality of high burden diseases (including chronic diseases that need routine follow-up)** is more efficient, since cost of the intervention per patient visit is small, with a large number of patients benefitting from the better care.

Table 5. Georgia: Summary cost results per all clinical focus areas

Dimensions	# of patients	Average cost of QI (medical Facility) (USD)	Total cost of project (HCI/ASSIST) (USD)	Total cost of intervention (project & facility) in USD	incremental cost-saving from non-EB medications and diag. tests (USD)	Total incremental saving from decreased non-EB practices (USD)
COPD ambulatory	1040	1,501	14,391	15.3	22.9	23,862
COPD hospital	210	1,486	9,593	52.8	3.7	770
Asthma ambulatory	1152	1,501	14,391	13.8	25.5	29,376
Asthma hospital	116	1,486	9,593	95.5	7.4	863
RTI ambulatory	26236	8,952	22,484	1.2	4.9	127,802
Pneumonia hospital	1544	6,229	14,989	13.7	12.1	18,614
CVD	303195	4,401	37,091	0.1	0.9	269,507
ACS	6836	3,663	24,727	4.2	16.6	113,174
Total (USD)			147,258			584,000

- Considering the fact that associated cost benefit from QI intervention in 3 hospitals and 17 ambulatory clinics is about 584,000 USD, spread and scale up of QI interventions countrywide would save hundreds of million USD from decreased non-evidence based practice. Considering that the cost of demonstration phase of the QI intervention is higher than cost of its spread in the same number of facilities (due to higher costs associated with assessment of quality gaps, preparation of QI implementation and evaluation tools and materials), scale up of QI interventions has potential to reach even greater cost-savings per patient.
- The results of effectiveness and cost-effectiveness assessment of the project's QI interventions demonstrated that implemented QI strategy was effective and can be scaled up and adapted across different settings (local, national). Scaling up, sustaining, and institutionalizing proven QI interventions countrywide with a focus to deliver essential high impact cost effective clinical interventions for high burden priority diseases will most likely lead to measurable improvement, prevention of high burden diseases and their complications, premature death, and associated cost-saving for payers and society.

Activity 2. Improve access and use of evidence based medical information and treatments

Overview:

This activity responds to limited access to and use of evidence-based medical information by Georgian physicians. To strengthen the capacity of Georgian professional associations and improve access to evidence-based medical information, the ASSIST team facilitated collaboration between Georgian Medical Associations and US professional associations and supported providers to:

a) Translate and publish evidence-based medical literature;

b) Support regional collaborative clinical training and supportive supervision; and
c) Regularly survey relevant international literature and prepare succinct evidence summaries disseminated through project-supported web- and Facebook page (as well as written dissemination).

Accomplishments and Results:

- **ASSIST Georgia developed six technical reports in Georgian on results of non-randomized controlled assessment of effectiveness and cost-effectiveness of project's quality improvement interventions in different clinical content areas** (December 2014- February 2015): 1) Ambulatory and hospital management of Asthma; 2) Ambulatory and hospital management of COPD, 3) Prevention and management of cardiovascular disease; 4) Hospital management of Acute Coronary Syndrome 5) Ambulatory management of acute pediatric respiratory tract infections; 6) Hospital management of pediatric pneumonia. The reports have been printed and disseminated to the key stakeholders, including to Ministry of Health and National CDC. During March-2015-April 2015, the project team also developed English versions of the technical briefs in abovementioned clinical focus area.
- **To support sustainability and institutionalization of trainings, the ASSIST team worked with relevant professional and non-governmental associations to develop 12 modules for Continuous Professional Development.** During the reporting period, four modules (Management of Asthma and COPD in Clinical Practice, Practical and Theoretical Aspects of Spirometry and Tobacco Cessation and Prevention) that have already been adopted by Tbilisi Medical University and Counsel of Continuous Professional Development at MoLHSA were reviewed and updated based on the latest scientific evidence and are regularly implemented by the professional medical associations. During Q2, FY15, eight of the following modules were developed and/or revised and submitted to MoLHSA:
    - Use of Essential Interventions in Initial Assessment, Diagnosis and Management of Acute Coronary Syndromes;
    - Assessment Evaluation and Management of Adult Dyslipidemia in Clinical Practice
    - Implementation of CVD Risk-factor Screening and Modification in Routine Medical Practice
    - Approaches for Accurate Interpretation of ElectroCardiogram
    - Evidence-Based Medical Practice
    - Blood Pressure Measurement and Diagnosis of Hypertension
    - Assessment and Management of Coronary Artery Disease
    - Health Care Quality

  In April 2015, MoLHSA accredited all abovementioned eight training modules.
- **Continued to upload evidence updates to Evidence-based Medical Portal** www.healthquality.ge**.** In February 2015, the website was transferred to our partner Medical Association for Healthcare Quality to continue its operation after the project closure. The association takes responsibility to maintain the website and sustain the work begun by USAID ASSIST in Georgia to make available the latest evidence-based medical information, quality improvement methodologies, tools, and experiences to improve quality of medical care in Georgia.
- **Continued to upload of evidence updates on project Facebook page:** http://www.facebook.com/USAIDGeorgiaHealthCareImprovementProject. During the reporting period, Georgia ASSIST team posted 132 updates on evidence-based management of different clinical conditions. The updates contain links to the original resources on best clinical and QI practices and translated summary evidence updates in Georgian. Currently, the Facebook page has 2003 likes, mostly from medical personnel, professional medical associations, and health care facilities.
- **Gathered and systematized more than 700 summary evidence updates, translated from peer-reviewed journals by the USAID HCI/ASSIST project in Georgia as an e-book and shared it to the project's web- and Facebook pages:** http://www.healthquality.ge/ka/node/628#.VQBvghCX-QY.facebook

Challenges and Remedies

Despite recent efforts of the government to improve access to care, affordability of medical services and pharmaceuticals still remains a problem for the Georgian population. For example, 67% of ambulatory patients reported financial access to medications as an access barrier. To support improved access to

quality health services, USAID ASSIST worked collaboratively with the MoLHSA, insurance companies, and other key national stakeholders to advocate for inclusion of minimum package of priority “best buy” high impact medical services and medications in publicly funded programs and private insurance schemes. The key approaches to address health system gaps and linkages used by the ASSIST team in the country have been 1) use of evidence to address the system challenges; 2) involve all key stakeholders in sharing, analyzing systemic gaps and developing relevant, country specific strategies to overcome systemic barriers hindering opportunity to deliver high quality medical care in ambulatories and hospitals of Georgia; 3) unceasing effort to find new solutions and opportunities, when due to changes in the political environment, almost final programs were stopped or not approved.

Improving Equity

The project continues to analyze sex-disaggregated results for Ambulatory Screening and Modification of Cardiovascular risk factors. As reported earlier, the gap between quality of care provided to men and women has no longer been detected.

Knowledge Management Products and Activities

- Developed 6 technical reports in Georgian summarizing results of implementation of quality improvement interventions as well as project recommendations.
- 6 CPD modules derived from trainings conducted by the project were submitted to Continuous Professional Development board under Ministry of Health Labor and Social Affairs.
- Study Dissemination Conference was held at NCDC to communicate the results to country stakeholders. Representatives of the MoLHSA, Professional Associations, medical facilities supported by the project as well as other clinics, insurance companies, international donors, wide range of experts and other interested parties attended this meeting.
    - This event was widely featured by the medical TV Channel Pulse TV:

      https://www.youtube.com/watch?v=9g4FFI7w784
      https://www.youtube.com/watch?v=4XwXaUHh79g
      https://www.youtube.com/watch?v=ijN2TsHGT2E
      https://www.youtube.com/watch?v=UGnAQgXXLOA
- On February 11th, ASSIST Georgia conducted the project closeout ceremony. Different stakeholders from the USAID field mission, MoH, NCDC, professional organizations, managers and care providers of medical corporations and facilities attended the event. It was featured on national television Imedi TV and posted on the Facebook page of USAID/Georgia: https://www.facebook.com/USAIDGeorgia?pnref=story.

Planned Activities Next Quarter: April–June 2015

- Complete remaining project closeout activities.

UKRAINE

Background

The USAID ASSIST Project began working in the Ukraine in 2014 as a continuation of similar work conducted through HCI, funded by the USAID Europe and Eurasia Bureau to implement a Ukraine non-communicable diseases pilot activity, also known as Improving Alcohol and Tobacco control during pregnancy in Ukraine. The overall goal of this intervention is to reduce alcohol and tobacco use among women during pregnancy, which has serious risks to the health and welfare of mothers and unborn babies. Preterm birth, developmental disabilities such as fetal alcohol syndrome, mental and growth retardation, low birth weight, asthma, and sudden infant death are some of the effects that drinking and smoking while pregnant have on babies, and alcohol and tobacco use in Ukraine are among the highest in the world.

ASSIST is working to support the MOH in Ukraine to achieve this goal through supporting partners to develop national protocol for health facilities to incorporate into routine practices of health care providers in the country. The national protocol includes recommendations on BPI, the process of BPI delivery, recording and reporting documentation, job aids, and referral mechanisms to specialty care.

Institutionalization/Sustainability Strategy

ASSIST is working in close coordination with Ministry of Health, oblast health care authorities, and the National Medical Academy of Postgraduate Education (NMAPE) to enhance the capacity of Ukrainian health care providers and institutions to enable them to effectively deliver quality care and respond to the needs of patients to decrease alcohol and tobacco usage among pregnant women. ASSIST-supported work in Ukraine has included training health care providers and key decision-makers both at the national and local level on an evidence-based brief physician intervention (BPI) tobacco and alcohol cessation protocol, as well as supporting a national multidisciplinary working group at State Expert Center to prepare the national protocol and guideline for BPI. ASSIST is also facilitating the institutionalization of the new BPI protocol through working with local and national health authorities to support its incorporation into the routine practice of health care providers in the country. In addition, the project is working with the National Medical Academy of Postgraduate Education to incorporate the BPI training curricula into postgraduate medical education to further achieve sustainability objectives.

Scale of USAID ASSIST's Work in Ukraine

MOH, Poltava Oblast Health Care Department, Ukrainian Association of Narcologists, National Academy for Postgraduate Education

1 out of 27 oblasts in Ukraine

5 cities in Poltava oblast

9 facilities

10 QI teams

5,099 (3%) out of 170,439 women of reproductive age in pilot cities (75% pregnant; 25% non-pregnant women)

Program Overview

What are we trying to accomplish?	At what scale?
1. Improving Alcohol and Tobacco Control During Pregnancy	
• Develop National Protocol and training curriculum for BPI intervention • Secure at minimum 80% of reduction in tobacco and alcohol use by pregnant women in selected facilities of two oblasts • To secure at minimum 90% coverage with BPI and family planning counseling of reproductive age women and 15-17 year old adolescents	Oblast: Poltava Cities in Poltava oblast: 5 (Poltava, Kremenchuk, Komsomolsk, Mirhorod, Lubny) Facilities: women's consultations, family planning offices (total number 9) – covering 80% of women population of pilot cities Health care providers: 80 Target population: women of reproductive age, including pregnant women and adolescent girls QI teams: 10

Improvement Activity

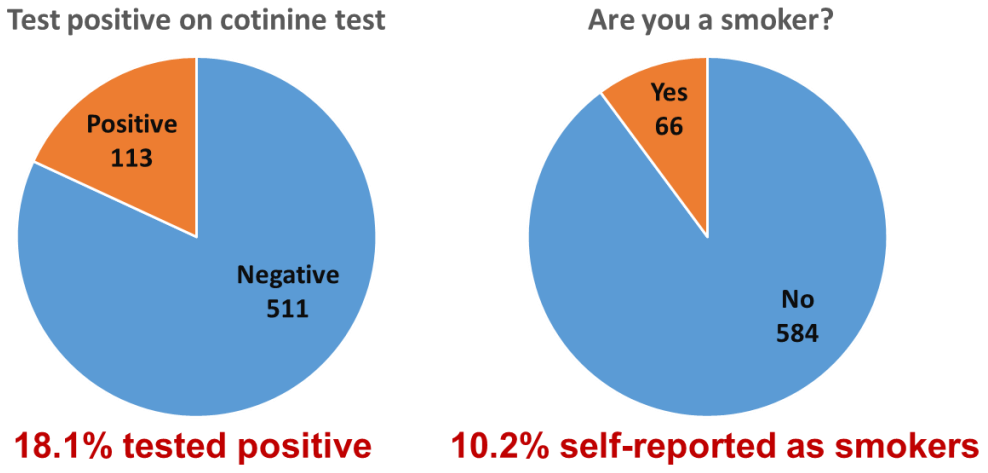
Accomplishments and Results by Activity (October 2014 – March 2015)

Activity 1: Improving Alcohol and Tobacco Control during Pregnancy

Accomplishments and Results:

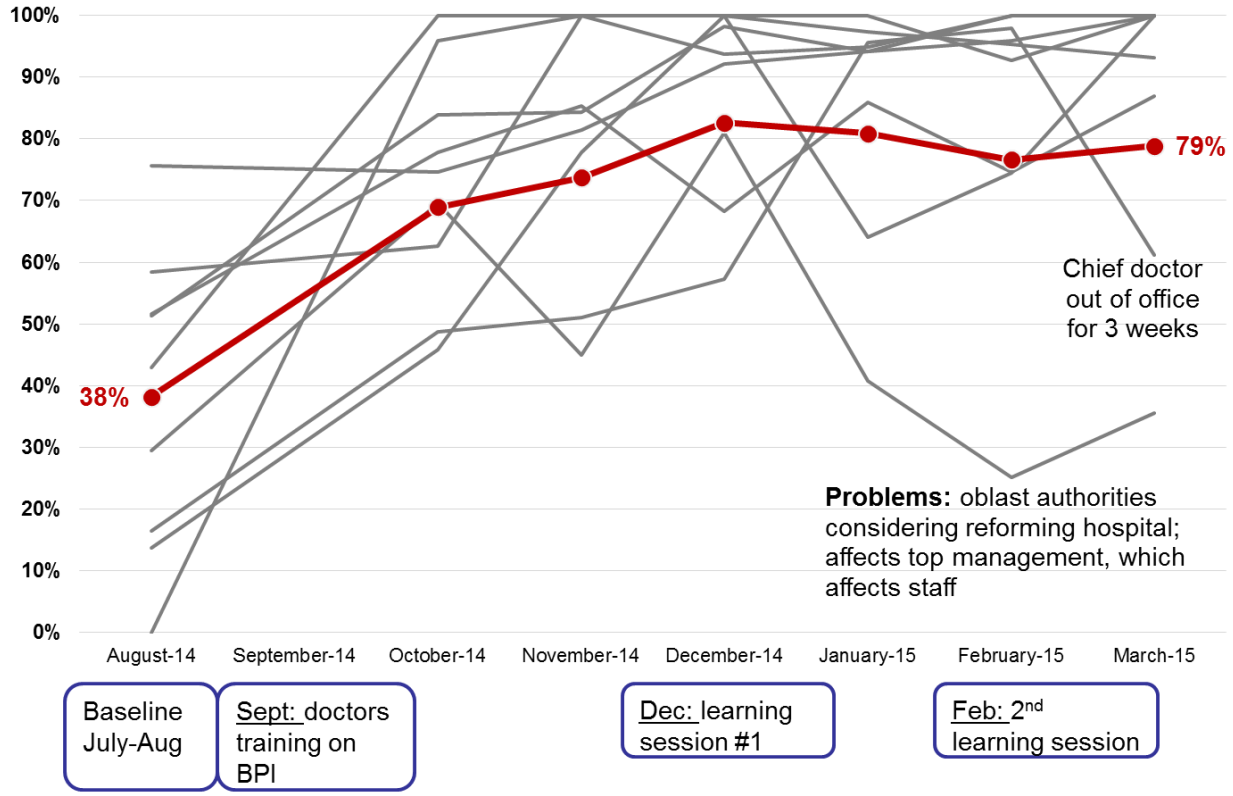
- **Conducted baseline data analysis.** In October 2014, the baseline data were analyzed to assess the *immediate quit rate* for tobacco and alcohol use among pregnant women after being screened without any additional intervention. This rate will be used to calculate the effectiveness of BPI to decrease number of pregnant women use tobacco and alcohol during pregnancy.
- **Results Tobacco.** At baseline, from July – August 2014, 672 pregnant women were assessed during their first prenatal (antenatal) visit, 624 (93%) were tested using urine cotinine tests. Of these 113 pregnant women (18%) tested positive for tobacco (**Figure 84**). Of the 99 women who were tested positive during their first visit and who came for a second prenatal visit, 46 (46.5%) tested positive; 14 women had no follow-up test (11 did not come for a second visit and 3 came for a second visit but were not tested).**The "immediate quit" rate for tobacco was 50%.**

Figure 84. Ukraine: Cotinine tests versus self-reported smoking rates (July – Aug 2014)



- **Results Alcohol.** At baseline, 652 pregnant women were assessed during their first prenatal (antenatal) visit. Of those women, 637 (98%) responded to the physician's question about whether they use alcohol. Almost one-third (32%) of the pregnant women responded positively for alcohol use and were at high risk for alcohol-related complications. For the second follow-up visit, 605 pregnant women returned, and 94% of them responded to the alcohol question. During the second visit, the rate of pregnant women at low/no risk was 92.8%% and the rate of high risk was 7.2%. **The "immediate quit" rate for alcohol was 26%.**
- **Conducted implementation phase.** The implementation phase started on September 2014 after the cascade training in BPI to decrease the number of reproductive age women (primarily pregnant women) to use tobacco and alcohol. Eighty trained physicians and health care providers from QI teams participated in the implementation phase. The intervention during the implementation phase consisted of providing screening to all pregnant women who visited the pilot policlinic for the first prenatal (antenatal) visit, filled out the questionnaire, and underwent the urine diagnostic test for cotinine. If a patient was positive for tobacco or alcohol use, the physician provided immediate BPI consultation by protocol. After the BPI consultation, the second visit was scheduled within 2-3 weeks for all positive patients.
- **Preliminary analysis shows an increase in the percentage of pregnant women screened for alcohol and tobacco from 38% at baseline (July – August 2014) to 79% in March 2015** (**Figure 85**). 4412 women of reproductive age were assessed following the first visit (3149 pregnant women, 1225 non-pregnant, and 223 young women 10-18 years). During the second visit, 586 women who received the BPI were assessed.

Figure 85. Ukraine: Percentage of pregnant women who were screened for tobacco and alcohol use among those registered, individual results for the nine facilities and average across facilities (red line) (Aug 2014- March 2015)



- **Based on preliminary analysis, the target of providing BPI counseling to at least 80% of pregnant women who screened positive for tobacco use in all pilot facilities was reached,** with average coverage achieved across the nine facilities at 94% (**Figure 86**).
- **For pregnant women, the achievement was less than the 80% target (78%),** with hopes to increase that during the next 3-6 month PDSA cycle (**Figure 87**).

Figure 86. Ukraine: Percentage of pregnant women who test positive for tobacco use during first antenatal visit and who accept BPI, 9 facilities, Poltava Oblast (July 2104 – April 2015)

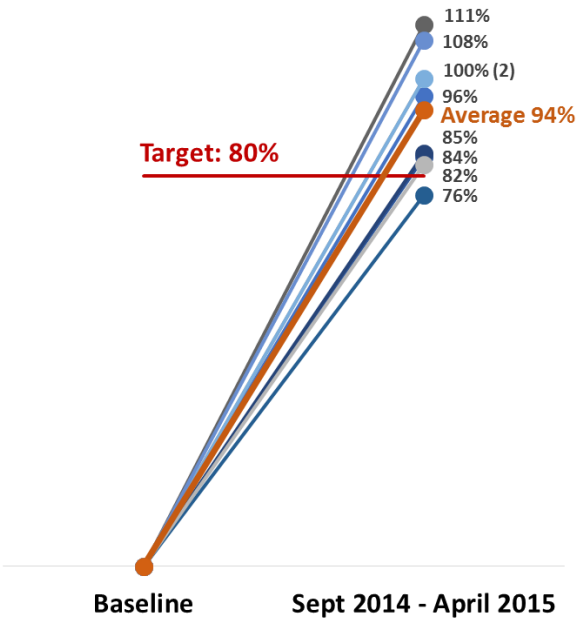
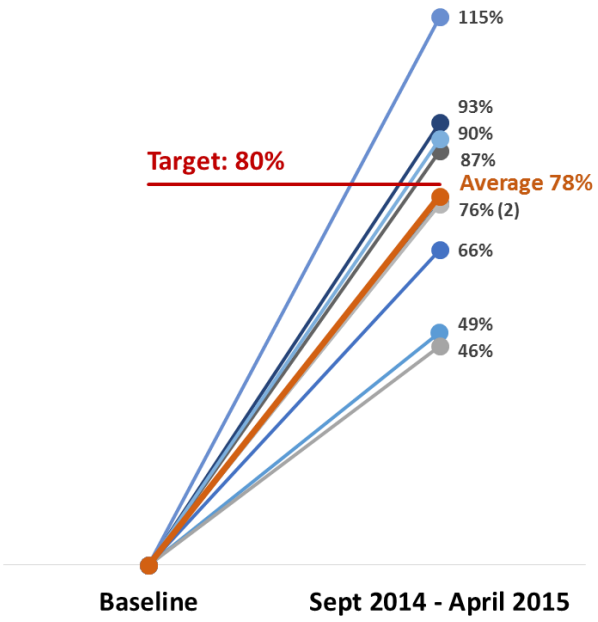


Figure 87. Ukraine: Percentage of pregnant women who test positive for alcohol use during first antenatal visit and who accept BPI, 9 facilities, Poltava Oblast (July 2104 – April 2015)



- **Conducted monitoring visits to pilot facilities to check the status of BPI implementation, the quality of screening and follow-up form completion, and the barriers to the new protocol.** ASSIST conducted five monitoring visits to each of nine facilities from December 2014 – February 2015. The results of these visits were reported by three Monitors from trained trainers during two learning sessions on December 2014 and March 2015 and at the Oblast Health Care Administration meeting in March 2015.
- **ASSIST's work in the Ukraine was monitored by a USAID Monitoring team including a visit to the Poltava Health Care Administration and to pilot facilities in Poltava and Komsomolsk** (Oct/early Nov 2014).
- **Conducted two learning sessions to facilitate shared learning from implementation of BPI among nine implementation teams** (Dec 2014 and March 2015). Approximately 30 participants attended each one-day session.
- **Signing of National Protocol for Brief Physician (BPI) intervention and forming of working group.** Order #951 December 11, 2014 was signed by the Minister of Health of Ukraine to set up a multidisciplinary working group at the National level to develop a National Clinical Protocol of BPI to decrease tobacco and alcohol using by pregnant women. ASSIST helped the State Expert Center to organize a first meeting in March 2015 of the working group to discuss first draft of protocol and

adapted evidence-based medicine guidelines for further development. The second meeting is planned for May 13, 2015.

Challenges and Remedies

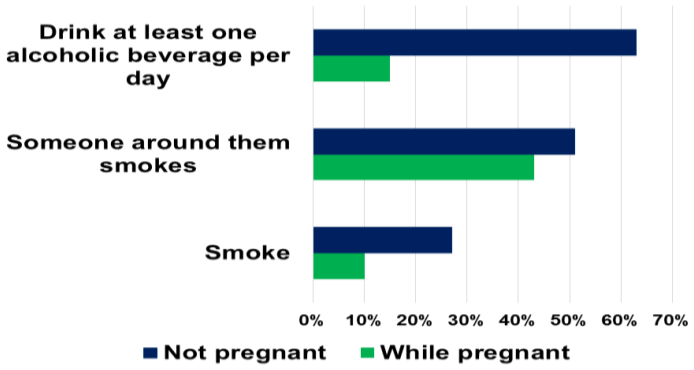
- **At the facility level,** one pilot policlinic demonstrated very small progress compared with others. After an analysis was conducted together with policlinic QI team and later with Poltava Health Care Administration officers, listed the following causes were identified:
  - Weak leadership
  - Lack of delegation of authority
  - Limited team communication
  - Lack of beliefs about the importance of prevention among OB/GYNs
  - Infrastructure and organizational problems within the facility

  A meeting at the end of data collection was organized with the QI team at the clinic to discuss the next steps of changes and modify the change strategy, based on assessed challenges. Another PDSA cycle was developed at the end of the session for the next three months (March 2015).
- **At the national level,** the lack of cotinine tests within the mandatory lists for primary health care practice, limits tobacco detection among pregnant women by almost half, which consequently decreases the percentage of women provided BPI sessions. Also, the lack of quality indicators at the national level to screen for risk factors of alcohol and tobacco use for pregnant women and lack of indicators of frequency of BPI counseling also limits screening. These two reasons are obstacles for wider implementation of this technology into routine health care practice. ASSIST is working on drafting a national protocol to include cotinine urine tests into the list of required diagnostic tests for pregnant women as well as indicators to measure alcohol and tobacco use and BPI counseling of pregnant women, so these changes would become mandatory for all health care facilities after the protocol is approved by the MOH.
- Technical assistance provided to officially register cotinine express diagnostic test in Ukraine.

Improving Equity

- **Conducted and analyzed survey to better understand how gender impacts targeted health issues:** In September 2014, ASSIST conducted research to better understand how gender impacts the project's target health issues (i.e., alcohol and tobacco use and violence during pregnancy). This quantitative survey was developed by project QI team, with input from WI-HER LLC. Data was collected from 617 women of reproductive age that attended participating women's health centers in Poltava Oblast. Results from a preliminary analysis were analyzing in October 2014 (see **Figure 88**) and were shared with participants at two gender integration trainings.

Figure 88. Self-reported alcohol and tobacco use among pregnant women in Ukraine (Sept 2014)



- **Two gender integration trainings conducted**: In October 2014, Megan Ivankovich of ASSIST partner WI-HER LLC conducted two gender sensitization and integration trainings; nine doctors in Poltava and seven advisors in Kiev were trained. Sessions included defining gender and related

concepts, identifying gender issues and gaps (gender analysis), addressing gender issues and gaps (designing changes to test), and analyzing and reporting results (sex-disaggregated data and gender-sensitive indicators). Based on these trainings and technical assistance on gender integration provided to the project in October 2014, the list of recommendations on how best to integrate gender into the project were proposed: Integrate the family approach into informational materials; make modifications in electronic form or hard copy; develop brief about role of gender for providers or patients; increase male participation during consultations.

As a response, the project developed a brief about role of gender in alcohol and tobacco cessation among pregnant women and adolescents and presented the brief during learning session #1 in December 2014 for QI teams during USAID monitoring visit meetings at the Poltava Health Care Department Administration.

Planned Activities Next Quarter: April - June 2015

- Final analysis of data collected during the implementation phase
- Organize second meeting of multidisciplinary working group on national protocol development
- Complete and send for approval final draft of National Protocol of BPI to State Expert Center, Department of Standardization of Medical Services of MOH
- Submit the final Country Report to USAID

LATIN AMERICA AND THE CARIBBEAN

HAITI

Background

The USAID ASSIST Project was invited by USAID Haiti to provide technical assistance to the Haitian Ministry of Social Affairs, implementing partners, and the United States Government in Haiti, to improve the quality of services offered to vulnerable children and families affected by HIV. The project is a continuation of work begun in January 2011 under HCI, which focused on building consensus among stakeholders on a set of minimum service guidelines at the point of service delivery. The National Guidelines were designed to guide service providers to ensure they were providing meaningful services that contribute to children's well-being. During 2012-2014, HCI identified champions from the government, local and international organizations, and other stakeholders to pilot and implement the service guidelines and provide support for quality improvement. HCI facilitated the development of a 15-member national Task Team, led by IBESR (*Institut du Bien Etre Social and de la Recherche,* an autonomous institution within the Ministry of Social Affairs) and included representatives from other line ministries and local and international organizations. With guidance from the national Task Team, quality improvement (QI) committees were formed in three departments (North, West and Artibonite) to pilot the minimum service guidelines. The OVC standards were officially launched in late 2013 and the following year they were distributed in Grand'Anse, Sud, and Nord Est departments. ASSIST is continuing to provide technical assistance to IBESR and partners to hold capacity-building sessions on use of the guidelines and improvement in the remaining departments of Nord Ouest, Centre, Sud Est, and Nippes.

Institutionalization/Sustainability Strategy

IBESR, the government agency mandated with planning and coordination of care and protection of Haiti's children has led the process of developing and implementing the National Guidelines over the last four years. Enhancing the capacity of IBESR, at national and local levels, in evidence-based interventions and in the use of improvement methodologies has the potential for long-lasting impact. Through ASSIST's cultivation of dependable relationships with IBESR staff, IBESR leaders have become QI "champions" and have adopted an improvement culture in their work in other service areas, including child protection.

USAID ASSIST will close out activities in June 2015. To promote the gains made in improving quality of programming for vulnerable children, ASSIST will partner with Caris Foundation staff to carry on the role of providing technical assistance on improvement. Caris staff will be included in future trainings to promote their capacity for improvement. ASSIST will develop a sustainability plan to help the Caris Foundation establish mechanisms for continuing to support IBESR in implementing the National Guidelines. ASSIST will also continue to be available for support any time requested by stakeholders in Haiti or the USAID mission.

Scale of USAID ASSIST's Work in Haiti

Min. Soc. Affairs

2 out of 10 departments

HIV/AIDS (including OVC)

Program Overview

What are we trying to accomplish?	At what scale?
1. Improve the quality of care and services for vulnerable children and their families	
Distribute guidelines and initiate implementation in 4 departments through 2 workshops in each department	In FY15, activities are targeted at 4 departments: Central Plateau, Nord Ouest, Nippes, Sud Est; during FY15Q1-Q2, ASSIST distributed guidelines in only 2 of these departments, Central Plateau and Nippes

Cross-cutting Activity

Accomplishments by Activity (October 2014 – March 2015)

Activity 1. Build capacity of government and NGO partners to implement national service standards to improve quality of care for vulnerable children and their families

USAID ASSIST is in its final phase of operation in Haiti. USAID Haiti has requested that ASSIST provide technical support to IBESR to disseminate the standards to the remaining four departments in Haiti: Nord Ouest, Centre, Sud Est, and Nippes.

- **With leadership from IBESR, ASSIST coordinated two meetings in Central Plateau, February 2015.** The first one-day meeting was designed to build constituencies of support among 22 OVC stakeholders, with a focus on local leaders and representatives of direct service delivery-local and international NGOs. The objectives of the meeting were 1) presentation of National Guidelines; 2) promotion of a paradigm shift towards quality in OVC programs; and 3) development of a common vision and language. Following the first meeting of department stakeholders, a two-day meeting was held with 33 local field agents who provide services to children and families. The field agents were trained in the content of the National Guidelines, principles of quality improvement, and an action plan to be followed by IBESR.
- **In March 2015, two meetings following the format described above were held in Nippes Department.** The first meeting was attended by 24 department stakeholders and the second meeting was attended by 20 field agents.
- **Table 6 shows the cumulative numbers and types of people trained in quality improvement by ASSIST and HCI since May 2013.**

Table 6. Haiti: Numbers and types of people trained in Quality Improvement (May 2013 – March 2015)

	Department	Month/ year of training	IBESR	Other local providers	Doctors	Nurses	Data clerks	Social workers/ psychologists	Community Health agents	Total
	National level		4	15	9	12	0	19	0	59
1	North	8/2014 & 7/2013	5	26	0	9	1	7	42	90
2	North'East	9/2014	6	21	4	8	1	7	20	67
3	Artibonite	8/2014 & 5/2013	6	41	1	7	1	9	33	98
4	Grand'Anse	7/2014	4	22	0	6	0	3	22	57
5	South	6/2014	6	23	0	5	1	5	0	40
6	West	8/2013 & 9/2013	2	15	0	4	1	5	38	65
7	Central Plateau	2/2015	7	4	0	7	0	2	33	53
8	Nippes	3/2015	6	11	0	2	0	5	20	44

	Department	Month/ year of training	IBESR	Other local providers	Doctors	Nurses	Data clerks	Social workers/ psychologists	Community Health agents	Total
9	Southeast	Planned								
10	Northwest	Planned								
	TOTAL		46	178	14	60	5	62	208	573

Challenges and Remedies

In the earlier work on disseminating the National Guidelines, improvement teams were formed at the local level to implement the guidelines. Because ASSIST is closing in June 2015, we are conducting the workshops, discussing the importance of working as teams, but not establishing the teams. In the trainings with the field agents, the question arises as to “now what.” ASSIST will make recommendations to Caris Foundation on mechanisms needed to follow up in supporting IBESR to establish/maintain the local improvement teams.

Planned Activities Next Quarter: April - June 2015

- Dissemination of national guidelines in Sud Est and Nord Ouest
- Finalization of Creole version of National Guidelines
- Finalization of Community Quality Booklet in Creole
- Participate in IBESR national meeting in which IBESR will showcase all of the materials it has developed
- Follow-up with Caris Foundation on transition of ASSIST role through a Sustainability Plan
- Final report of HCI/ASSIST activities as requested by USAID mission and IBESR
- Close-out of project

NICARAGUA

Background

The USAID ASSIST Project began activities in Nicaragua in 2014, continuing the work started by HCI in the country's health training institutions. ASSIST is working to institutionalize improvement methods and pre-service training in HIV services in the medical and nursing schools of eight public and private universities in Nicaragua by supporting the development of skills among nursing and medical faculty to apply a teaching package for quality care. This work is supported by PEPFAR.

ASSIST's technical assistance targets universities, and its objectives are:

- To promote inclusion of MOH norms and protocols (ART, PMTCT, rapid testing, combination prevention counseling) as well as gender, gender-based violence, and human trafficking topics in medical and nursing study programs
- To develop competencies among medical and nursing teachers and students for HIV prevention and health services provision for people with HIV
- To promote continuous improvement in teaching and evaluation methodologies for both medical and nursing teachers
- To provide support to universities in reducing stigma and discrimination towards people with HIV and of sexual diversity

These objectives support the Central American region joint approach guidelines to accelerate progress towards universal access to prevention, care, treatment, and support related to HIV, thus contributing to reaching MDG 6: to have halted and begun to reverse the HIV/AIDS spread by 2015.

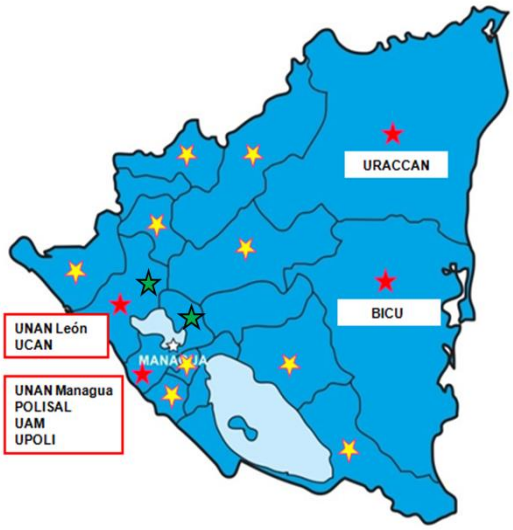
In addition, ASSIST is providing technical assistance to three additional organizations: Association for Human Rights of Nicaraguan Sexual Diversity (ADESENI), Western Self-Help Groups for People Living with HIV/AIDS (GAO), and the Female Transgender Organization (ODETRANS), targeting design and implementation of a quality management program. Two of these organizations are of sexual diversity, and one is for people with HIV.

Since January 2014, ASSIST has provided technical assistance to eight universities: Universidad Nacional Autónoma de Nicaragua (UNAN) León, Universidad Nacional Autónoma de Nicaragua (UNAN) Managua, Bluefields Indian and Caribbean University (BICU), Universidad de las Regiones Autónomas de la Costa Caribe de Nicaragua (URACCAN), Instituto Politécnico de la Salud "Luis Felipe Moncada" (POLISAL), Universidad Cristiana Autónoma de Nicaragua (UCAN), Universidad Americana (UAM), and Universidad Politécnica de Nicaragua (UPOLI). The first five are public universities, and the last three are private universities. All universities train future medical doctors and nurses; some universities, including UNAN León and BICU, train doctors and nurses simultaneously. In FY15, with a small budget of $50,000, ASSIST will continue technical assistance centered on continuous improvement of teaching, especially in processes related to applying teaching and evaluation methodologies.

Institutionalization/Sustainability Strategy

ASSIST is institutionalizing the HIV training package in Nicaraguan universities to redefine norms and protocols, both for prevention and care provisions, which are now included in medical and nursing study programs. ASSIST's institutionalization and sustainability strategy is to strengthen the Nicaraguan health system through increasing the knowledge and capacity among nursing and medical students from both public and private universities. These students are the future doctors, nurses, and leaders within the health system in Nicaragua.

Scale of USAID ASSIST's Work in Nicaragua



8 universities of 13 existing in the country (62%)

3 organizations out of 51 (6%)

13 out of 18 regions (72%)

8 QI teams

3,575 medical students (83%)

1767 nursing students (100%)

HIV/AIDS

Main campus

Satellite campus

NGO

Program Overview

What are we trying to accomplish?	At what scale?
1. Strengthen teachers' capabilities to teach the HIV care protocols	
• Teachers develop competencies among their graduate students for prevention, care and follow up to people with HIV	13 out of 18 regions (72%) 8 out of 13 universities (62%) 176 teachers in 8 universities
2. Implement continuous quality improvement in teaching	
• Improve the quality of educational processes on teaching and evaluation related to the HIV topic at universities	13 out of 18 regions (72%) 3,575 out of 4216 medical students in 13 regions (83%); 1767 nursing students (100%)
3. Design and implement a quality management program in three sexual diversity organizations	
• Improve the quality of the services provided by three sexual diversity organizations for HIV prevention	3 organizations out of 51 (6%) 400 of 47,306 persons of sexual diversity (1%) 100 of 8,661 PLHIV (1%)

Improvement Activity

Cross-cutting Activity

Accomplishments and Results by Activity (October 2014 – March 2015)

Activity 1: Strengthen teachers' capabilities to teach HIV care protocols

Overview: The Nicaraguan MOH guidance and protocols to provide care for people with HIV were updated this year according to WHO guidelines, making it necessary to update medical and nursing teachers on these new guidelines. Training activities during this reporting period targeted competency development for medical and nursing teachers at UNAN León, BICU, and URACCAN. Topics covered included the new clinical and laboratory criterion (CD4 and viral load) to start antiretroviral therapy and unique standardized approaches to provide care for adults, children, and pregnant women with HIV.

Accomplishments and Results:

- **ASSIST provided technical assistance to develop teacher competencies on provision of care for people with HIV to three universities** (Jan-March 2015). To date, six out of eight universities have received technical assistance from ASSIST (63%). Thirty-five teachers were trained during the period on HIV care. Methodologies used to develop their competencies included: peer activities to review the sample-taking technique, group work to fill out forms and interpret flowcharts, and clinical case analysis for clinical classification and treatment.
- **ASSIST provided technical assistance to 60 POLISAL and UPOLI teachers to develop their competencies on gender, gender-based violence (GBV), and human trafficking** (Jan – March 2015). USAID ASSIST collaborated with the USAID PrevenSida Project to design a gender-specific module for university professors which includes prevention, care, and rehabilitation for survivors of GBV and trafficking, and integrates educational methodologies that allow for the transmission of this knowledge to medical and nursing students. The GBV module's three learning objectives are: 1) Understand the basic conceptual gender framework, reflect collectively from their experiences on the intrapersonal and interpersonal dimensions of gender and their relationship to development; 2) Become well-versed in the basic aspects of the national legislation and its relationship with the international framework and institutional policies of USAID on gender and identify the main activities and challenges for gender mainstreaming; and 3) Professors commit to implementing actions for addressing these important issues in universities and influence the various examples of inequalities they encounter. A training on this module was completed at UPOLI and POLISAL universities, to build the competencies among 60 teachers. Family and sexual violence are catalogued as a public health problem, and therefore the topic must be included in training of future health professionals, who must be aware of the cycle of violence and work on it in order to break it.
- **ASSIST provided technical assistance to UPOLI, POLISAL, UNAN Leon and UCAN to develop capabilities among teachers to work on reducing stigma and discrimination towards people with HIV and of sexual diversity at their universities** (Jan- March 2015). A plan of activities was drafted with teachers to reduce stigma and discrimination towards people with HIV and of sexual diversity, to be implemented at their universities, where laws and Ministry resolutions that protect these people were shared.

Activity 2: Implement continuous quality improvement in teaching

Overview: ASSIST is providing TA to eight universities to promote continuous quality improvement activities in teaching processes and learning evaluations. Quality monitoring is not carried out at universities, so it is of great importance for ASSIST to provide technical coaching. ASSIST taught quality concepts to teachers such as the quality triangle and the rapid cycle quality improvement methodology. Universities already had results from the KAP-HIV surveys conducted among their students at different times, thus teachers had identified knowledge and attitude gaps among students to provide care for people with HIV. From these gaps, teachers at BICU, URACCAN, POLISAL, and UCAN designed an average of three improvement rapid cycles at each university, in order to implement changes in teaching and learning assessment methodologies for HIV topics. With UNAN Leon and UPOLI, there were a total of six universities working to improve quality at their facilities this fiscal year. Introducing changes to teaching and learning assessment methodologies will enable students to develop required competencies to provide health services and teachers to evaluate student learning more objectively.

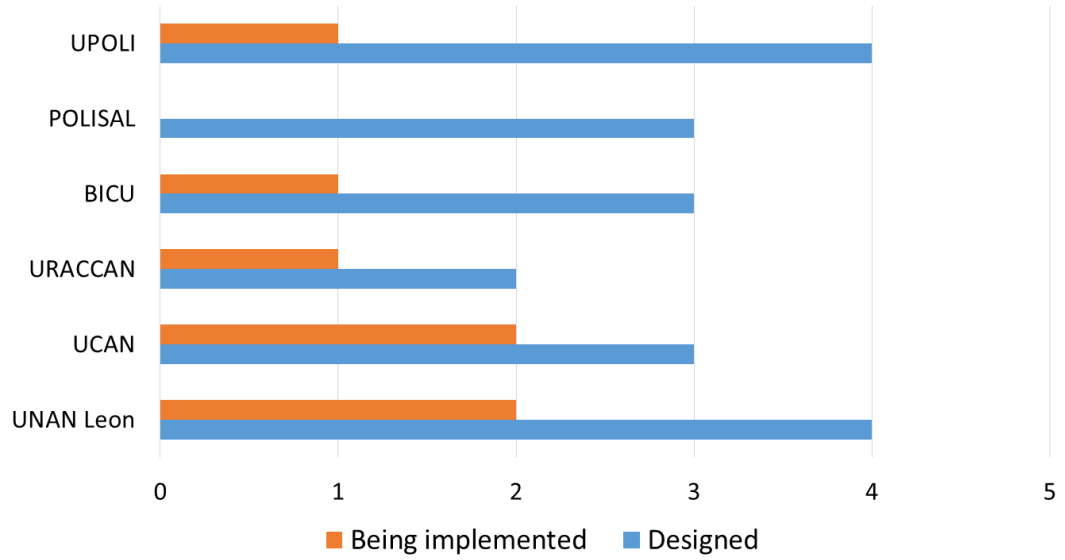
Due to the work schedule and other issues at universities, some of these cycles are still under implementation and have not yet been measured. In other cases, initial measuring has been completed with some successful changes, but are pending the final measurement. Some of these changes include:

- UCAN and UNAN Leon universities designed tests to evaluate knowledge of care protocols for people with HIV to assess students at the beginning and end of rotation through HIV clinical services.
- At UPOLI and UCAN, they designed checklists to evaluate knowledge among medical and nursing students on sexually transmitted infections.
- At the UCAN nursing school, the rapid cycles methodology was included in the health management class, with practical exercises applied during student rotation through health units.
- BICU achieved greater follow-up of performance of teachers located in medical clinical areas at health units and better communication between module and/or department teachers and coordinators. At the nursing school, the study program now includes prevention of mother-to-child transmission of HIV.
- At UNAN Leon, the pediatrics module now includes care for children exposed to HIV; the Health Paradigms class has increased hours allocated to the topic of HIV, going from one hour to four hours; and the teaching methodologies were modified to introduce video-forum and testimonial presentations.

Accomplishments and Results:

- **ASSIST completed nine technical assistance visits to six universities and supported the design of 19 improvement cycles currently under implementation to reach improvement in their educational processes (Figure 89**).
- **New adjustments were made to study programs in two universities (UNAN Leon and BICU).**

Figure 89. Nicaragua: Number of rapid cycles designed and under implementation at 6 universities (Oct 2014 - March 2015)



Activity 3: Design and implement a quality management program in three sexual diversity organizations

Accomplishments and Results:

- **Completed baseline assessment on quality management of female transgender people** ODETRANS (Feb 2015). With this diagnosis, the baseline for the three organizations receiving ASSIST technical assistance was completed.
- **Trained authorities and members of the three organizations receiving ASSIST technical assistance (GAO, ADESENI and ODETRANS) on the quality management model in their**

institutions and its concepts (January 21, February 3 and February 18, 2015, respectively). After the baseline diagnosis, each organization defined the quality management model that would be followed within their organization, as well as the activities to develop the design. Each organization also formed a quality team responsible to lead the whole quality process.

- **ASSIST is currently working on providing technical coaching and advice to implement the quality improvement activities** they have planned, by working with each organization to define roles and functions for quality improvement team members, reviewing current functions of the organizations' board of directors, and defining quality standards and indicators. By defining, developing, and implementing their quality model, organizations will strengthen their management capability, making them more competitive and with more opportunities to opt to different funding sources in the future, as well as developing capabilities to provide quality services (rapid testing, counseling for behavior change).

Improvement in Key Indicators

Activity	Indicators	Baseline (FY 2014)	Last value (Oct 2014-March 2015)
To strengthen teachers' capabilities to teach the HIV care protocols according to the WHO 2013 evidence, stigma and discrimination reduction, gender approach, GBV, human trafficking, and knowledge management in 10 universities	Number of teachers trained in the HIV care protocols according to the WHO 2013 evidence, stigma and discrimination, GBV, and human trafficking	0	Reached in the Q2: FY2014: 107 Q1+Q2 FY 2015: 114 Cumulative 221 A target: 200 (110%)
To implement continuous quality improvement in teaching with emphasis in teaching and evaluation methodologies applying rapid cycles in 10 universities.	% of universities implementing quality improvement cycles	0%	Reached in the Q2: 6 of 8 (75%)
To design and implement a quality management program in three sexual diversity organization	Number of organizations with a quality management program	0	Reached in the Q2: 3 of 3 (100%)

Challenges and Remedies

One of the major challenges has been the limited time available to teachers for quality improvement activities. Teachers have a great academic burden and very little time available for this type of activity. However, ASSIST has overcome this challenge by accommodating time availability of teachers, and providing technical assistance even on Saturdays and out of work hours.

Another challenge is that many teachers contracted by universities only work on an hourly basis and not full time. These teachers do not want to take on additional responsibilities or get involved in quality improvement activities or training, because they are not paid to do so. Unfortunately, ASSIST has no capability to change this, as it is up to university authorities to make the decision.

Improving Equity

Over the past two quarters, the ASSIST Nicaragua team continued our work to promote equity by ensuring that all students receive training on HIV-related stigma, discrimination and the rights of LGBT persons. Through the Knowledge, Attitudes and Perspectives surveys implemented previously, it was determined there were biases among students surrounding HIV and sexual minorities. We have worked hard to ensure that the curriculum promotes equity and that this curriculum is institutionalized.

Together with the USAID PrevenSida Project, we developed a training module on gender, gender-based violence, and human trafficking, and we have begun to test the module, working with NGO staff and health human resource training institutions at Instituto Politécnico de la Salud "Luis Felipe Moncada" (POLISAL) and Universidad Politécnica de Nicaragua (UPOLI). Gender-based violence is a public health issue that is increasing in the country, and we have worked hard to ensure medical students who are future professionals and health services providers, receive this training.

Knowledge Management Products and Activities

Shared the *Evidence-Based Intervention Guide to Reducing Neonatal and Perinatal Mortality and Morbidity*, which contains simple, cost-effective, high-impact interventions that can be applied at all health care levels as part of the continuum of care: preconception, pregnancy, and postnatal periods with 132 medicine and nursing teachers from six universities and 280 medicine students from UNAN Leon and UNAN Managua. In addition, shared it and distributed it at medical societies: Perinatal Medicine (SONIMEP), Pediatrics (SONIPED), Gynecology-Obstetrics (SONIGOB) and Public Health (ANSAP). Distributed 837 copies nationwide. Also, shared the intervention guide through the web page, www.maternoinfantil.org.

Planned Activities Next Quarter: April - June 2015

- Conduct technical assistance visits to six universities implementing rapid cycles to accompany them in measuring the rapid improvement cycles (BICU, URACCAN, UCAN, UNAN Leon, POLISAL and UPOLI)
- Evaluate the Strategic Plan for Comprehensive Care for Female Transgender Population in Nicaragua with sexual diversity organizations
- Conduct workshop to design the quality policy and service strategy at the three organizations receiving coaching to design their management model: ADESENI, GAO and ODETRANS
- Conduct training on gender, GBV, and human trafficking, targeting BICU teachers
- Conduct learning sessions to transfer the teaching package to the two new universities: UNICA and UCM
- Distribute the second edition of the interactive DVD of the teaching package among the graduates from universities receiving technical assistance from ASSIST

2. MNCH CORE-DIRECTED FUNDING

MATERNAL NEWBORN AND CHILD HEALTH

Background

The USAID ASSIST Project's MNCH direct-funded activities build the capacity of governments and partners to adapt improvement approaches to continuously strengthen essential system functions to improve scale up, and sustain high-impact evidence-based health care for leading causes of maternal, newborn, and child mortality in USAID-priority countries. All activities are in support of the Ending Preventable Child and Maternal Deaths (EPCMD) strategy. ASSIST MNCH activities seek to incorporate best practices along all points of antenatal, intra- and post-partum, postnatal, and early childhood care from the household to hospital continuum. Among others, MNCH direct-funded activities will contribute to the following objectives:

- Build government and partner capacity to apply improvement approaches across health system levels (community, clinic, hospital, district management team, central/regional MOH) to improve, scale up, and sustain high-impact people-centered MNCH services for leading causes of maternal newborn and child morbidity and mortality in USAID MNCH priority countries.
- Test innovative applications of improvement approaches to address cutting-edge areas in maternal newborn child health, such as integrating maternal, newborn, and child routine and complications care across system levels; strengthening local information systems to track sentinel quality measures; and building provider/manager competencies to support improvement work in local systems.
- Strengthen health worker and manager skills, motivation, and performance through integrated clinical, and QI capacity building and engagement of health workers in ongoing improvement work.
- Develop, test, and disseminate technical frameworks, approaches, and tools that can increase effectiveness of improvement and health system strengthening initiatives in support of the USAID EPCMD strategy.
- Support development and testing of MNCH quality of care indicators and measurement to strengthen routine health information systems, permit regular tracking of quality measures at service delivery level, and promote accountability at global, national, and sub-national levels.

Institutionalization/Sustainability Strategy

As with previous ASSIST and HCI work, all activities are being planned and led in close collaboration with the MOH in order promote ownership and institutionalization. The officers in charge of the MNCH programs at the MOH and at each of the participating districts will be closely involved in all the stages of each activity, from planning to evaluation. ASSIST is making every effort to make the changes and improvements not dependent on external resources that would not be sustainable after activities end. We will aim at including a few basic indicators within a scheme of regular monitoring and feedback, ideally within the official management information systems.

Program Overview

What are we trying to accomplish?	At what scale?
1. Primary care antenatal care delivery	
• In a demonstration district in Uganda, improve antenatal care to achieve early recognition, quality initial management and referral of obstetric complications as well as associated morbidity including malaria, HIV/AIDS, sexually transmitted diseases, anemia, gestational diabetes, and pre-eclampsia/eclampsia	"Slice" of Hoima District in Uganda; # of health facilities TBD, but will include hospital(s) and health center(s)
2. Improve quality of integrated pre-eclampsia/eclampsia (PE/E) and preterm labor care	
• In a demonstration in Uganda, improve care for preeclampsia and preterm labor developing and testing an integrated package for both	"Slice" of Hoima District in Uganda; # of health facilities TBD, but will

What are we trying to accomplish?	At what scale?
obstetric conditions to achieve better outcomes for mothers and babies	include hospital(s) and health center(s)
3. Survive and Thrive (S&T) Initiative	
• Working with the American Academy of Pediatrics (AAP) to develop, test, and support use of a QI workbook and QI materials to build skills of health care workers in low-resource settings. • Lead a QI TWG for the multi-partner S&T Global Development Alliance (GDA) to contribute to improved newborn and maternal outcomes by supporting to build integrated clinical and QI competencies of providers, managers and professional associations in USAID priority countries	Global
4. Improve and sustain high-quality newborn resuscitation services	
• Support the UN Commission on Life Saving Commodities (UNCoLSC) TWG on Newborn Resuscitation (NR) to conduct a national assessment of NR coverage and quality, identify gaps and support coordinated improvement actions bringing together capacity of various UNCoLSC TWG NR members	Uganda (national level)
5. Child health and immunization	
• Improve Integrated Management of Childhood Illness (IMCI) care for children at a demonstration sample of primary care facilities focusing on care for pneumonia, diarrhea, and newborn infection/sepsis early recognition, management, and referral	Uganda, sample of primary care facilities TBD

Improvement Activity

Cross-cutting Activity

Accomplishments and Results by Activity (October 2014 – March 2015)

Activity 1. Primary care antenatal care delivery

Overview: There is strong evidence supporting the impact of ANC interventions on the health outcomes for the pregnant woman and fetus and for preventing obstetric and neonatal complications when effectively administered. However, significant quality gaps persist in ANC services in low-resource settings, which contribute to high burdens of maternal morbidity.

While much progress has been made to refine a basic platform of ANC best practices, poor quality of ANC services in low- and middle-income countries continues to increase women's risk of serious maternal morbidities and mortality and increased risk of poor outcomes for their newborns. ASSIST (and previously HCI) and other partners are gaining important experience in improving quality of ANC services. For example, HCI collaborated with the MOH to support maternity teams to improve quality of ANC care in 21 facilities in Kenya's Kwale District in 2012. Adherence with selected ANC best practices including consistent measurement of blood pressure (BP) and hemoglobin and provision of supplemental iron as part of routine ANC care improved dramatically from January 2011 to August 2012 in the 21 participating facilities. Routine measurement of blood pressure as part of every ANC visit increased from 32% to 100% of ANC encounters; routine measurement of hemoglobin at least once during ANC increased from 34% to 68% of visits; the percent of women provided with 90 day supply of iron increased from 23% to 98% of ANC visits.

Despite many gains, there is a strong need to accelerate and disseminate learning about effective approaches for improving and sustaining ANC services tailored to local disease burden for improved prevention and management of maternal morbidities and obstetric complications. Learning will synthesize leading ANC quality gaps and approaches for overcoming critical gaps to improve epidemiologically

appropriate ANC services (per burden of disease) in a low-resource settings like Uganda, including dissemination of program implementation tools and development of a user-friendly case study. This activity will demonstrate a locally driven sustainable approach to continuous improvement of ANC services tailored to local disease burden to reduce maternal and neonatal morbidity and mortality.

Objectives: An intervention to improve quality of primary ANC services will be implemented in the Hoima District in Uganda, focusing on improving: 1) ANC health promotion best practices (e.g. nutrition counseling, birth preparedness) and 2) prevention, early detection and management of maternal morbidities and obstetric complications including PE/E, anemia , malaria (IPTp/case management), HIV/PMTCT (if high-prevalence country).

Accomplishments and Results: This activity is currently in its final planning stage. Funds were received by ASSIST in January 2015.

Activity 2. Improve quality of an integrated PE/E and preterm labor

Overview: Preeclampsia and eclampsia are major risk factors for pre-term delivery that require integrated care of the mother and neonate to reduce PE/E and prematurity-associated morbidity and mortality. While major progress has been made in refining and demonstrating the efficacy of high-impact intervention bundles for PE/E (MgSO4), preterm labor (Antenatal Corticosteroids) and management of the pre-term neonate (KMC), significant barriers remain around the effective integration and implementation of these intervention bundles along a continuum of antenatal, intra- and post-partum care and primary to referral level services. In particular, early recognition of complications at household and primary levels and effective referral and counter-referral continue to represent major challenges for improving outcomes for mothers with PE/E and their term and premature neonates.

ASSIST and other partners have started to build substantive experience in improving early detection and case management of PE/E, preterm labor (PTL), and the pre-term neonate in several USAID MNCH-priority countries. In particular, ASSIST has gained substantial experience in improving care of PE/E (MgSO4) in Mali, Afghanistan, Niger and the Latin America and Caribbean (LAC) region, with improving care of PTL (ACS) in Uganda and the LAC region and with improving care of the premature infant (KMC) in the LAC region. For example in Mali HCI/ASSIST is collaborating with the MOH in Mali's Kayes Region to support frontline provider teams to improve PE/E case management in 19 primary and referral maternities in two districts. As the result of project interventions, compliance with PE/E standards in the 19 maternities increased from 0% at baseline in October 2012 to 92% in April 2013.

This activity will generate important learnings about effective program models for improving delivery of integrated maternal and newborn care for two leading and closely linked causes of maternal and neonatal mortality. It will give clarity to the most common and important obstacles to providing quality care for PE/E and for premature labor/newborn cases including early recognition, initial treatment, and referral from primary care to hospital level. It will also inform about quality gaps at the hospital level of care. The QI work will generate key learnings on the best possible ways, in a deprived health care environment, to overcome such obstacles, improve the quality of care and reduce maternal and newborn mortality.

The activity will develop and test a model for providing integrated maternal quality care for mothers presenting with PE/E who also are at risk of a preterm delivery, by implementing evidence-based interventions such as antenatal corticosteroids and tocolytics together with standardized care for preeclampsia, as well as initial immediate care for the small/preterm baby and referral to the regional Hoima hospital.

The learnings of the QI work will be shared thoroughly with the Uganda Ministry of Health, the Hoima and neighboring district management teams and with other USAID and MOH implementing partners, seeking opportunities for a scale-up of the integrated model of care to new regions and networks. It is likely that learnings about how to design and deliver a package of integrated services for PE/E and PTL can be applicable to other similar African countries.

Objectives: To improve the quality and continuity of intra- and post-partum PE/E, premature labor/newborn care and related maternal and neonatal health outcomes in the Hoima District in Uganda through developing and implementing an integrated package of high impact cost-effective interventions.
Accomplishments and Results: This activity is currently at its final planning stage. Funds were received by ASSIST in January 2015.

Activity 3. Survive and Thrive Initiative

Overview: As child mortality continues to decrease worldwide, the rate of reduction in newborn mortality has continued to lag behind under five child and maternal mortality rates reduction. Newborn mortality now constitutes 44% of under-five mortality demanding urgent attention to accelerate reductions in newborn mortality. Building on the success of the Helping Babies Breathe (HBB) global development alliance, a Survive and Thrive (S&T) private-public GDA was recently created, with USAID as a principal partner. The purpose of the S&T GDA is to improve provider competencies, professional associations' capacity, and quality of newborn health services for leading causes of newborn mortality in support of ENAP goals.

There is growing recognition based on recent research and cumulative HBB training experience, that clinical training, while essential, is insufficient for improving and sustaining life-saving newborn health care service in low-resource settings in the absence of broader systems strengthening and quality improvement efforts. Critical systems and quality gaps impeding sustained delivery of high-impact newborn services include: poor maintenance of provider clinical competencies; unavailability of essential commodities at the bedside; inefficient organization of health care processes; lack of tracking or use of quality measures as part of routine information systems to drive improvement work; and lack of QI capacity of managers and providers to support ongoing improvement work as part of a culture in which "quality is everybody's business".

Objective: The objective of this activity is to improve newborn outcomes by supporting S&T GDA partners to build integrated clinical and QI competencies of providers, managers and professional associations to continuously improve HMS and HBS best practices in USAID priority countries.

Accomplishments and Results:

- **Completed a framework to guide the development of standardized skills-based QI HBS and HMS training exercises and tools/products for use as part of clinical training, supervision and local improvement efforts in USAID priority countries** (Q2FY15).
- **Completed two chapters of a generic integrated QI workbook and clinical capacity building exercises/tools tailored to priority HBS and HMS clinical content areas (e.g., newborn resuscitation; care of small baby; prevention and management of PPH)** (Q2 FY15). Sample exercises were field tested in an AAP workshop in Chicago (November 2014). In addition, a session was conducted during the MNCH Conference held in Bangladesh in April 2015 to present a sample chapter of the QI workbook.
- **In addition to leading the S&T QI TWG, ASSIST has supported and will continue to support pilot testing of integrated clinical and QI capacity-building exercises in collaboration with the American Academy of Pediatrics and other S&T QI TWG partners.** To date, ASSIST has collaborated with AAP to support integrated QI and clinical HBS training at S&T meetings and AAP HBS master training sessions in Arusha, Tanzania; Addis, Ethiopia and Chicago, Illinois.
- **ASSIST collaborated with AAP, MCSP and other partners to support QI sessions at the April 2015 Asia launch of the HBS materials.**

Activity 4. Improving and Sustaining High- quality Newborn Resuscitation Services

Overview: Newborn resuscitation (NBR) is necessary to treat birth asphyxia, which is the cause of death in about 30% of newborn deaths. There is an increasing investment in assuring the ability of countries to provide effective coverage with quality NBR services. Quality NBR service includes presence of functioning equipment, as well as the presence and capability of health care providers able to perform NBR correctly, including drying/stimulating, clearing airway, and bag and mask resuscitation.

Several countries have implemented or introduced NBR programs through Helping Babies Breathe or other programs. However, it is possible that in many countries, the expected level of coverage has not been achieved, and it is difficult to measure the quality of the services that exist. In 2014, the USAID ASSIST project and the UN Commission on Life Saving Commodities' Newborn Resuscitation Technical Working Group published the document "Improving the Quality of Basic Newborn Resuscitation in Low-

resource Settings: A Framework for Managers and Skilled Birth Attendants"[4] which provides guidance to assess the quality of resuscitation services, identify gaps, and start improvement work. A major knowledge gap identified by the Resuscitation Working Group of the Newborn Technical Reference Team (TRT) globally is guidance and tools to assist countries in improving effective coverage and quality of resuscitation services at scale. In order to develop a strategy and tools, the UNCoLSC Resuscitation TRT is preparing to undertake a series of steps and activities to better understand the gaps and bottlenecks that have prevented wider availability and accessibility to resuscitation equipment and trained health workers, as well as quality services to treat cases of birth asphyxia. Based on several discussions within the Resuscitation Working Group, as well as interest expressed by the Newborn Health Program authorities at the Uganda Ministry of Health, Uganda has been selected as a focus country based on its previous engagement and progress with HBB and now HBB+. Uganda's experience in both has the potential to offer important learning for informing a broader strategy to improve effective coverage and quality as part the ongoing rollout of HBB+ in Uganda and across other countries as well.

Objectives:

- Develop and test methods and tools to assess effective national coverage and quality of resuscitation services in Uganda
- Identify coverage and quality gaps and support coordination of UNCoLSC Newborn Resuscitation Technical Working Group members´ capacities jointly with the Uganda MOH and the Newborn Steering Committee to start improvement work
- Inform a broader strategy to improve effective coverage and quality as part of ongoing rollout of HBB+

Accomplishments and Results: This activity is currently at its final planning stage. Funds were received by ASSIST in January 2015.

Activity 5. Child Health and Immunization

Overview: Significant achievements have been made in global health during the last two decades in reducing early childhood mortality due to preventable diseases including pneumonia and diarrheal disease. However, despite availability of high-impact prevention and treatment interventions for leading causes of early childhood illness and mortality many critical obstacles continue to prevent delivery of life-saving interventions for children with acute illness in low- and middle-income countries, particularly in Sub-Saharan Africa and South Asia with the highest rates of child death.

Clinical approaches to identify and manage these young infants, such as WHO's Integrated Management of Childhood Illnesses (IMCI), has proven to be effective and efficient to ensure combined treatment of the major childhood illnesses through improving case management skills of health care staff, overall health systems, and family and community health practices. Because of the importance of timely intervention to detect and treat children's life-saving diseases, IMCI traditionally focuses on the first point of contact with the health system, the first level of trained health workers, and primary care clinics. However, growing evidence exists about the poor quality of medical services at primary health centers.[5] The health care providers at these clinics should be able to assess children, including young infants whose parents seek care, arrange referral for hospital admission for those with possible serious infections, and when that is not accessible, offer alternative ambulatory treatment.

Recently published studies[6] on the use of simplified outpatient regiments in settings close to home for treatment of serious infections in young infants proved to be as effective as standard treatment

---

[4] Kathleen Hill, Phyllis Ann Clark, Indira Narayanan, Linda L. Wright, and Donna Vivio. "Improving the Quality of Basic Newborn Resuscitation in Low-resource Settings: A Framework for Managers and Skilled Birth Attendants". The USAID ASSIST Project. August 2014. Available at: https://www.usaidassist.org/resources/improving-quality-basic-newborn-resuscitation-low-resource-settings-framework-managers-and.

[5] Outpatient Treatment for Neonates and Young Infants with Clinically Suspected Severe Infection, Lancet Global Health 2015, available at: http://www.thelancet.com/pdfs/journals/langlo/PIIS2214-109X(15)70109-9.pdf

[6] Community Management of Neonatal Infections, Available at: http://www.thelancet.com/journals/lancet/article/PIIS0140-6736%2815%2960204-5/abstract

regimen with injectable antibiotics at hospitals. These studies provide strong programmatic rationale to focus on the first contact of health service delivery system to improve adherence and coverage with timely medical care.

To contribute to reduction of preventable mortality in children less than 5 years of age, as defined by Acting on the Call of EPMCD[7], the activity that will be implemented in Uganda, aims to reach the following two objectives:

Objectives:

- Improve prevention and management of common leading causes of mortality in children less than 5 years of age (especially pneumonia and diarrhea) in selected primary care clinics in Uganda
- Strengthen health system functions to institutionalize and sustain the best child care practices for leading causes of child mortality

Accomplishments and Results:

- **In April 2015, in coordination with the USAID Bureau of Global Health (GH)/Office of Health and Infectious Diseases and Nutrition (HIDN)/Maternal and Child Health (MCH) Division, a draft concept note was developed and shared with relevant USAID/Washington representatives.**

Planned Activities Next Quarter: April - June 2015

- The ASSIST MNCH team is in discussion with USAID Washington counterparts regarding planned activities and timelines.

[7] from 69 in 2012 per 1,000 live births to 39 per in 2020

3. OFFICE OF HEALTH SYSTEMS-FUNDED ACTIVITIES

CROSS BUREAU ACTIVITIES

Background

The Office of Health Systems (OHS) undertakes health systems strengthening work to contribute to USAID's goals of EPCMD and fostering an AIDS-Free Generation (AFG). OHS invests cross-bureau funds for development and testing of interventions related to Universal Health Coverage, finance, governance, service delivery, medical products, vaccines and other technologies, and information.

Since FY13, cross-bureau funds have supported the USAID ASSIST Project in strengthening essential system functions and improving and sustaining high-impact, evidence-based health care. During this reporting period in FY15 (using FY13 OHS cross-bureau funds) ASSIST implemented the activities described below.

Program Overview

What are we trying to accomplish?	At what scale?
1. Secondment to WHO to support the development of a health workforce technical assistance program for the Ebola health systems response team	
• Aid preparations and facilitation of a high level UN and partners meeting on the coordination of the Ebola response and determine short to long-term needs towards rebuilding and strengthening health systems • Develop a six-month program of technical assistance to strengthen the health workforce in affected and priority countries	Ebola-affected countries and West Africa Region
2. Responsiveness of health systems to non-communicable diseases (NCD) and injuries	
• Integrate NCD work into HIV or MNCH	TBD
3. People-centered care	
• Apply people-centered care strategies in partnership with WHO	Mali and South Africa
4. Family Planning (FP) Quality Framework	
• Develop a FP Quality Framework that highlights common quality gaps and solutions for achieving integrated, safe, effective, and people-centered postpartum FP services for improved health and social outcomes for women and their families	Global
5. Postpartum Family Planning (Niger)	
• Achieve better health and social outcomes for women of reproductive age and their children and families by promoting Healthy Timing and Spacing of Pregnancies (HTSP) with a focus on reducing unmet need for FP services during the early and extended postpartum period	3 districts: 2 districts in Niamey City (urban): District III and District IV; 1 district in Tahoua Region: Konni (rural) 16 facilities (out of 20 facilities total): 2 hospitals, 2 private primary care centers and 12 public primary care centers: District III: 3 (out of 3 total) primary care centers, 1 (out of 1) regional hospitals

What are we trying to accomplish?	At what scale?
	District IV: 4 (out of 4) primary care centers Konni District: 7 (out of 13) primary care centers and 1 (out of 1) district hospital QI teams:16 Coverage: 239,255 (25%) out of 971,115
6. Internet-based mechanism to strengthen kangaroo mother care (KMC) and newborn health	
• Strengthen strengthen systems and services that support delivery of high quality KMC and newborn resuscitation using internet-based applications to reduce costs and increase efficiency; test multi-country "virtual collaborative" to improve newborn care	El Salvador, Nicaragua, Honduras, Ecuador, Dominican Republic, Paraguay, Bolivia, Colombia
7. MCH Safe Childbirth Checklist (SCC)	
• Test use of WHO SCC to improve package of essential MNCH services	TBD
8. Develop basic improvement course for the Global Health eLearning (GHeL) platform	
• Increase basic knowledge and understanding of improvement approaches in USAID staff, Ministry of Health officials, health care managers, and other global health professionals through the development of a GHeL course	Global
9. Basic Improvement Course and Workbook	
• Increase the competency of USAID ASSIST staff and counterparts in improvement through the development of a basic curriculum in improvement	Global
10. Pre-service improvement curriculum	
• Build competencies of health care professionals to continually improve the quality of the services they provide in order to improve health outcomes	TBD (anticipated 3 to 4 pre-service institutions such as medical colleges and medical training institutes)

Improvement Activity
Cross-cutting Activity

Accomplishments and Results by Activity (October 2014 – March 2015)

Activity 1. Secondment to WHO to support the development of a health workforce technical assistance program for the Ebola health systems response team

Overview: Even as response efforts have ramped up, the Ebola outbreak has highlighted the significant health system weaknesses and vulnerabilities that have not only hindered an effective response but also have further exacerbated the public health crisis through the lack of access to essential health care services. This activity was established to provide short-term support to WHO in forming and operationalizing a health systems recovery team and program of support in Ebola-affected countries and the West Africa Region. The health systems response team is working with Ministries of Health and partners to develop health systems recovery plans that will strengthen critical system weaknesses, manage systems vulnerabilities, and better leverage existing and new resources to build stronger systems that are positioned for Universal Health Coverage.

WHO, a partner of the USAID ASSIST Project through its SDS Department, recognized the importance of addressing health workforce issues and the contribution ASSIST can offer, and requested ASSIST's support in this important work. This activity seconded Dr. Tana Wuliji, ASSIST Health Workforce Development Unit Lead, to WHO for the period of one month to work with the health systems recovery team to:

1) Aid preparations for a high level meeting on the health systems recovery in Ebola affected countries with Ministers of Health and Finance, UN and key stakeholders and determine short to long-term needs towards rebuilding and strengthening health systems
2) Develop a WHO work plan for health systems recovery in Ebola affected countries and the West Africa region
3) Lead an analysis of health worker Ebola infections and propose recommendations

Accomplishments and Results:

- **Completed support** (December 2014). This activity supported the rebuilding and strengthening of the health systems of the recently Ebola-affected countries through providing technical expertise in health workforce and human resources for health. This activity has been completed and no further activities are planned for the next quarter.

Activity 2: Responsiveness of health systems to non-communicable diseases (NCD) and injuries

This activity is still being developed.

Activity 3: People-centered care

This activity is still being developed.

Activities 4: Family Planning Quality Framework

Overview: The objective of this activity is to develop a FP Quality Framework that highlights common quality gaps and solutions for achieving integrated, safe, effective, and people-centered postpartum FP services for improved health and social outcomes for women and their families. A first draft of a PPFP Quality Framework was developed with OHS cross-bureau funding in FY14. In FY 15, ASSIST continued refining the draft framework, leveraging learning from testing models of integrated PPFP service delivery in Niger, Mali, Senegal, and other ASSIST countries. The final version of the framework incorporates user-friendly tools and measurement strategies tested at the country level to support governments and partners to strengthen integrated postnatal FP, maternal, and newborn services with a strong focus on client-centeredness of services. The framework also includes a menu of quality of care FP service delivery and system performance indicators that can be adopted and adapted by country governments and partners to support continuous improvement of FP services at different levels.

Institutionalization/Sustainability Strategy

The PPFP Quality Framework is intended to help managers and health care providers at all system levels to understand common quality gaps and promising approaches for improving postpartum family planning services. By identifying quality gaps within their own system, testing changes to address those gaps institutionalizing the changes that work, and then scaling them up will contribute to health system strengthening. These efforts can be supported by governments, the private sector, or other NGOs.

Accomplishments and Results:

- **Final version of the PPFP framework developed** (March 2015). The complete draft is in review will be submitted for USAID approval in the next quarter.

Activity 5: Niger postpartum family planning

Overview: Despite a favorable political environment for family planning activities in Niger, there are still many constraints related to demand, access, and use of high-quality FP services. In a survey conducted by the Niger MOH in 2010, 51% of respondents reported they did not feel qualified to provide FP services and 71% of health facilities managers reported that they felt unable to provide FP services in their facilities. Twenty seven percent (27%) of customers surveyed said they had not received counseling on

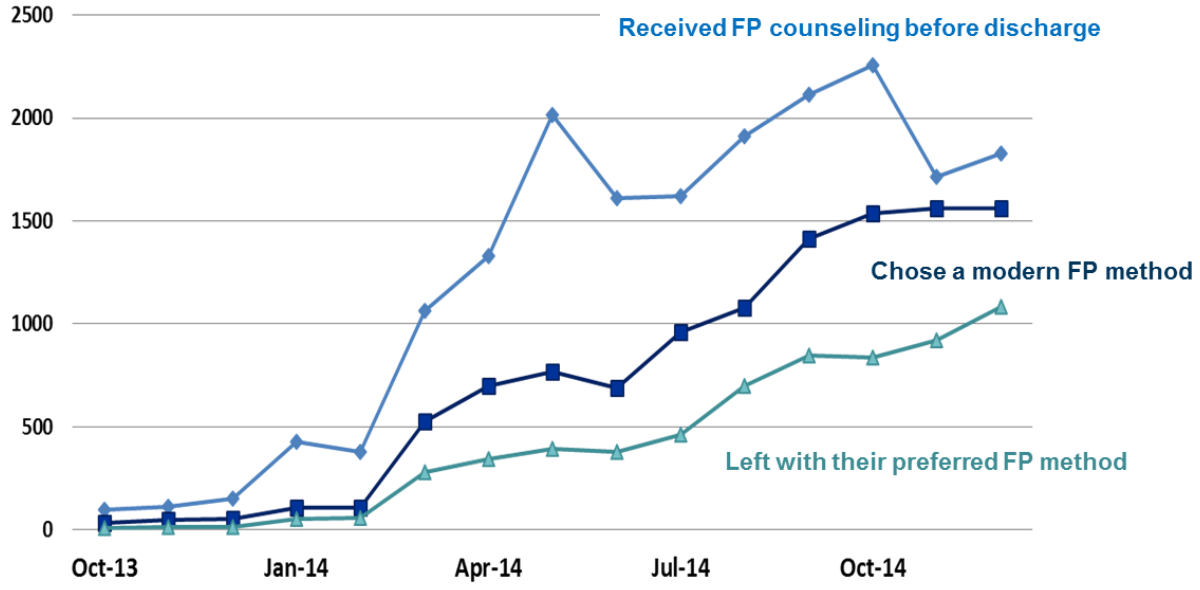
FP methods available (UNFPA & MOH, 2010). Despite the general availability of short-term methods in most health centers, this 2010 survey showed that availability of long-acting methods was lower, with only 20% in primary health centers reporting having IUDs and 25% having implants. The environment is therefore well poised for an introduction of a postpartum family planning (PPFP) intervention. This collaborative improvement intervention sought to generate innovations and learning related to service delivery strengthening models which can support a more efficient and sustainable integration of FP in routine services health during pregnancy, childbirth, postpartum and early childhood.

ASSIST worked in close collaboration with the Niger MOH, managers, and front-line providers to promote HTSP via improved integration of FP counseling and services into routine public and private sector MNCH services in two urban Niamey districts and one rural Birnin Konni district. ASSIST promoted client-centered FP services to improve client choice and adherence with selected FP methods of choice to reduce unmet FP need and achieve healthy timing and spacing of pregnancies and reduced maternal and child mortality.

Accomplishments and Results:

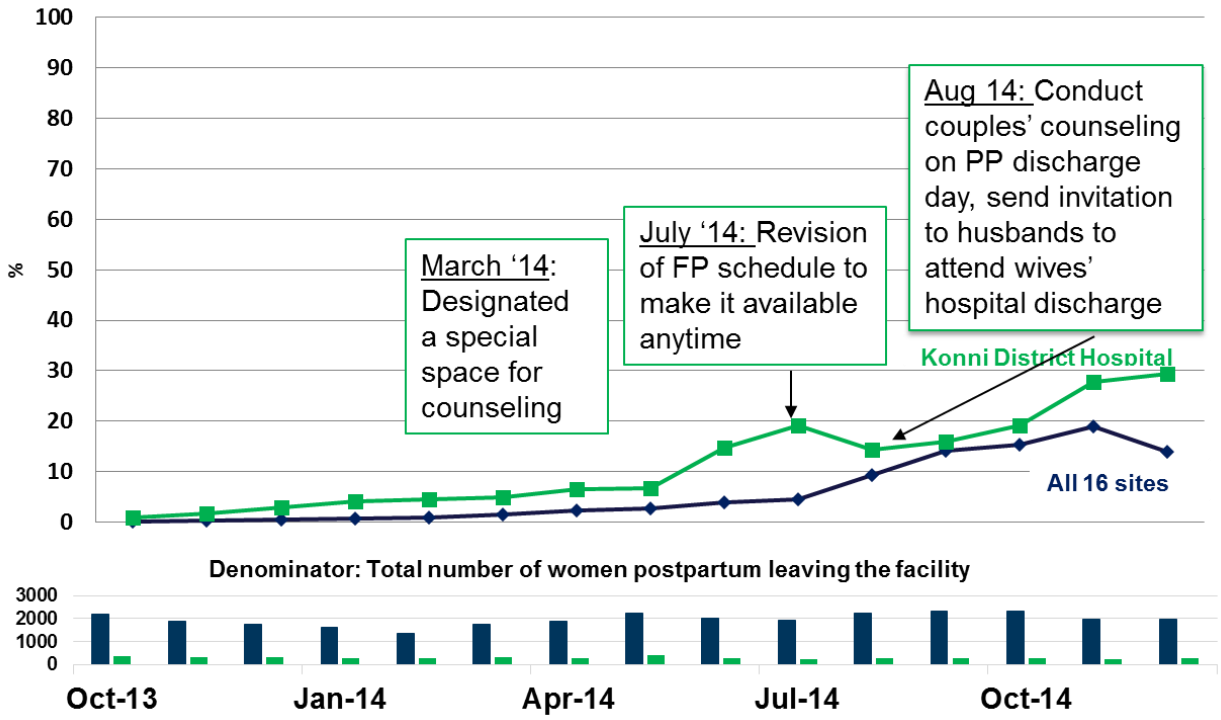
- **Baseline data on PPFP available for nationwide use as the target sites not only represented rural and urban sites, but also effectively captured regional disparities in Niger.**
- **A critical number of providers and managers well-trained in improvement, particularly in the practical experience on improving PPFP in Niger.**
- **A change package developed in February 2015 as a result of the intervention, with strong evidence supported by data that could be spread to other districts in the country.**
- **A final report was developed on the collaborative experience.**
- **Key results achieved through the collaborative improvement intervention are presented in the figures below. Figure 90** shows the large gains made in covering postpartum women with family planning counseling and acceptance of a modern family planning method. To achieve these results shown in **Figure 90**, many changes were implemented, including the following:
    - Reinforcement of essential equipment (requesting and obtaining FP commodities from MOH)
    - Provision of systematic counseling to all postpartum women
    - Provision of providers' refresher training on HTSP
    - Documentation of counseling in partogram (stays in the HF)
    - Provision of FP counseling to both mothers and partners before discharge

Figure 90. Niger: Comparison of PP women who received FP counseling before exit, chose a modern FP method and left with their preferred FP method, 16 sites (Oct 2013 – Dec 2014)



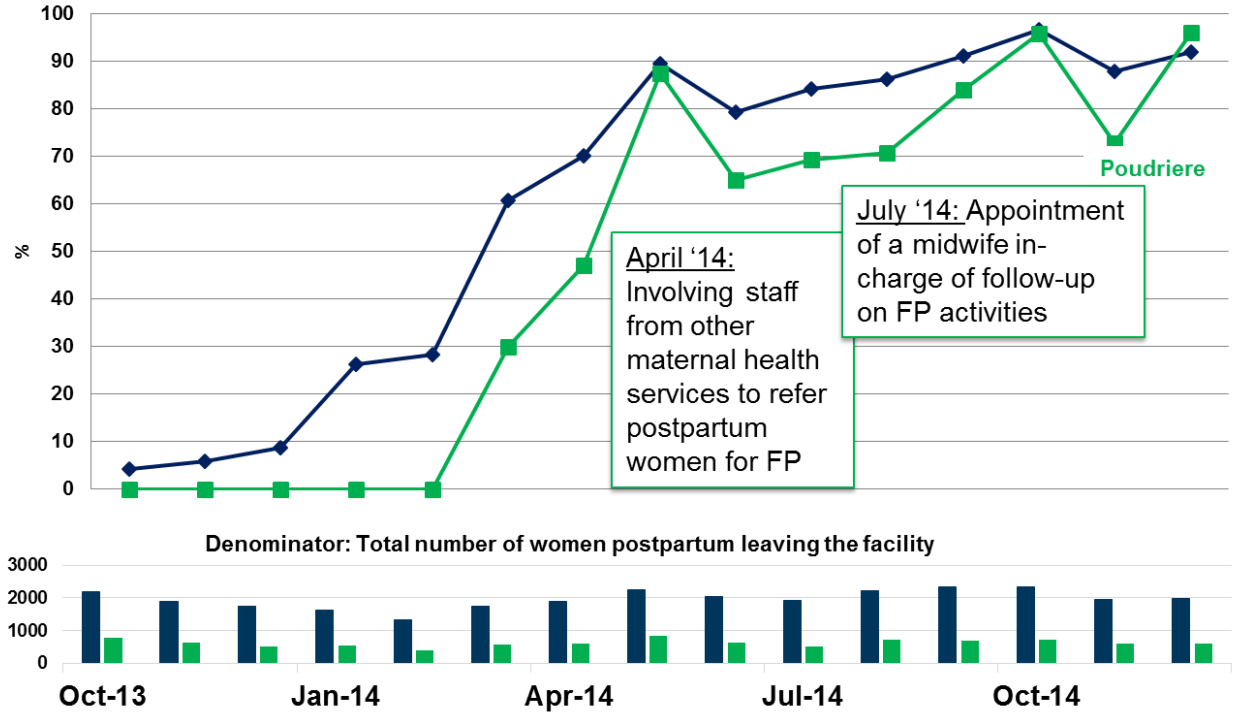
- **Involving husbands in FP issues is a major challenge in Niger because of cultural and traditional barriers. Nevertheless, the Konni District Hospital team, tested the idea and implemented changes that showed promising changes in their attitudes** (**Figure 91**).

Figure 91. Niger: Comparison of PPFP where couples received FP counselling before exit, 16 sites and in the Konni District Hospital (Oct 2013 – Dec 2014)



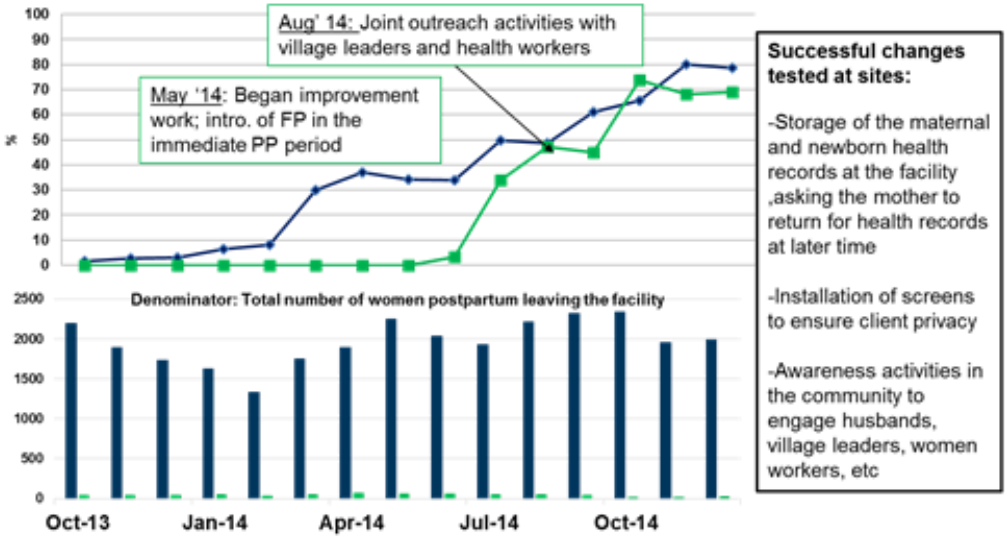
- Poudrière Regional Hospital is one of the two main maternity to which all women from the Niamey and Tillabery regions come. They created a special FP position held by a midwife who also served as a QI team leader several years back during HCI's predecessor project in Niger. All midwives were part of this QI team.
- **The QI team in Poudriere made many changes to achieve the results shown in Figure 92,** some of which are as follows:
  - Designation of a special space for counseling – March 2014
  - Involvement and empowerment of staff from other maternal health services on referring postpartum women for FP – April 2014
  - Provision of clear job descriptions to health providers – Apr 2014
  - Rotation of midwives with each taking turns staffing the FP counseling room – April 2014
  - Involvement of new delivery room providers in raising awareness and provision of FP services to women – May 2014
  - Revision of the supply chain management system to ensure continuous availability of commodities and thus promote client satisfaction – June 2014
  - Prioritization of couples for FP services – that is, in cases where women came with their partners, they were received first even when there were other women waiting to be seen – June 2014
  - Appointment of a midwife in-charge of follow up FP activities – July 2014
  - Revision of FP schedule to make it available 24 hours a day instead of morning only– July 2014
  - Daily check of completed charts – July 2014
  - Prioritization of FP services at time of discharge for women who received C-sections – July 2014
  - Insertion of PP IUD in the delivery and the operating rooms – August 2014

Figure 92. Niger: Postpartum women who received FP counselling before exit, 16 sites (in 2 districts) and the Regional Hospital Poudrière - Niamey (Oct 2013 – Dec 2014)



- The midwife in charge in Tsernawa Health Center had some experience in QI from previous work with URC. Tsernawa also had a new Medical Officer who changed the management such as addressing provider practices of fraudulent selling of contraceptives (which are normally free-of-charge).
- **Strong and well-targeted messages were necessary to achieve the changes shown in Figure 93,** including the following:
  - Introduction of FP in the immediate PP period – May 2014
  - Installation of screens to ensure client privacy – May 2014
  - Storage of the maternal and newborn's health records at the facility and asking the mother to return to retrieve the records on the 8th day or a day after the newborn's baptism (period after which, per Niger's customs, the PP women can be seen in public) – July 2014
  - Awareness activities in the community to engage husbands, village leaders, lay women workers, community health committee, and local NGOs – July 2014
  - Joint outreach activities with village leaders and Tsernawa health workers – August 2014

Figure 93. Niger: Postpartum women who left with their preferred FP method, 16 sites, 2 districts and in Tsernawa Health Center (Oct 2013 – Dec 2014)



Improvement in Key Indicators

Activity	Indicators	Baseline (October 2013)	Last value (December 2014)
Niger Post-Partum Family Planning	% women counseled for PPFP	4% (16 sites)	96% (16 sites)
	% women selecting a modern PPFP method;	2% (16 sites)	83% (16 sites)
	% women discharged with modern PPFP method of choice	0% (16 sites)	23% (16 sites)
	% births after which couple received PPFP counseling prior to discharge of mother	0.1% (16 sites)	14% (16 sites)

Activity 6. Internet-based mechanism to strengthen KMC and newborn health

Overview: The LAC Region has reached more than 90% average skilled birth attendance, a higher percentage than any other region in the developing world. However, important deficiencies persist in the quality of care at birth, as evidenced by assessments of process of care and health outcomes. It is estimated that in 2012 there were between 700,000 and one million cases of possible severe newborn infections in the region"[8]. Evidence-based practices capable of reducing the incidence of newborn infections exist and are available at a cost that seems to be acceptable for most LAC health care systems. The USAID ASSIST Project has global experience using quality improvement methods and tools proven effective to increase the quality of care. In the LAC Region, ASSIST has been using internet-based applications to promote quality improvement such as a website to disseminate evidence-based maternal and newborn interventions and communities of practice.

[8] Seale A. et al. Estimates of possible severe bacterial infection in neonates in sub-Saharan Africa, south Asia, and Latin America for 2012: a systematic review and meta-analysis estimates of possible severe bacterial infection in neonates in sub-Saharan Africa, south Asia, and Latin America for 2012: a systematic review and meta-analysis. The Lancet, vol. 14, August 2014.

Institutionalization/Sustainability Strategy

As country-level USAID MNCH funding has dwindled in the LAC region, ASSIST had invested modest core MNCH funds to sustain and grow the LAC regional newborn communities of practice focused on KMC and basic newborn resuscitation, essential interventions for two leading causes of newborn mortality—prematurity/low-birth weight and newborn asphyxia. These activities are being implemented and being leveraged in close collaboration with regional international organizations such as the LAC Newborn Alliance, the Pan American Health Organization (PAHO), UNICEF, the Mesoamerican 2015 Initiative, the Kangaroo Care Foundation, and others. It is likely that these partner organizations will eventually increase their current support to implement these activities in some of the countries they support or in the entire region.

Accomplishments and Results:

- **Carried out four webinars:**
  - "Newborn Health in the LAC Region: progress and challenges". Dr Pablo Duran, PAHO/WHO. November 2014.
  - "Intercultural aspects of Newborn Care in the LAC Region". Dr. Mario Tavera, UNICEF/Peru. December 2014.
  - "Essential Care for Every Baby. A new curriculum for Newborn Care Training". Dr. Carl Bose, American Academy of Pediatrics, U.S.A. February 2015.
  - "Prevention and early recognition of Retinopathy in the Premature Baby". Dr. Pedro Acevedo, Kangaroo Care Foundation, Colombia. March 2015.

  Each of these webinars was attended by an average of 80-90 participants from 7 to 9 countries.
- **A multi-hospital, multi-country improvement collaborative is being run using internet-based applications to increase the uptake of evidence-based practices in 25 LAC region hospitals and reduce the incidence of hospital newborn infections.** The use of the internet will bring down costs reaching facilities across country borders and increasing the efficiency of the QI approach. At a low-cost and high efficiency, ASSIST is being successful in reaching hundreds of professionals in 8-10 LAC countries using internet-based applications to disseminate evidence-based newborn care interventions. The internet-based collaborative is allowing 25 participant hospitals to communicate towards sharing successes and lessons learned on best ways to reduce hospital newborn infections. This is one of the first experiences of this type in the Region, which could eventually be scaled up to new technical areas, new countries, and perhaps other regions in the developing world.
- **The ASSIST MNCH Spanish-language website www.maternoinfantil.org has reached 785,742 visits to March 2015, and a database of 855 documents were consulted; among them scientific articles, tools, newsletters, guidelines, video and audio documents.**

Activity 7: MCH Safe Childbirth Checklist (SCC)

This activity is still being developed.

Activity 8. Develop basic improvement course for the Global Health eLearning platform

Overview: Global health professionals and MOH officials are often convinced of the need to improve the quality of health care, but are confused as to what to do and/or overwhelmed by the different approaches and methods available. In December 2014, USAID ASSIST began the development of an improvement course for the USAID Global Health eLearning platform to introduce USAID staff, Ministry of Health officials, health care managers, and other global health professionals to principles and approaches that can help health care and social service workers continually improve the work that they do and make care better. This new information will help to demystify improvement and give them a better understanding of how to differentiate improvement approaches. Course participants will receive an overview of different ways to improve health care and their pros and cons, and the underlying principles of improvement. The course will then examine in more depth process improvement and measurement for decision making since health care improvement has become a critical component of USAID and PEPFAR programming.

For this activity, we are working closely with the Johns Hopkins Center for Communication Programs (JHU CCP), which manages the GHeL platform and provides technical assistance in course design.

Institutionalization/Sustainability Strategy

Once the course is complete, it will be openly available at no cost through the Global Health eLearning Center website, which is designed for low bandwidth connections, ensuring accessibility for a wide range of stakeholders.

Accomplishments and Results:

- **Course proposal approved** (January 2015)**.** ASSIST developed a course proposal that was reviewed and approved by USAID.
- **Authors' training conducted** (February 2015). CCP conducted an authors' training for USAID ASSIST staff.
- **Learning objectives developed** (March 2015). USAID ASSIST authors developed learning objectives for the course.

Activity 9. Basic improvement course and workbook

Overview: A critical component to the work of the USAID ASSIST Project is to build competencies for improving health care and social services in host country counterparts and staff at the national, regional, district, facility, and community levels. USAID ASSIST is exploring new, innovative ways to build competencies in staff, local counterparts, and implementing partners that will ensure a consistent level of improvement competencies throughout the project activities.

This course will comprise the initial steps in building not only the knowledge, but also basic skills that are necessary for improving care at the point of service delivery. The course will provide information and basic competencies and will serve as the first point training for USAID ASSIST staff in improving health care and be adapted for use in training host country partners and other implementing partners. The course is a self-directed workbook, which will be complemented by other materials such as articles, case studies and guides. The audience for the training will be staff in facilities, host country counterparts, and implementing partners, and the training will be made available for anyone who has an interest in how to improve health care or social services. By the end of the course, a participant will have the basic competencies in improvement, which would enable them to begin an improvement project with mentorship and supervision.

The course will draw upon existing resources and develop new ones as appropriate, including manuals, job aids, and exercises. ASSIST will work closely with an instructional design consultant to ensure that we are developing materials and learning approaches that will contribute to building competency and not simply be a knowledge transfer.

Institutionalization/Sustainability Strategy

As a self-directed workbook, this course will be sustainable as it does not require outside trainers or funding for health care managers or workers to build improvement competencies.

Accomplishments and Results:

- **Developed course outline and began detailing learning objectives** (Dec 2014 - Jan 2015).

Activity 10. Pre-service improvement curriculum

Overview: The lack of competency of health care workers to continually improve the quality of care they are providing contributes in part to health care problems such as poor retention in HIV care and treatment or low uptake of highly active antiretroviral therapy (HAART) among the pediatric HIV-infected population. In December 2014, the USAID ASSIST Project began working with the FUNZO Kenya Project (FKP) to explore opportunities for incorporating improvement competencies into the curricula of pre-service medical training institutions in Kenya. This work will build upon an improvement competency framework for pre-service education and IST that was developed by ASSIST and the Regional Center for Quality Health Care in Uganda. The work will be complementary to the Medical Education Partnership Initiative (MEPI) and the Nursing Education Partnership Initiative (NEPI) and will strengthen PEPFAR efforts. Products and lessons learned will be shared broadly, including with MEPI/NEPI. The activities will

contribute to the PEPFAR 3.0 Human Resources for Health Strategy Objective 2 by strengthening pre-service training institutions and Objective 5 by building competency in quality improvement as an approach for performance improvement.

ASSIST will work with three to four medical training institutions to incorporate improvement competencies into their existing pre-service curricula, including practicums for doctors, clinical officers, nurses, or lab or pharmacy technicians. Developing curricula, materials and testing these in practice will provide a benchmark that other medical training institutions can use to institutionalize improvement. ASSIST will work closely with the FKP, which is responsible for supporting all medical training institutions, to conduct a curriculum review, develop materials, train faculty and conduct the first courses in improvement. Students will immediately implement their new improvement skills during their practicums with improvement aims focused on improving HIV-related care.

Institutionalization/Sustainability Strategy

As one part of institutionalizing improvement, health care systems need a critical mass of the health workforce competent in improvement. Many resources have gone into IST, but a shift to incorporating improvement competencies into pre-service training will strengthen institutionalization of improvement in health systems.

Accomplishments and Results:

- **Draft concept note prepared** (March 2015): A draft concept note has been prepared and will be reviewed by USAID/Office of HIV/AIDS (OHA) and USAID/Kenya for approval.

Challenges and Remedies

- **FP Quality Framework**: Complementing the recently released WHO resources "Programming Strategies for Postpartum Family Planning" and the "Statement for Collective Action for Postpartum Family Planning" without duplication of effort. In the FP Quality Framework, we focused on quality improvement that was not addressed in these two documents.
- **Niger PPFP:** The main challenge was mainly at the management level. Despite their commitment and engagement, it was very difficult to have them engage at each step of the process as planned. Their time was divided across many partners and programs without alternative solutions such as having a focal person within the structure. This created limitations in decision-making and institutionalization. To reduce the impact of this challenge, we have put more focus on district level supervisors. We expect them to introduce the process into at least the supervision system in order to ultimately benefit patients and clients.
- **Internet-based mechanism to strengthen newborn health**: Lack of experience from participating professionals using the internet for improving health care activities. We have adapted our strategies to include more time and dedication to strengthening such capacity. In addition, we developed short guides on how to perform basic internet-related tasks; and we conducted one webinar specifically on skills to use the www.maternoinfantil.org website, the Webex program and Skype.
- **Pre-service improvement**: Coordinating between ASSIST, FKP, USAID/OHA, and USAID/Kenya has taken time.

Improving Equity

PPFP Quality Framework: The PPFP Quality Framework discusses the need to tailor services to the needs of vulnerable populations of girls and women including unmarried and married adolescents; women receiving post-abortion care; older high—parity women with co-morbid conditions (e.g. HTN); HIV + women poor women.

Niger Postpartum Family Planning: The team identified gender-related issues affecting PPFP uptake, including lack of decision-making power among women, and harmful cultural beliefs. Involving husbands in FP issues is a major challenge in Niger because of the cultural and traditional barriers. Nevertheless, the Konni District Hospital team tested the idea and implemented changes that showed promising changes in their attitudes. The changes included, among others: designation of a special space for counseling, revision of FP schedule to make it available 24 hours a day instead of the morning only, taking advantage of the PP women's discharge day to conduct couples' counseling on PPFP, and sending an invitation of husbands (by phone) to be present at their wives' hospital discharge (and thus

use this opportunity to conduct PPFP couples' counseling). These changes were shown to be very successful in increasing uptake in family planning.

Planned Activities Next Quarter: April - June 2015

Activity 1: WHO secondment

- None. Activity was completed.

Activity 2: NCD

- Finalize selection of countries for implementation

Activity 3: People-centered care

- Define work plans with counterparts in Mali and South Africa

Activity 4: Family Planning Quality Framework

- Submit the final document for USAID review and approval to publish

Activity 5: Niger PPFP

- Publish the final report and change package from the PPFP improvement collaborative

Activity 6: Internet-based mechanisms to strengthen newborn care

- Two new webinars, one on hospital newborn infections; a second one on new evidence on the use of antenatal corticosteroids for preterm delivery
- First learning session of the Virtual Collaborative and start of e-coaching to hospital-based QI teams

Activity 7: MCH Safe Childbirth Checklist

- In consultation with USAID, identity a country for this activity.

Activity 8: GHeL improvement course

- Develop course content and upload to the GHeL platform
- Submit course materials to CCP for instructional design and language review
- Hold internal content review and revise
- Prepare for external content review

Activity 9: Basic improvement course

- Write content and design exercises for course

Activity 10: Pre-service improvement

- Receive approval and signatures on workplan
- Conduct rapid assessment of institutional readiness and choose participating facilities and faculty
- Hold workshop with participating faculty to review existing materials

4. OFFICE OF HIV/AIDS-FUNDED ACTIVITIES

HEALTH WORKFORCE DEVELOPMENT

Background

USAID ASSIST seeks to contribute to improvements in the effectiveness, efficiency, and sustainability of PEPFAR investment in CHW programs. This activity builds on previous work conducted by HCI and ASSIST for the USG Evidence Summit on CHW performance. Activities are currently underway for two studies based in Southern Africa on health workforce development, both of which investigate community health workers and volunteers and their performance. Understanding better how CHWs can facilitate their most effective and efficient deployment in the field tends to be a neglected area of research in the medical literature. These activities are being conducted with the Harvard School of Public Health.

Institutionalization/Sustainability Strategy

The importance of CHWs and their contribution to health care and health promotion have garnered increasing attention from governments, donors, health systems researchers, and planners. CHWs play an essential role in many countries to extend the outreach of health services such as HIV services in the community and improve linkages between those who need care and those who can provide it – representing key strategies toward PEPFAR goals. Support needs of community-based cadres differ from those of more formalized health worker cadres. Addressing these needs is integral to ensuring sustainability of PEPFAR-supported community-based cadres and programs that utilize and rely on them to ensure the HIV continuum of response.

Program Overview

What are we trying to accomplish?	At what scale?
1. CHW performance logic model validation study for Swaziland HIV/TB services	
• Analyze how different CHW programs in Swaziland achieved intended performance • Develop Swazi CHW case study to determine factors that have been effective in improving services. • Use findings to inform CHW planning/strategy in Swaziland and inform PEPFAR programming. • Evaluate validity & content of generic CHW Performance Logic Model	HIV/TB CHW programs in Swaziland
2. CHW harmonization study in Southern Africa	
• Develop and publish policy recommendations for harmonization of HIV community cadres and programs into national CHW programs and plans targeted to decision makers at country level	HIV/TB CHW programs in Swaziland and South Africa
3. Pre-service improvement curriculum	
• Build competencies of health care professionals to continually improve the quality of the services they provide in order to improve health outcomes	TBD (anticipated 3 to 4 pre-service institutions such as medical colleges and medical training institutes)

Cross-cutting Activity

Accomplishments and Results by Activity (October 2014 – March 2015)

Activity 1. CHW performance logic model validation study for Swaziland HIV/TB services

Overview: Under HCI funding, a CHW performance logic model was developed to guide efforts to improve CHW program performance. A study is now underway in Swaziland to determine if this model has validity for CHWs involved in TB/HIV service provision.

Accomplishments and Results:

- **Developed a protocol along with data collection tools for submission to the Swaziland IRB** (January 2015).
- **Developed a framework for data collection activities with the Swaziland team** (February 2015).
- **Identified a data collection contractor to conduct the in-country part of the data collection** (March 2015).

Activity 2. CHW harmonization study in Southern Africa

Overview: This activity builds on the work done by ASSIST in 2013 with USAID and the Global Health Workforce Alliance in publishing a monitoring and accountability platform for CHW programs by developing policy guidance for the harmonization of CHW programs based on multi-country case studies. The USAID Missions in Swaziland, Lesotho, and South Africa have been approached to determine the value and feasibility of conducting the study in those countries. A fourth country may be considered for inclusion in this study, depending on budget and time.

Accomplishments and Results:

- **Developed a preliminary data collection tool for the study, which was shared with USAID missions in the aforementioned countries to help determine their interest** (February 2015).
- **Discussions with USAID missions are ongoing** (March 2015).

Activity 3. Pre-service improvement curriculum

This activity is funded jointly by OHA and OHS cross-bureau funds. Please see the OHS cross-bureau activity plan for details about this activity.

Challenges and Remedies

The Swaziland institutional review board (IRB) has been unexpectedly slow to approve the CHW performance logic model validation study, and this has delayed its implementation.

Planned Activities Next Quarter: April - June 2015

- Once IRB approval of the logic model validation study has been obtained, data collection can begin. It is anticipated that some preliminary results will be available in the coming quarter.
- Final decisions on the participating countries for the harmonization study are expected in the coming period. It will be decided if a fourth country can be included in this work.

HIV AND AIDS: CHRONIC CARE, AND TREATMENT & PREVENTION

Background

USAID ASSIST's HIV and AIDS prevention and treatment portfolio is currently comprised of three activities: injection safety and health care waste management in Swaziland, and two activities – chronic care and VMMC – in Uganda. These activities began in December 2012 under HCI.

Swaziland's injection safety project applies quality improvement (QI) principles to improve injection use and waste management practices in health care settings. The project aims to reduce the transmission of HIV, Hepatitis B & C, and other blood-borne pathogens. An impact evaluation component of the project is studying health worker engagement, stigma and discrimination, quality of care for PLHIV, and efficiency of the improvement intervention. In collaboration with MOH counterparts, the project staff are working to improve health worker knowledge and safety, decrease stigma in health care settings, and support post-exposure prophylaxis (PEP) as well as reporting/documentation of needle-stick injuries.

The chronic care work in Uganda is currently being implemented in Mityana (18 months of intervention) and has been spread to Nakaseke (6 months in intervention). The primary thrust of the work now is to determine the effectiveness and efficiency of applying the chronic care model to improve HIV care. From October 2014 to December 2014, teams in Nakaseke focused on developing further changes to build more evidence regarding the use of the chronic care approach while those in Mityana focused on sustaining and spreading improvement gains beyond HIV care. Monthly coaching was done in Nakaseke, while the level of coaching in Mityana was lighter, about once every 2 months. This light coaching support is to help the facilities sustain the improvement work even after the majority of ASSIST QI activities in the district have wrapped up. The final month of improvement work in the two districts was December 2014. Between January and February 2015, endline data collection was conducted at all the sites.

At the beginning of the **VMMC improvement work in Uganda**, technical support was provided to the Ministry of Health and 10 USG IPs which have since been reduced to eight IPs as one closed and one had its funding suspended. Intense support has been provided to 30 health facilities, which increased to 49 in June 2014. The VMMC improvement work is jointly funded by the USAID Mission in Uganda.

Institutionalization/Sustainability Strategy

Swaziland injection safety: Currently, the project is in its pilot phase with 20 intervention sites. It will eventually be scaled up nationally using learned best practices from the improvement activity as well as the findings from the impact evaluation. Coaching, mentoring, and support supervision is conducted with direct MOH involvement, and a core team (consisting of MOH focal persons for injection safety and health care waste management) is leading all activities for sustainability. Collaborative learning and feedback sessions with participation from national and local governments, the private sector, and partners provide a platform to share best practices that can be used for national roll-out and continued health system strengthening.

Uganda chronic care: To support institutionalization of chronic care, the Mityana coaches provided coaching in the Nakaseke sites. This was meant to build their competencies to continue supporting themselves back in Mityana after closure of the collaborative. The coaches also included district staff from Nakaseke District. In both Nakaseke and Mityana, chronic care improvement teams are involving teams outside HIV care (TB, diabetes and hypertension clinics) in improvement work and holding integrated meetings. There is also internal supervision at site level by the chronic care teams.

Uganda VMMC: USAID ASSIST works with district health authorities during technical support visits to health facilities in order to build their skills in QI coaching. This gives an opportunity to the district health staff to be mentored by the experienced USAID ASSIST coaches.

Program Overview

What are we trying to accomplish?	At what scale?
1. Improving injection safety and waste management to reduce the transmission of blood borne infections such as HIV, Hepatitis B and Hepatitis C (Swaziland-Implementation)	
• Reduce % of providers experiencing needle-stick injuries • Increase % of observed injections in which safe practices were performed • Implement proper health care waste management practices	Coaching and mentoring support to the 20 intervention sites in each of the 4 regions of the country Hhohho -6 sites Lubombo-3 sites Manzini-7 sites Shiselweni-4 sites The 20 sites are made of 11 hospitals, 2 health centers, 2 ambulatory clinics and 5 primary health units. Quarterly collaborative feedback sessions support provided to all 20 sites
1.1 Evaluating the impact and efficiency of improving safe injection practices on health worker engagement and attitudes towards caring for PLHIV (Swaziland-Impact Assessment)	
• Determine the extent to which the above implementation activity is effective at increasing engagement among health care workers and at decreasing stigma towards PLHIV.	Baseline data collection was conducted at the 20 sites. Additional retrospective data collection is being conducted. Endline data collection is scheduled for September/October 2015.
2. Refined Chronic Care Model (CCM) implementation and impact evaluation (Uganda)	
• Improve care for people living with HIV through the implementation of an adapted, chronic care model. Improved care is measured using measurable patient outcomes and the ART framework which monitors closing the access, retention, and adherence gaps. • Achieve rapid improvements in the late intervention district (Nakaseke) applying learning from the early intervention sites • Sustain improvement gains in the early intervention district (Mityana)	6 facilities in two districts –3 in each of the districts - Nakaseke and Mityana. 1 hospital, 1 HC IV and 1 HC III in out of a total of 10 accredited ART health facilities in both districts There are 6 QI teams in the two districts; 1 at each site. Catchment population 400000 out of 36 million
3. Integrating quality improvement in Voluntary Medical Male Circumcision (VMMC) in Uganda	
• Improve the ability of local officials and IPs to continuously monitor, evaluate, and improve their Safe Male Circumcision (SMC)/VMMC programs • Increase our knowledge of how health systems should adapt to best accommodate and integrate SMC/VMMC programs • Increase uptake of SMC/VMMC through utilizing various changes including female partner involvement • Generate new knowledge materials related to SMC/VMMC	Provinces: 13 out 13 health regions Districts: 40 out of 112 49 QI teams

What are we trying to accomplish?	At what scale?
4. Integrating CQI for VMMC activities in South Africa (This activity is reported as part of the South Africa presentation)	
• Improve the quality and safety of VMMC services by applying CQI methodology and tools	9 provinces

☐ Improvement activity

Accomplishments and Results by Activity (October 2014 – March 2015)

Activity 1: Apply QI principles to improve safe injection and waste management practices and to reduce the transmission of HIV, Hepatitis B & C and other blood-borne pathogens

Overview: This activity is important in that it aims to directly reduce the medical transmission of HIV and other blood-borne pathogens among patients, providers, and waste handlers during the delivery of medical injections including phlebotomy and through safe disposal of medical waste.

Accomplishments and Results:

Capacity Building

- **Conducted trainings for health care waste handlers** (November 16-18, 2014). ASSIST funded and offered technical support in the training for health care waste handlers in the 20 intervention sites. The objective of the training was to capacitate the health care waste handlers on standards for health care waste management and injection safety as they are the most at risk and end line people to handle waste. The training gave the health care waste handlers an opportunity to increase knowledge on waste management and also voice the challenges and also be able to improve the quality of the services they offer on managing waste. Sixteen of the 20 intervention sites attended the training. During the training they were tasked with working closely with the injection safety focal persons in facilities to support the quality improvement activities that were already in place. The training posttest scores showed a remarkable improvement when compared with the pretest scores, suggesting knowledge transfer.
- **Conducted health care waste handlers training at Mbabane Government hospital with MOH counterparts** (March 4, 2015). Forty-five health care waste handlers were trained on waste management infection prevention and control, Hepatitis B, and PEP. During the training an anonymous informal survey was conducted to determine needle pricks injuries and reporting. Twelve out of 45 handlers responded that they had experienced needle pricks, and only five reported the pricks for care and treatment purposes which showed that about 60% of the respondents do not report needle prick injuries. The reasons given ranged from fear of the unknown to being afraid to test for HIV and having their HIV status known by management who may blame them for negligence. Pre and post-test evaluations showed improvement as well with a mean score of 21% pretest and 72% posttest.
- **Facilitated an onsite training for Ubombo ILLOVO Hospital** (Nov 11, 2014). This training followed a need seen during one facility field visit. The objectives of the half day on-site training were for the participants to be able to describe the broad concepts of injection safety and health care waste management; be motivated to improve standards of safe injection and waste management practices and be supported to draft action plans for their facility for the next 3-6 months. A total of 16 health care workers (9 nurses, 1 data clerk, 1 lab technician, 1 dispenser, 1 radiographer, 3 cleaners) were trained.
- **Attended the Health Care Risk Waste Management Master Class 2014 with two Ministry of Health counterparts** (Oct 28th – 30th, 2014). The aim was to provide the project officers on health care risk waste management because there are numerous challenges being faced by health care practitioners from "cradle to grave." The event was meant to dissect key issues related to Health Care Risk Waste, as well as provide best practice solutions to the challenges involved. The event was also

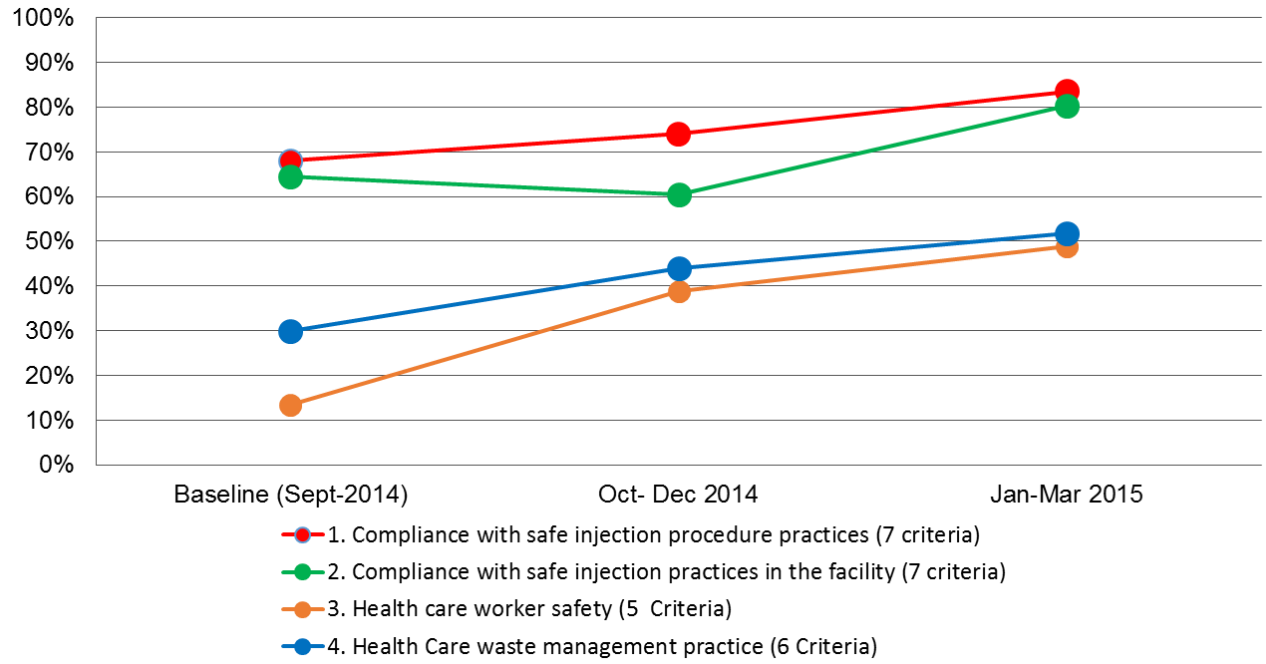
a platform to network with other practitioners involved in Health Care Risk Waste, as well as hear from erudite presenters from key stakeholders from both public and private sectors.

- **Conducted the second project collaborative learning session for facility injection safety and health care waste management focal persons** (Nov 20, 2014). The project uses collaborative improvement to encourage sharing and learning across sites for identifying, selecting, and testing changes through the application of quality improvement methodologies, these sessions are held every quarter and are designed for sites to share their successes, failures, lessons learned and accomplishments at implementing changes. During the last session, 15 sites were represented by injection safety and health care waste management focal persons. The focal persons shared their improvement plans and gave updates on progress of the projects. As a result among the 15 facilities 8 (53%) had QI plans and projects and all had teams in their health care facilities. The sites' focal persons reported that there are too many activities and some were new and required QI trainings.
- **Coaching and mentoring visits in collaboration with the MOH injection safety focal person were conducted to monitor and support the quality improvement teams and their projects at facilities** (two weekly coaching visits for the 20 intervention sites from Oct 2014-March 2015). Visits were conducted in 19 of the 20 sites (95%) where 13/20 sites had active documented QIPs (mainly from Hhohho, Manzini, Lubombo and Shiselweni regions). The objectives of the visits were to monitor the quality improvement projects, support the facility with the injection safety and health waste management activities, and ensure that they comply with standards and procedures as prescribed by WHO. Each facility was assisted in the weekly data collection.
- **Engaged a consultant to support QIPs in the facilities** (Jan – mid March 2015). The first month of engagement involved introduction visits and well as sharing the baseline assessment results. The seven facilities which did not have any active QIPs were prioritized for support by the MOH.
- **Collected data from intervention sites** (Oct – Dec 2014). Data was collected from 13 of the 20 visited sites. The seven sites had no data for the following reasons: staff changes and workload; no active QIPs, and no active improvement focal point at the sites.
- **Health care waste management pilot project plan concept development.** Finalized the concept note on the pilot for waste transportation to treatment sites of health care waste from TB/HIV facilities. This project is funded by the World Bank, and URC will document the process from implementation and disseminate results.
- **Facilitated the injection safety and health care waste management core team meetings** (Oct 29, 2014 and Feb 20, 2015)
- **Facilitated the development and printing of project materials:**
  - Facilitated the development of the injection safety guideline addendum. This shall be included as a section in the national infection prevention and control guidelines.
  - Developed the sharps /prick injury log form which is being piloted as an improvement change in the sites until May 2015.
  - The health care worker injection safety pocket card was designed and adapted from Pakistan form which will be used as reminders for health care workers during clinical care practice. This card will be given to all health care workers in the 20 intervention sites and will be printed in the next quarter.
  - Finalized the injection safety poster with the core team and disseminated in February 2015.
  - Facilitated the printing and dissemination of the national health care waste management guidelines.
- **Held four regional workshops to orient health workers and waste handlers on the new guidelines for healthcare waste management** (Febr 10 -17, 2015). The workshops also provided a forum for the MOH Environmental Health Department to showcase infrastructure and controls for the management of health care waste in Swaziland. In addition, the forum enabled the sharing of the results of the injection safety and waste management baseline assessment results, and recommendations.

Evaluating impact and efficiency of improving safe injection practices

- **Baseline assessment results sharing forums (Feb – March 2015)** conducted during the regional workshops, nurse managers' meetings and in the 20 sites. The 20 site-specific results were shared so that the quality improvement results were focused as these results were only shared in late 2014. All the 20 sites were given their score boards with results in the key areas observed during the baseline assessment. The results presented during sharing sessions raised many comments as the facilities were mostly shocked by the standard practices reported. Of great interest was the observation in two dental clinics of poor hand washing practices during injection procedures and the sterilization of syringes. This results-sharing has helped in guiding specific areas for improvement.
- **Results of improvement interventions**. **Figure 94** shows improvements achieved in compliance with injection safety and health care waste management standards in the 20 intervention sites.

Figure 94: Swaziland: Average compliance with injection safety and health care waste management standards, 20 intervention sites (Oct 2014-March 2015)



- **Two research products are currently in draft form: "Baseline assessment of injection safety and waste management practices in 60 facilities" and "Qualitative data on felt and expressed stigma and discrimination."** We hope to build on these two products and produce either a peer-reviewed publication or an ASSIST Research & Evaluation Report**.**

Activity 2. Refined Chronic Care Model implementation and impact evaluation (Uganda)

Overview: The work under this collaborative in Nakaseke and Mityana districts is meant to build more concrete evidence on how to improve HIV chronic care through the application of the chronic care model.

Accomplishments and Results:

- **Conducted first learning session for teams in Nakaseke District** (Nov 11-13, 2014). Selected participants from Mityana District were invited to take part in the session two of whom as facilitators and shared their experiences in implementing the chronic care model. The objectives were to share and discuss changes implemented, synthesize them and tease out those responsible for results seen so far. District representatives were involved and shared their plans to sustain improvement efforts. At the end of the session, improvement changes were harvested to enhance the chronic care change package document developed following interventions in Buikwe district as part of the chronic care tool

kit document. Thirty seven participants took part in the learning session; 15 from sites in Nakaseke district, 09 from sites in Mityana district, four staff from DHOs office in Nakaseke District, two from the DHOs office in Mityana.

- **Conducted one coaching visit by district coaches** (Dec 2014). All sites in Nakaseke and Mityana were visited. This was meant to support sites to implement their action plans to ensure they are focused on improvements. At all sites quality improvement teams were functional and had started working on their improvement projects. Each of the improvement teams had added on new members. Five new members had been added to the teams. The coaching was conducted by coaches from Mityana to help build their competencies to independently support improvement teams. This was in preparation to institutionalize chronic care. At Mityana hospital, teams were supported to ensure records in the TB unit register are complete. Data on septrin prophylaxis, start date on ART in the TB register for patients that are TB/HIV co- infected was not being filled in.
- **Conducted 3rd point chronic care data collection** (Jan 25 – Feb 8, 2015). Data was collected all the sites in Mityana and Nakaseke districts. The purpose of this activity was to:
  - Assess sustainability of improvements achieved in Mityana over the last one year without intensive support.
  - Determine the effects of spreading chronic care interventions to Nakaseke from Mityana district to enhance the conclusions about the effects of applying the chronic care model to improve HIV care.

  As was done at baseline and end line data assessment for the impact study, chart reviews, waiting time and data on patients' CD4 was collected on respective sample sizes. A group of data collectors from Buikwe and Mityana were involved in this activity. The data collected has been entered in Excel and is currently being cleaned up. ART framework data was also collected and updated up to the end of December 2014 (**Figure 95** and **Figure 96**).
- The teams in Mityana have spread improvement beyond HIV care. At St Padre Pio HC III, improvement spread to PMTCT clinic, infection control and theater departments. At Mityana hospital the team is working on improving the quality of records in the TB clinic using lessons learnt from the HIV chronic care clinic.

Figure 95: Uganda: Coverage, retention and outcomes of ART patients, Mityana (early intervention) chronic care sites (April 2013 - Dec 2014)

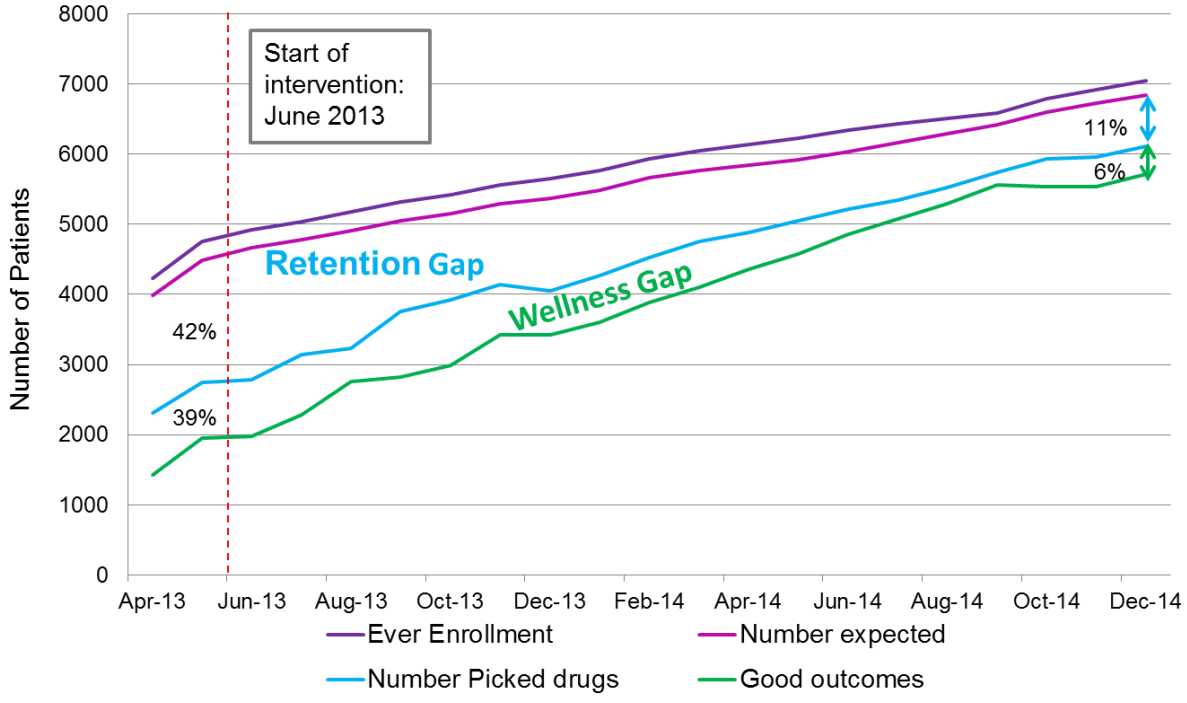
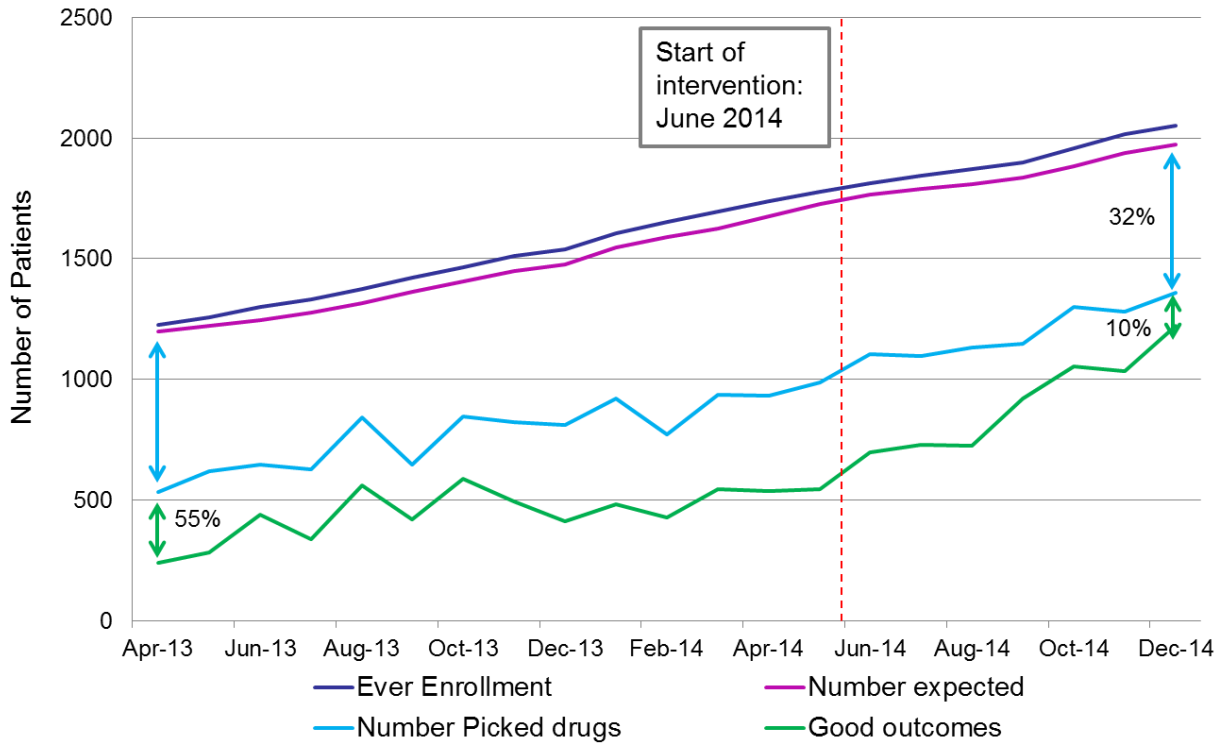


Figure 96: Uganda: Coverage, Retention and Outcomes of ART patients, Nakaseke (late intervention) chronic care sites (April 2013 – Dec 2014)



Activity 3: VMMC Uganda

Accomplishments and Results:

- **Provided support for coaching in the 49 health facilities in 40 districts** (Oct 2014 – Feb 2015). Conducted joint coaching with the implementing partners and district coaches to support teams in identifying and addressing gaps in complying with the SMC quality standards and the client level indicators. Teams were supported to implement the developed action plans and work on improvement projects.
- **The dashboard in Figure 97 shows that sites have maintained good performance on the quality standards**. However some gaps do still exist mainly the area of supplies, registration and monitoring and evaluation. This is due to absence of information, education and communication materials and lack of reporting tools that were recently revised.
- **Figure 98 shows that the new sites have also made great improvement, significantly reducing the number of standards that are in red**. During the reporting period, a number of implementing partners were set to close because the project life had ended. This affected the level of support they rendered the sites, and in turn this affected the performance of the sites. To date, some sites do not have an IP supporting them, and this makes it challenging to maintain the standards.
- **Conducted QI training for the new health facilities and representatives of the district health offices in the districts where these sites are located** (Oct 28-30, 2014). Seventy-two staff were trained from the 18 health facilities. The goal of the training was to improve the knowledge and skills of health workers in applying modern quality improvement approaches to improving the quality of SMC services.

Figure 97: Uganda: Performance dashboard on SMC quality standards, 30 sites (Feb-May 2013 vs. Feb 2015)

	Baseline Feb-May 2013							Feb-15						
Health Unit IP Supporting Site District	Management systems	Supplies, equipment & environment	Registration group education and IEC	Individual counseling & HIV testing	Male circumcision surgical procedure	Monitoring & evaluation	Infection prevention	Management systems	Supplies, equipment & environment	Registration group education and IEC	Individual counseling & HIV testing	Male circumcision surgical procedure	Monitoring & evaluation	Infection prevention
Kinyara HCII, Masindi,HIPS	30	50	0			33		80	100				85	100
Mabale HCII ,HIPS, Kyenjonjo	20	33	0			7	92	80	87	80			87	92
Lugazi Mehta, HIPS, Buikwe	40	83	0			14	84.6	80	100	83	80	90	78	92
Kitgum general Hospital Kitgum NU-HITES	30	50	0			18	82	90	83	100	100	100	93	100
Apac Hospital Apac NU-HITES	20	33	0			14	80	100	100	83	100	100	86	100
Anaka Hospital Nwoya NU-HITES	10	50				7	70	100	100	100	100	100	100	92
Kulva Hospital, IRCU, Arua	40	50	50			75	60	90	83	100	83	100	92	96
Ishaka Hospital, Bushenyi	50	50	25			14	77	90	100	83	100	90	86	85
Mengo Hospital, IRCU, Kampala	60	50	83	39	64	29	92	100	83	100	100	100	86	100
Gulu Regional Referral Hospital, SUSTAIN, Gulu	20	50	50			0	33	100	100	100	100	90	100	92
Kabale Regional Referral, SUSTAIN, Kabale	33	25	0			0		80	80	83	90	80	100	80
Fortportal Regional Referral Hospital	25	33	0				70	100	83	100	80	83	100	92
Nsinze HCIV, STAR EC, Namutumba	60	67	75	83	81	14	80	80	83	100	100	100	86	83
Buyinja HCIV, STAR EC, Namayingo	70	50	25			50	80	90	83	100	100	100	85	83
Bugiri Hospital, STAR EC, Bugiri	60	33	25			50	90	100	84	100	100	97	86	93
Kibuli Police Training School HCIII, SPEAR Kampala	30	67	100			14	58.3	90	83	100	100	100	93	100
Murchison Bay Hospital, SPEAR, Kampala	40	83	75	100	100	14	84.6	100	67	100	83	100	86	92
Masaka Police Clinic HCIII, SPEAR, Masaka	70	67	100	67	100	69	75	100	75	100	100	100	100	80
Bugangari HCIV, STAR SW, Rukungiri	40	50	0			21	100	100	83	83	80	97	100	100
Kabuyanda HCIV, STAR SW, Isingiro	60	50	0			21	92	100	83	83	83	85	93	85
Kisoro HCIV, STAR SW, Kisoro	70	50	0			21	77	90	80	83	94	80	75	83
Kayunga Hospital, MUWRP, Kayunga	80	83	100			93	100	90	100	100	100	90	85	100
Mobile Van, MURWP	70	100	100	100	100	93	100	100	83	100	83	97	86	100
Mukono HCIV, MURWP, Mukono	70	100	100	100	100	93	100	100	83	100	94	100	86	92
Budaka HCIV, STAR E, Budaka	60	50	100			46	100	90	83	100	100	91	79	85
Busolwe Hospital, STAR E Butaleja	60	33	50			15	76.92	100	67	100	100	91	93	92
Kibuku HCIV, STAR E, Kibuku	40	83	75	100	100	75	100	90	83	100	100	91	79	85
2nd Division Military Hospital, RTI, Mbarara	20	50			78	15	50	90	75	50	94	87	93	90
General Military Hospital, RTI, Luwero	22	67	67		47	29	85	90	83	83	100	91	93	92
4th Division Military Hospital, RTI, Gulu	40	67				38	84.6	90	67	83	83	70	100	100

Figure 98: Uganda: Performance dashboard on SMC quality standards, 19 new sites (June 2014 vs. Feb 2015)

	Jun-14							Feb-15						
Health Unit District IP Supporting Site	Management systems	Supplies, equipment & environment	Registration group education and IEC	Individual counselling & HIV testing	Male circumcision surgical procedure	Monitoring & evaluation	Infection prevention	Management systems	Supplies, equipment & environment	Registration group education and IEC	Individual counselling & HIV testing	Male circumcision surgical procedure	Monitoring & evaluation	Infection prevention
Wakiso Community health plan, UPHS, Wakiso	60	83				71	100	67	83				77	80
Bumanya HCIV, STAR EC	60	83	84	62	77	79	84	80	83	75	72	77	86	84
Kojja HCIV, MUWRP, Mukono	90	83				86	85	90	100	100	100	94	86	92
Iganga Islamic medical centre, IRCU, Iganga	50	83				36	70	80	67				78	80
Nankandulo HCIV, STAR EC, kamuli	80	83				79	85	80	67	83	67	87	79	85
Kiyunga HCIV, STAR EC, Luuka	90	83				79	85	90	67				79	85
Butebo HCIV STAR-E	60	83	50		93	36	92	50	67	60		90	64	84
Nabiganda HCIV STAR-E	80	83				57	70	80	67	100	83	90	86	80
Moroto Regional Referral Hospital SUSTAIN	80	83	83	83	80	57	92	70	83	83	83	85	86	100
Moroto Sector Field Hospital RTI/DoD	80	83				64		80	50	67	60	91	86	80
Nabilatuk HCIV SPEAR	80	83	75	67	82	57	85	80	67	75	83	82	79	83
Kotido HCIV SPEAR	50	83				57	77	70	67	83	83	90	71	85
Kiwoko Hospital Nakaseke IRCU	80	83				43	100	100	100	83	82	100	92	100
Achol Pii Military Hospital Pader	60	83	67	67	80	50	60	80	50	75	100	80	86	70
Pajule HC IV Pader NUHITES	22	83	0	22	23	14	36	50	83				43	50
Dokolo HC IV Dokolo NUHITES	50	83				14	77	80	67				79	92
Mubende regional Referral Hospital Mubende SUSTAIN	70	83	100	82	72	29	85	80	83	100	82	72	80	85
Maparo HCIV Kabale STAR SW	80	83	50	50	70	21	50	90	83	50	50	70	78	80
Ruhoko HCIV HCIV Ibanda STAR SW	100	83	50	50	70	21	90	100	100	70	80	70	60	90

- **Held the quarterly stakeholders meeting involving the representatives of the implementing partners, MOH, and representation from the USAID mission in Uganda** (Dec 12, 2015). During the meetings the implementing partners shared their updates on QI in SMC and ASSIST shared with them the plan for scale up of the QI work to other sites implementing SMC. There was also communication from the representatives from the USAID mission Uganda office.
- **Results: Improvement in client follow up at 48 hours at the four new health facilities, following formation of the improvement teams who collected and analyzed data on follow up.** The teams were oriented on the importance of client follow-up post-operative during the coaching visits and started to test the change of repackaging the information given to clients after circumcision. They changed from telling them to come 'only when they have problems/complications' to informing them to all come back at 48 hours for removal of the dressing and review of the surgical wound (see **Figure 53** for more information).
- **Improved management of adverse events and reducing the rate of occurrence of adverse events (AEs).** There was noted improvement in the management of adverse events; through mentorship of teams on the grading, documentation and review of AEs. The improvement teams were able to improve on the diagnosis of adverse events and work on reducing them in some facilities. In

all facilities, teams have been able to organize emergency supplies and equipment in the operating theatres for easy access in case of any adverse events or complications. Inventory lists for the supplies have been developed and are being checked for functionality at least on a monthly basis by the clinicians. The adverse events client management forms are being used for all clients who experience moderate to severe adverse events and this is also used during the review of the adverse events which have occurred in a month during the QI team meetings (see **Figure 52** for more information).

Improvement in Key Indicators

Swaziland:

Activity	Indicators	Baseline (Sept)	Oct- Dec 2014	Jan-Mar 2015
Apply QI principles to improve safe injection and waste management practices and to reduce the transmission of HIV/AIDS, Hepatitis B & C and other blood-borne pathogens.	Compliance with safe injection procedure practices (7 criteria)	68% 14 sites	74% 13 sites	83% 20 sites
	Compliance with safe injection practices in the facility (7 criteria)	65% 14 sites	61% 13 sites	80% 20 sites
	Health care worker safety (5 criteria)	14% 14 sites	39% 14 sites	49% 20 sites
	Health care waste management practice (6 criteria)	30% 14 sites	44% 14 sites	52% 20 sites
	Policies, Guidelines, Job (4 criteria)	0	0	49%
	Equipment and supplies (4 criteria)	0	0	49%
	Availability of structures for QI knowledge for service providers (3 Criteria)	0	0	47%

Uganda: Chronic Care

Activity	Indicators	**Baseline** (July 2014) 3 sites Nakaseke	**Last value** (Dec 2014) 3 sites Nakaseke
Refined Chronic Care Model Implementation & Impact Evaluation	% of ART patients that adhere to their scheduled appointment	73%	97%
	% of patience that demonstrate good adherence to their ARV medicines	73%	93%
	% of complete and correct medical records	71%	93%

Uganda: VMMC

Activity	Indicator	Baseline	Last value
Safe Male Circumcision	Percentage of SMC that meet the minimum quality standards at 30 health units supported by USAID ASSIST	10% (May 2013) N.B This was from 4 sites	77% (Feb 2015), 30 sites
	Percentage of SMC that of clients that experience moderate to severe adverse events at 30 health units supported by USAID ASSIST	0.5% (Oct 2012) N.B This was from 8 sites	0.7% (Feb 2015), 22 sites
	Percentage of clients that counselled tested and receive HIV test result within SMC setting	87% (Jan 2013), 14 sites	100% (Feb-2015), 22 sites
	Percentage of clients that are assessed for sexually transmitted infection prior to circumcision at 30 health facilities supported by USAID ASSIST	81% (Jan 2013), 19 sites	100% (Feb 2015), 22 sites
	Percentage of SMC clients with documented informed consent prior to circumcision at 30 health facilities supported by USAID ASSIST	83% (Jan 2013), 19 sites	100% (Feb 2015), 22 sites
	Percentage of clients of safe male circumcision that return for review within 48 hours after circumcision at 30 health facilities supported by USAID ASSIST	18% (Jan 2013), 7 sites	95% (Feb-15), 22 sites
	Number of knowledge products for generated to aid spread of knowledge	Jan'13 (0)	1

Challenges and Remedies

Swaziland:

- ASSIST does not procure equipment and supplies, which can make it very difficult to help some facilities improve without procuring some of the things for them to comply to standards. Some waste bins were procured by working with the laboratory health and safety office.
- Originally, the project was short-staffed, with only one full-time advisor working to support all the sites. Additional hands through the recruitment of an officer in the project and ongoing support from management has ensured data from all 20 sites is collected, thus clearly showing some marked improvements in some key indicators such as safe injection practice (20% change) and health care worker safety (10% change)
- Facilities in rural areas generally require more support due to accessibility issues. They tend to receive limited coaching, and to address that, ASSIST prioritized those sites for coaching.

Uganda Chronic Care: Site level improvement teams faced challenges with improving retention; linking up with patients that missed clinic appointments was difficult because their phones were either off or had poor network coverage. To address such challenges, they opted to assign expert patients a list of patients lost to follow up or who have missed their scheduled clinic appointment to trace them in the communities and encourage them to return to care.

Getting money and other logistics to make telephone calls was challenging. This problem was raised with the facility managers through the QI focal persons where a small provision for calling clients was made from the facility PHC funds.

Uganda VMMC:

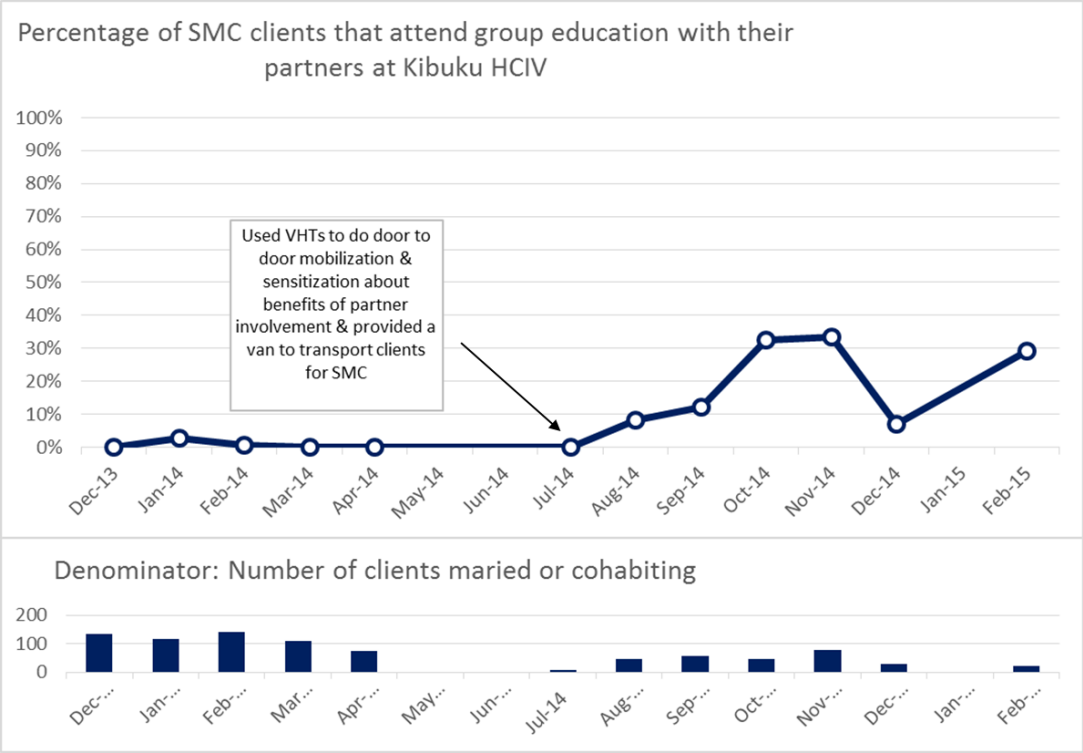
- The SMC data tools have been revised several times in a short period of time and this has made it challenging supporting the teams to adapt to using one version before another version is circulated again. Delay in availing these revised versions of the data tools to some of the health facilities has also made supporting the teams a challenge since data on some indicators may not be clearly captured. As a result, during the coaching visits, samples of the tools are carried along and soft copies availed to the teams for them to make copies as they wait for the copies from the implementing partners.
- At some health facilities, there were inconsistent quality improvement team meetings to review performance, identify gaps and test changes. This was due to inappropriate allocation of roles and responsibilities of members. Also, in some cases the facility in-charge were allocated roles of team leaders and due to their other commitment were unable to organize regular meetings. These called for supporting the teams to re-allocate roles of members and guide them on the expectations of each member at a team meeting.
- High staff turn-over at the military health facilities made sustainability of improvement at these facilities difficult.
- Facilities with no implementing partner supporting SMC work at their site had delays in addressing the gaps which required external inputs like availability of surgical kits.

Improving Equity

Uganda VMMC: Gender integration

- There have been efforts made to improve gender integration in SMC by sensitizing clients to come with their partners for SMC. All sites have tried to improve the proportion of clients attending SMC group education by obtaining a register for capturing all clients who attend group education and others are testing innovations of mobilizing the clients prior to the SMC community outreach, to come with their partners so that they too can benefit from the HCT services. This effort has seen increased uptake of SMC in some facilities.
- Kibuku HCIV registered some progress in this area. On realizing that partner involvement was not being emphasized during the community mobilization, the SMC QI team decided to sensitize the mobilizers (VHTs) about the benefit of partner involvement using VHTs to do pre-activity mobilization including door to door mobilization emphasizing the need for women to escort their husbands for SMC for those who are married or cohabiting. The mobilizers would then communicate to the health care workers who provided transport to collect all clients who had accepted to be circumcised including the couples. The results are shown in **Figure 99**.

Figure 99. Uganda: Percentage of SMC clients who attend group education with partners, Kibuku Health Center IV (Dec 2013- Feb 2015)



The decline in December could be attributed to the scale down of activities due to end of contracts and January 2015 there were no clients circumcised since site teams still preparing for next implementation cycle. This QI project is still being tested to see if it will yield better results or be modified accordingly.

Knowledge Management Products and Activities

Uganda Chronic Care:

- Developed and submitted an abstract to the International Forum on Quality and Safety in Health Care due in London from 21st to 25th April 2015 titled: *Partnership between patients and health workers to implement an improvement change package- A strategy to accelerate improvement gains.* This abstract was accepted for oral presentation at the improvement symposium during the forum.
- Guided a team from St Padre Pio to develop a success story titled: *Spreading Quality Improvement beyond HIV chronic care.* An intervention of health workers at St Padre Pio H/C III, Mityana, Uganda. This is still in draft form and is currently under review by the Ugandan knowledge management team.

Uganda VMMC:

- Finalized *A Guide to Improving the Quality of Safe Male Circumcision***.** This will be used to scale up QI support in Uganda.
- Submitted two abstracts for consideration for the ISQua 2015 conference titled:
  - Improving emergency preparedness in safe male circumcision for HIV prevention: An experience from Uganda.
  - Providing technical assistance to address the quality and safety of a national HIV prevention program in Uganda; the experience of USAID ASSIST project
- Organized the knowledge handover meeting (March 18 – 19, 2015) to enable the staff from the old sites share their experiences in improving the quality of SMC with staff from new health facilities in the knowledge management study and shared knowledge management products with the new sites.

Planned Activities Next Quarter: April - June 2015

Swaziland:

- Continue coaching and mentoring support
- Finalize all documents and posters
- Plan for endline assessment
- Recruit end line study personnel
- Conduct refresher trainings on injection safety and waste management for focal persons, IPC focal persons and wellness clinics focal persons
- Continue to support the World Bank waste treatment pilot

Uganda VMMC:

- Conduct monthly coaching visits in the sites of intense support
- Conduct quarterly coaching visits in the scale-up sites
- Conduct peer to peer learning session
- Conduct training for the district coaches of the scale-up sites

NACS-PHFS

Background

Building on HCI's experience in supporting Nutrition Assessment, Counseling and Support (NACS) services for HIV clients in Uganda, Kenya, Malawi and Zambia, the USAID ASSIST Project is supporting clinics and communities in Zambia and DRC to improve nutrition care and to strengthen their systems to ensure high quality care is being delivered. Under direct funding from FHI 360, URC staff have provided NACS improvement training to government and implementing partner staff in KwaZulu-Natal Province in South Africa and intensive coaching support to improve NACS services in five facilities in uMkhanyakude District of KwaZulu-Natal. In addition, ASSIST is integrating NACS to improve engagement, adherence, and wellness of people living with HIV in Kenya, Tanzania, and Uganda. ASSIST has also supported community improvement activities in Mozambique and is spearheading the global technical leadership and learning related to reducing HIV transmission to exposed infants under the Partnership for HIV-Free Survival (PHFS) that draws on experiences funded under HCI since 2011.

Institutionalization/Sustainability Strategy

All improvement work carried out in the countries is always conducted with the participation and engagement of districts and where possible, provincial and national government officials. ASSIST is also working closely with local partners.

As the global leader of PHFS' cross-country learning platform, ASSIST seeks to develop further buy-in and support from key global actors and stakeholders for the PHFS mechanism. Methods used include inter-country knowledge exchange visits to promote global learning and encouragement of government participation on the front lines of the PHFS work.

Program Overview

What are we trying to accomplish?	At what scale?
1. Improve technical assistance and leadership for NACS	
• Provide improvement technical assistance & leadership and share learning for integrating NACS into HIV care	Zambia (core-funded), DRC (mission-funded), and South Africa (mission-funded through FHI 360)
2. Improve technical assistance and leadership for PHFS	
• Provide improvement technical assistance, coordination & leadership across five countries • Document and share learning	Kenya, Lesotho, Mozambique, Tanzania and Uganda
3. Global leadership for PHFS	
• Provide global leadership and document and share learning across the six participating countries.	6 PHFS countries (Kenya, Lesotho, Mozambique, South Africa, Tanzania and Uganda) and globally
4. Zambia: Technical assistance to integrate NACS into HIV care	
Improve management and nutritional status of malnourished HIV clients by: • Integrating NACS into facility-based ART, PMTCT and MNCH services • Strengthening community-facility linkages • Strengthening the capacities of district health managers and care providers to apply improvement skills	1 district (Kitwe); 8 sites

What are we trying to accomplish?	At what scale?
5. Mozambique: Technical assistance to communities linking mothers to facilities (PHFS)	
• Quality improvement technical assistance for community-level activities to improve uptake of PMTCT and retention in care	3 provinces (Gaza, Zambezia, and Sofala); 95 *bairros* Provide direct technical support to 39 *bairros* in Gaza and to community partners in Zambezia and Sofala
6. Apply improvement principles to implement an integrated, person-centered approach to HIV and nutrition care to improve engagement, retention, and wellness of people living with HIV (PLHIV)	
• Improve the overall health and well-being of PLHIV by addressing factors affecting their health (including biomedical, nutritional, psychosocial, logistical) through use of improvement and an integrated approach to care • Contribute to the evidence base on how an integrated, person-centered approach to HIV and nutrition services can influence engagement, retention, and well-being of PLHIV	Limited number of high-volume sites in Kenya, Tanzania, and Uganda

Improvement Activity

Cross-cutting Activity

Accomplishments and Results by Activity (October 2014 – March 2015)

Activity 1. Improve technical assistance and leadership for NACS

Overview and Accomplishments:

ASSIST supports NACS implementation and scale-up by applying quality improvement techniques to strengthen health systems that deliver nutrition services for PLHIV. Currently, NACS implementation is being supported by core funds in Zambia (see Activity 4).

Regular check-in calls are being conducted with all countries that currently conduct NACS activities. These calls are designed to promote learning and to identify technical support that may be needed by the countries.

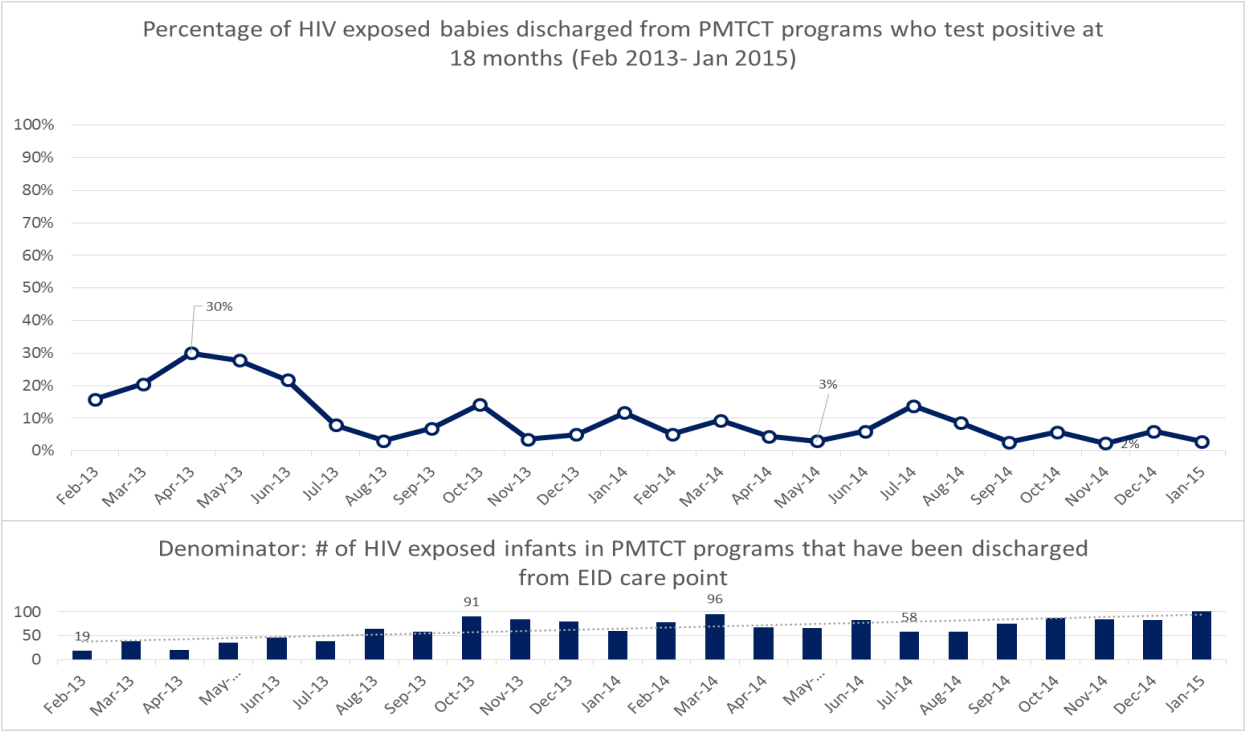
Activity 2. Improve technical assistance and leadership for PHFS in five countries

Overview: This PHFS activity supports country teams working on improvement aims to achieve HIV-free survival by supporting optimal infant feeding practices and protecting exposed infants from HIV infection. ASSIST's leadership works to generate new knowledge on how best to improve the quality of pre- and postnatal eMTCT care, including nutrition interventions.

Accomplishments and Results:

- **Reduction of mother-to-child transmission of HIV in Uganda's demonstration sites** (Feb 2013 – Jan 2015) through retention of mother-baby pairs in care and ensuring both mother and baby receive all services for HIV prevention and treatment. As shown in **Figure 100**, the percentage of HIV-exposed babies discharged from PMTCT programs who tested positive for HIV at 18 months was reduced from 30% in April 2013 to 3% in January 2015.

Figure 100. Uganda: Percentage of HIV-exposed babies discharged from PMTCT programs who test positive at 18 months, 22 sites, 3 districts (Feb 2013 – Jan 2015)



Activity 3. Global leadership for PHFS

Overview: ASSIST is responsible for managing the cross-country platform and learning for PHFS, which has selected the quality improvement methodology to close the gap in MTCT.

ASSIST has used several mechanisms to disseminate information, such as quarterly webinars, and monthly updates. The monthly updates reach 212 subscribers of the PHFS email listserv, which includes USAID, host country government officials, and implementing staff. The monthly updates contain a programmatic update from field activities in a PHFS country. The quarterly webinars are facilitated by ASSIST staff members with presentations provided by in-country staff who are leading PHFS activities for their respective ministry or organization.

Accomplishments and Results:

- **Held Lesotho-Uganda Knowledge Exchange Visit in Uganda between implementing teams from Lesotho and Uganda that work on PHFS** (Feb 2015). Ministry of Health staff from Lesotho and Uganda along with USAID ASSIST Project staff participated in the knowledge exchange and shared good practices but also challenges from their work. The objectives of the knowledge exchange were: 1) Share and learn from programmatic successes and challenges among Lesotho and Uganda, which are both implementing activities from PHFS. 2) Discuss changes tested and implementation strategies that can be adapted by the visiting country and the host. 3) Identify lessons and action steps from the visit.
- **Held quarterly webinar** (Jan 2015). Staff from Elizabeth Glaser Pediatrics AIDS Foundation (EGPAF) in Tanzania and ASSIST Mozambique presented on community linkages and their importance toward improving PMTCT care.
- **Conducted programmatic monthly updates** (Dec 2014-March 2015). Monthly updates on a specific theme are sent out over the PHFS listserv.

Activity 4. Zambia: Technical assistance to integrate NACS into HIV care to increase engagement and retention

Overview: ASSIST supports NACS implementation and scale-up by applying quality improvement techniques to strengthen health systems that deliver nutrition services for PLHIV. Through delivery of NACS services, ASSIST aims to get all ART patients assessed and categorized for malnutrition and referred to services that provide therapeutic or supplementary foods, with the ultimate goal of managing and addressing malnutrition among PLHIV. *(This activity is reported in full in the Zambia report under Field support-funded activities.)*

Activity 5. Mozambique: Technical assistance to communities linking mothers to facilities (PHFS)

Overview: ASSIST received initial funding from PEPFAR in 2013 and additional funds from USAID/Mozambique in 2015 to support community-level improvement activities in the catchment area of facilities participating in the PHFS to improve postnatal PMTCT care for HIV-infected mothers and their infants to maximize HIV-free survival of infants. In December 2013, ASSIST began to provide technical support for community-level improvement to the Ministry of Health of Mozambique. The goal of the PHFS Community Demonstration Project was to contribute to the elimination of mother-to-child transmission through increased community awareness, improved community-facility linkages, and increased access to services for pregnant women. ASSIST provided limited training to PHFS partners in Sofala and Zambezia provinces in the community health systems strengthening model, quality improvement, and coaching. In Gaza Province, ASSIST provided direct technical support to Bilene District and Chissano, Incaia and Licilo health centers and their respective catchment areas, totaling 39 communities. *(This activity is reported in full in the Mozambique report under Field support-funded activities.)*

Activity 6. Apply improvement principles to implement an integrated, person-centered approach to HIV and nutrition care to improve engagement, retention, and wellness of people living with HIV

Overview: USAID ASSIST will work in three East African countries - Kenya, Uganda, and Tanzania - that are currently part of the multi-country PHFS. The objective is to strengthen engagement, retention, and wellness of adult and pediatric malnourished HIV patients, including introducing the program in high-volume learning sites, understanding interventions that work, and sharing implementation experience and data among the countries to identify a common set of interventions that lead to desired outcomes, with the goal of eventual spread to other sites and regions within the countries. ASSIST will work in collaboration with two other centrally funded projects, the FANTA III Project and the LIFT II Project, along with bilateral clinical service and care partners. Implementation of the program will begin in May 2015.

Improvement in Key Indicators

Activity	Indicators	Baseline	Last value
Improvement technical assistance and leadership for PHFS (Uganda)	Percentage of HIV-exposed babies discharged from PMTCT programs who test positive at 18 months	16% (Feb 2013) (7 sites) 30% (April 2013) (10 sites)	3% (Jan 2015) (22 sites)
Technical assistance to integrate NACS into HIV care (Zambia)	Percentage of patients assessed and categorized for nutrition status	0% (June 2014) (6 sites)	92% (March 2015) (6 sites)

Challenges and Remedies

- Getting and maintaining buy-in from government staff and other partners can be challenging and requires consistent work to sustain their engagement with the activity.

Knowledge Management Products and Activities

- **Report drafted**: A draft of the final report on NACS work in Malawi, “Strengthening Systems to Improve Nutrition Care, Support, and Treatment in Malawi” was completed in March 2015 and is under review.
- **Case study drafted**: A case study documenting the process and results of the Lesotho-Uganda PHFS knowledge exchange visit in being finalized.
- **ASSIST developed three videos related to the Lesotho-Uganda knowledge exchange carried out in February 2015:**
  - “Lesotho-Uganda Knowledge Exchange visit for the Partnership for HIV-Free Survival”. Available at: https://vimeo.com/123231180
  - "Value of Exchange". Available at: https://vimeo.com/123231179
  - "Reflection on Coaching". Available at: https://vimeo.com/123231178)

Planned Activities Next Quarter: April - June 2015

- Planning meeting in Dar es Salaam, Tanzania, for teams from Kenya, Tanzania, and Uganda to plan new NACS work on improving engagement, retention, and wellness of PLHIV (May 2015)
- Brown Bag presentation at USAID on the NACS and PHFS activities (May 2015)
- Second PHFS knowledge exchange visit, from Kenya to Tanzania (June 2015)

VULNERABLE CHILDREN AND FAMILIES

Background

Building on the work of a regional initiative to improve the quality of OVC programming known as "Care that Counts," started under HCI in 2007, in October 2013 the USAID ASSIST Project began enhancing the technical and organizational capacity of the Regional Psychosocial Support Initiative (REPPSI) and the African Network for the Protection and Prevention of Child Abuse and Neglect (ANPPCAN) to provide a quality improvement approach to child protection services in Tanzania, Uganda, Swaziland, and Kenya.

Institutionalization/Sustainability Strategy

From its inception, ASSIST has worked with governments to institutionalize improvement in social services. ASSIST has provided technical assistance in ten countries in the ministry-led process of developing, piloting and implementing minimum service standards for vulnerable children. The current core work under Partnerships in Community Child Protection is designed to build the capacity of regional African organizations and includes government at national and local levels. The work is also aimed at integrating formal and informal mechanisms within the social service system of care.

Program Overview

What are we trying to accomplish?	At what scale?
1. Partnerships for Community Child Protection	
• Build the technical and organizational capacity of REPPSI and ANPPCAN to provide a quality improvement approach to child protection services	REPSSI operates in 13 Sub-Saharan countries, ANPPCAN in 22
• Improve child well-being through integration of community and formal child protection mechanism	2 communities X 2 districts X 2 countries – Uganda and Kenya
2. Global Technical Leadership	
• Provide technical support to ministry, partners, and project staff to use improvement approaches to improve quality of child protection mechanisms at the national and local levels	Global

Improvement Activity

Cross-cutting Activity

Accomplishments by Activity (October 2014 – March 2015)

Activity 1. Partnerships for Community Child Protection

Overview: In 2011, HCI established a partnership with REPSSI and ANPPCAN. Continuing under ASSIST, the partnership has provided organizational and technical capacity building opportunities for REPSSI and ANPPCAN on quality improvement and research and evaluation. HCI also awarded subcontracts to REPSSI and ANPPCAN, with the objective of improving the effectiveness and reach of child protection systems in Africa, through an understanding, strengthening, and integration of the formal and informal mechanisms at the local levels. Through the establishment of technical working groups at the regional, national, district (local government), and community levels, the project has created an action-oriented, bottom-up community of learning on child and family protection systems that cuts across multiple levels of the system in four countries: Kenya, Swaziland, Tanzania and Uganda. Through ASSIST, the partnership's improvement activities in the Kenya and Uganda communities will be continued.

Accomplishments and Results:

- **Built the technical and organizational capacity of REPPSI and ANPPCAN to provide a quality improvement approach to child protection services.** ASSIST continues to capture opportunities to

include ANPPCAN and REPSSI in improvement meetings, trainings, and mentoring activities. ASSIST holds a monthly conference call with HQ and OVC countries. ANPPCAN and REPSSI have been invited to attend those meetings so that they can learn how to incorporate the material from these meetings. In planning/implementing improvement activities in Kenya and Uganda, ASSIST is able to provide ANPPCAN and REPSSI with ongoing knowledge of improvement and quality.

- **Developing a protocol for improvement activities in Nairobi, Kenya, and districts in Uganda.** To improve child well-being through integration of community and formal child protection mechanisms, ASSIST is designing a protocol for activities to include control groups through a step-wedge design, which will be submitted for institutional review board approval in country. The work will build on the Partnerships in Community Child Protection begun under HCI. The two focus countries will be Kenya and Uganda.

Activity 2. Global Technical Leadership

Overview: Provide technical support to ministry, partners, and project staff to use improvement approaches to improve quality of child protection mechanisms at the national and local levels

Accomplishments and Results:

- **Across all technical areas, ASSIST has developed Aims, Indicators and Content templates to harmonize improvement efforts across countries** (**Figure 101**). Improvement Aims for the Vulnerable Child and Family area are very broad, and include health, nutrition, food security, shelter, psychosocial care, child protection, education, and household economic strengthening. In developing improvement aims, it important to recognize the ages and stages dimension of social services and the recognition that children have particular needs at different developmental levels. Aims and indicators for an infant under two will be different than for an adolescent.

Figure 101. Excerpt of Aim, Indicator, and Content Template

Improvement Aim 3: Increase the % of children living in vulnerable households whose essential needs are met by the primary caregivers through caregivers' implementation of money management best practices.

Care Phase, System level, Age group or other (as relevant for aim)	Evidence-based Interventions	Anticipated Barriers	Change Ideas
Community	Establish savings groups: village savings and loan associations (VSLAs), savings and internal lending communities (SILCs), and self-help groups (SHGs).	• Community doesn't have access to information on organizing for a VSLA. • VSLA doesn't follow best practices.	• Distribute booklet on VSLA best practices. • Document contributions and loans in accounting book • Charge a fine for late loan payments
Caregiver	Target female caregivers: When mothers own assets, children have better outcomes because their nutrition is better and they benefit from increased spending on education and clothing[6]. Caregivers participating in VSLAs increased child well-being[7]	• Caregivers may not understand or accept that there are benefits to VSLAs. • Women may not have agency within family.	• Raise awareness of VSLAs at women's group meetings. • During VSLA meetings, hold 30 minute discussions on child development and needs of children.
Adolescent	Engage children directly in HES: In a savings intervention that included mentoring, job counseling, and financial education, AIDS-orphaned adolescent girls and boys self-reported significant positive effects on their health and mental health functioning.[8]	• Children excluded from VSLAs.	• Access adolescents through a school program. • Hold VSLA meeting after school on school grounds.

[6] Chowa, Gina A. N. Asset Outcomes for Women and Children: a Research Review, Center for Social Development, 2007.

[7] *Bundervoet, Annan, & Armstrong, & Bundervoet, 2011. "Urwaruka Rushasha"*: A Randomized Impact Evaluation of Village Savings and Loans Associations and Family-Based Interventions in Burundi." https://www.microlinks.org/sites/microlinks/files/resource/files/Bundervoet%20Annan%20and%20Armstrong%202011.pdf

[8] Ssewamala, Fred M. et al. Asset Ownership and Health and Mental Health Functioning among AIDS-orphaned Adolescents: Findings from a Randomized Clinical Trial in Rural Uganda. Social Science and Medicine, 2009

- **Below are examples of the Aims, Indicators, and Content templates for one domain, Household Economic Strengthening:**

- Increase the percent of children living with vulnerable households whose essential needs are met by the primary caregivers through linkages between household economic strengthening (HES) activities and other social and health services
- Increase the percent of children living in vulnerable households whose essential needs are met by the primary caregivers through integration of HES activities with complementary interventions
- Increase the percent of children living in vulnerable households whose essential needs are met by the primary caregivers through caregivers' implementation of money management best practices
- Increase the percent of children living in vulnerable households whose essential needs are met by the primary caregivers through caregivers' participation in income generating activities
- Increase the percent of children living in vulnerable households whose essential needs are met by the primary caregives through identification and linking of extremely destitute families to informal and formal emergency resources (food, shelter, etc.).

- **The USAID ASSIST Project hosted a TAG meeting in January 2015, with presentations of results across all the technical areas, including Vulnerable Children and Families.** Results were presented from Kenya (linkages from OVC services to health services), Malawi (improvement of primary school performance), Uganda (improving birth registration) and Tanzania (sustainability). Several comments were heard from attendees of the meeting that they did not realize improvement methods were being used in social services.
- **Continuous Shared Learning, Local to Global to Local.** Every improvement team in every country accumulates vast experiences and lessons that need to be shared with others or they are lost on the ground. ASSIST places great value in each team's experiences in improving the quality of care and protection of vulnerable children and families and is invested in ensuring that lessons learned in one site or country are spread to other countries. ASSIST holds once-monthly calls with ASSIST staff, to which ANPPCAN and REPSSI are invited. We plan to feature invited guests on the calls as we develop the agenda and to cover trending topics. For example, next month's call will be led by the Kenya team and will be focused on health indicators in OVC programming.
- **REPSSI will hold its biannual forum in September 1-3rd in Zimbabwe.** The theme of the meeting is Love, Care, and Protection – From Infancy to Adolescence. ASSIST has been welcomed by REPSSI to submit a panel proposal for the Forum, to include improvement work from Kenya, Uganda, Tanzania, and Malawi. We are in the process of developing content for that panel.

Planned Activities Next Quarter: April - June 2015

- Submit Partnerships in Community Child Protection protocols in Kenya and Uganda
- Finalize an Aims, Indicators and Content template on aims to decrease violence against children
- Submit a panel proposal on improvement methods across developmental transitions for REPSSI Forum September 1-3, 2015

5. COMMON AGENDA ACTIVITIES

GLOBAL TECHNICAL LEADERSHIP

Background

The USAID ASSIST Project's global technical leadership activities on behalf of USAID seek to further advance and inform the field of improvement globally by engaging and building capacity of USAID implementing partners and global health organizations to expand the application of improvement approaches. The project aims to serve as a conduit and catalyst for sharing, learning, and advancement in the field of improvement applied to health and social services.

USAID ASSIST technical leadership and communication activities build on publications and relationships developed under the seven years of the USAID Health Care Improvement Project. They seek to contribute to the global health community's understanding of the contribution of improvement methods to health systems strengthening and demonstrate how USAID investment in this project provides good value for money by producing meaningful results linked to USAID's Global Health priorities of EPCMD and AFG.

Technical leadership activities are carried out primarily by the project management, technical unit leads, and country teams.

Program Overview

What are we trying to accomplish?*	At what scale?
1. Increase application of improvement methods	
• Expand the use of modern improvement approaches in USAID-assisted health care systems and by USAID cooperating agencies through global technical leadership for USAID's worldwide efforts to improve health care in developing countries	Global, Regional
2. Demonstrate results	
• Demonstrate the results of USAID's investment in health care quality improvement	Global, Regional
3. Build capacity in improvement	
• Support the development of improvement competencies in ASSIST staff, counterparts, and implementing partners	Global

Note: The FY15 USAID ASSIST work plan included a fourth Global Technical Leadership activity: **Develop Global Health eLearning (GHeL) course on improvement. In the second quarter of FY15, this activity was approved for funding under the project's Cross-Bureau support activities and is therefore reported under Cross-Bureau Support.*

Cross-cutting Activity

Accomplishments and Results by Activity (October 2014 – March 2015)

Activity 1. Increase application of improvement methods

Overview: As the USAID Office of Health Systems' flagship project on improvement, USAID ASSIST has a mandate to coordinate and collaborate with international agencies and USG implementing partners to expand the application of modern improvement methods, particularly in USAID-assisted countries and in support of USAID global health priorities. The project fulfills this role by raising awareness of the value of improvement methods through staff participation in technical working groups and expert consultations and contributions to frameworks, issue papers, and working papers.

Accomplishments and Results:

- **Incorporated improvement in the work of the UN Commission on Life Saving Commodities (UNCoLSC) Newborn Resuscitation working group**: Dr. Kathleen Hill participated in a meeting on October 14, 2014 of the UNCoLSC Newborn Resuscitation working group in Washington at which she presented a technical framework (and country level applications) developed by USAID ASSIST in partnership with the working group: *Improving Quality of Basic Newborn Resuscitation in Low-resource Settings: A Framework for Managers and Skilled Birth Attendants*, available at: https://www.usaidassist.org/resources/improving-quality-basic-newborn-resuscitation-low-resource-settings-framework-managers-and.
- **Participated in HRSA Expert Meeting on organizational capacity development**: On October 16, 2014, Dr. M. Rashad Massoud participated with representatives from various universities, Research Triangle Institute, MSH, CSR and JSI in an expert meeting hosted by the US Human Resources and Services Administration (HRSA) to review best practices in accurately assessing capacity and building ownership for technical assistance plans; identify aspects of an ideal capacity assessment approach that can be used to meet US Government and local stakeholder interests. The goal of the HRSA Expert Meeting was to determine a recommended organizational capacity assessment approach for local organizations within USG-funded health programs for planning technical assistance and building in-country ownership to become effective and sustainable.
- **Led interactive training workshop at Harvard School of Public Health**: On October 20, 2014, Dr. Massoud and Ms. Danika Barry led an interactive training workshop on improving health care for students at the Harvard School of Public Health in a course taught by Dr. Paul Campbell.
- **Presented to Maternal and Child Survival Program (MCSP) on gender:** On October 30, 2014, Dr. Taroub Faramand of WI-HER LLC presented to MCSP staff on USAID ASSIST's approach to integrating gender considerations through improvement methods. On January 12-13, 2015, Dr. Hill represented ASSIST at the Technical Consultation on Reporting and Mapping Maternal Deaths in Countries with High Maternal Mortality, organized by MCSP in Washington, DC.
- **Promoted improvement approaches with the Mesoamerican Health 2015 Initiative**: Dr. Massoud, Dr. Jorge Hermida, and Ms. Barry were invited by the Interamerican Development Bank to participate in the first Salud Mesoamerica 2015 (SM2015) regional meeting in Panama City, November 11-12, 2015. Over 100 delegates from all eight SM2015 countries participated. Dr. Hermida spoke about the LAC virtual improvement collaborative on newborn care that ASSIST is launching and distributed materials in Spanish and English about USAID-supported improvement work in Latin America.
- **Participated in Survive and Thrive meeting**: On Nov. 20, 2014, Dr. Hill participated in the bi-annual meeting of the private-public Survive & Thrive GDA to discuss the integration of QI capacity-building into Survive & Thrive's maternal and newborn country clinical training and implementation activities supported by the GDA, including as part of the three-country "Helping 100,000 Babies Survive" initiative being implemented in India, Nigeria, and Ethiopia.
- **Presented evidence for collaborative improvement and use of cost-effectiveness analysis to the Institute of Medicine**: On November 24, 2014, Dr. Massoud presented to a select Institute of Medicine panel—the Standing Committee to Support USAID's Engagement in Health Systems Strengthening—on the evidence for collaborative improvement, drawing on URC's work over the past 15 years. The panel was convened by USAID to assess the evidence for improvement methods in health care. On Jan. 28-29, 2015, several ASSIST staff and partners participated in the public workshop in Washington, DC, organized by the same Institute of Medicine Standing Committee. Dr. Massoud and Dr. Edward Broughton served as panelists to discuss Tools and Processes for Quality Improvement and Cost-effectiveness of Quality Improvement Interventions.
- **Participated in expert meeting to develop WHO monitoring and evaluation framework**: On Dec. 2-3, 2014, Dr. Tamar Chitashvili participated in an expert meeting at WHO in Geneva to develop a monitoring and evaluation framework that covers the WHO non-communicable disease mHealth portfolio. The meeting was convened by WHO and the International Telecommunications Union (ITU). On Dec. 4-5, 2014, Dr. Hill participated in an expert meeting on metrics for the Every Newborn Action Plan at WHO in Geneva.

- **Participated in IOM Roundtable on Population Health Improvement in the United States**: On Dec. 4, 2014, Dr. Massoud participated in an expert panel in New York City convened by the Institute of Medicine to recommend strategies for scaling up population-level health interventions in the United States.
- **Participated in Evidence to Action** (**E2A) Scale-up Community of Practice**: Dr. Massoud and Dr. Maina Boucar spoke at the Community of Practice meeting on Scaling Up convened by the E2A Project on Dec. 5, 2014 in Washington, DC. Dr. Stella Mwita, Dr. Victor Boguslavsky, Ms. Kim Ethier Stover, Ms. Barry, and Ms. Amanda Ottosson also participated in the discussions on scale-up. ASSIST Agreement Officer's Representative (AOR) Dr. Jim Heiby was also a keynote speaker.
- **Presented on facility-based improvement at the Implementing Best Practices (IBP) Consortium meeting in Bethesda, MD**. The presentation was made by Ms. Stover presented on Dec. 11, 2014. The meeting involved over 90 IBP members who participated in activities designed to further members' understanding of implementation science and its relationship to the work of family planning and reproductive health program implementers.
- **Coordination with PEPFAR male circumcision implementing partners**: Dr. Pamela Marks, Dr. Donna Jacobs, Ms. Anisa Ismail, and Ms. Lani Marquez represented USAID ASSIST at the USAID VMMC global partners meeting convened at JSI on Jan. 12-13, 2015, presenting on ASSIST's current VMMC work in Uganda and South Africa, QI tools, and knowledge management activities.
- **Participated in Human Resources for Health**: On March 24, 2015, Dr. Massoud participated in a human resources for health meeting on the global HRH strategy that is being developed by the World Bank, WHO and USAID. At the meeting, Professor Frances Day-Stirk of the International Confederation of Midwives presented the findings of the technical working group she co-led with Dr. Massoud on improving health worker productivity and performance in the context of Universal Health Coverage.
- **Contribution to *Disease Control Priorities***: Dr. Broughton was invited to co-author a chapter on cost-effectiveness of improvement in the upcoming third edition of *Disease Control Priorities* (DCP-3), coordinated by the University of Washington's Department of Global Health (UW-DGH) and the Institute for Metrics and Evaluation (IHME), funded by the Bill & Melinda Gates Foundation. On March 25, 2015, Dr. Massoud and Dr. Broughton participated in a DCP-3 authors' meeting at the Harvard School of Public Health in Boston. Dr. Massoud also participated in a meeting of the Harvard Alumni Council.

Members of the USAID ASSIST Project Technical Advisory Group (TAG) (left to right): Ms. Katie Taylor (Deputy Assistant Administrator for the Bureau of Global Health, USAID), Dr. Enrique Ruelas (President, National Academy of Medicine, Mexico), Dr. Alex Rowe (Medical Epidemiologist, U.S. Centers for Disease Control and Prevention), Dr. Francis Omaswa (Executive Director, African Centre for Global Health and Social Transformation), Sir Liam Donaldson (WHO Envoy for Patient Safety and former Chief Medical Officer for the United Kingdom), and Mr. Derek Feeley (Executive Vice President, Institute for Healthcare Improvement). *Photo by Simon Hiltebeitel, URC.*

Activity 2. Demonstrate results

Overview: Project staff demonstrate the results of USAID's investment in health care quality improvement through presentations at international and regional conferences, publication of findings in peer-reviewed journals and project reports, and the organization of technical events and briefings.

Accomplishments and Results:

- **USAID ASSIST convened a high-level Technical Advisory Group to advise the project in its second half**: On Jan. 22, 2015, USAID ASSIST convened its technical advisory meeting in Washington, DC, bringing together a distinguished group of improvement science and health systems experts to review the ASSIST Project's strategies and accomplishments to date and provide recommendations for future USAID efforts to improve the quality of health care. (See photo for names and affiliations of the six TAG members).
- **Active engagement of ASSIST staff at three high-level international health meetings**: As shown in **Table 7**, ASSIST had an active presence at the Global Symposium on Health Systems Research in Cape Town, the International Society for Quality in Health Care (ISQua) annual conference in Rio de Janeiro, and the International Union Against Tuberculosis and Lung Disease (IUATLD) Congress in Barcelona, Spain. In all, staff made 23 oral and eight poster presentations and convened two workshops at eight conferences during the first half of FY15.

Table 7. USAID ASSIST Project conference participation, Q1-Q2 FY15

Conference	USAID ASSIST Staff Participation
Third Global Symposium on Health Systems Research Sept 30 – Oct 3, 2014 Cape Town, South Africa	• M. Rashad Massoud participated in the HRH Working Group satellite session with Co-Chair Frances Day-Stirk to presented the findings of the Performance/Quality/Productivity/Regulation working group • Tana Wuliji presented at the session, "Enhancing Patient-Centered Care: Translating Knowledge into Action for CHW Performance" • Ram Shrestha made the oral presentation, "Strengthening the community system to increase access to people-centered care in Ethiopia" • Martin Muhire made the oral presentation, "Experiences of how patients are involved in tracking fellow patients back to HIV chronic care at a health centre III in Uganda" • Astou Coly presented the poster, "Reasons for discontinued clinic attendance: Perspectives from ART patients in Cote d'Ivoire" • Tamar Chitashvili presented the poster, "Addressing rational use of medication in pediatric patients with respiratory tract infections through collaborative improvement in Georgia" • Herbert Kisamba presented the poster, "Improving access to essential medicines at health facilities through active engagement of district leadership: experience from Uganda" • Joseph Kundy presented the poster, "Better HIV care – why does health worker engagement matter? A cross-sectional mixed methods study of health worker performance and engagement in Tanzania"
31st ISQua International Conference October 5-8, 2014 Rio de Janeiro, Brazil	• Kate Fatta, Sidhartha Deka, Elizabeth Silvia, and M. Rashad Massoud led the pre-conference half-day workshop, "Managing Knowledge to Improve Care" • Jorge Hermida made the oral presentations, "Towards Universal Health Coverage: Improving Access and Quality of Maternal and Newborn Care in the Lowest Coverage Districts of Cotopaxi Province, Ecuador" and "Aligning formal and traditional care systems to increase access and quality" • Jude Ssensamba made the oral presentation, "Using quality improvement to improve follow up of safe male circumcision (SMC) clients for HIV prevention: A review of ten health facilities in eastern Uganda" • Rhea Bright made the oral presentation, "Clients' & providers' perspectives of PMTCT services in Tanzania: A qualitative exploratory study of an activity to increase uptake and retention of PMTCT services"

Conference	USAID ASSIST Staff Participation
	• Edward Broughton made the oral presentation, “Cost-effectiveness of improving maternal and neonatal health care: results from Mali and Uganda” • Linley Hauya made the oral presentation, “Strengthening systems to improve nutrition care, support and treatment in Malawi: Results from Balaka and Karonga districts” • Sidhartha Deka made the oral presentation, “Enabling a learning approach for collaborative quality improvement in India” • Elizabeth Silva made the oral presentation, “Innovative Approaches to Gender Integration Using the Science of Improvement to Improve Patient Care: • Kate Fatta made the oral presentation, “Using Knowledge Management Techniques to Spur Peer-to-Peer Learning in Improvement Programs in Low and Middle Income Countries” and presented the poster, “Leveraging Knowledge Management Techniques to Improve Improvement Programs in Low and Middle Income Countries”
American Evaluation Association October 15-18, 2014 Denver, Colorado	• Sarah Smith Lunsford made the oral presentation, “Evaluating a Community Health System: Lessons from Tanzania” and “Improving healthcare for NCDs in Georgia” (the latter on behalf of Edward Broughton). • Naheed Ahmed of CCP presented “Learning During: Leveraging Tacit Knowledge to Improve Voluntary Medical Male Circumcision Services in Uganda” as part of the panel, “Social KM interventions—learning before, during, and after implementation”
IUATLD World Congress **28 Oct-1 Nov 2014** **Barcelona, Spain**	• Samson Haumba, Marianne Calnan, Janet Ongole, Lindiwe Mkhatshwa, Lindiwe Dlamini and Makhosazana Matsebula made 4 oral presentations and 3 poster presentations on the results of ASSIST tuberculosis and TB-HIV work in Swaziland
APHA November 15-19, 2014 New Orleans, LA	• M. Rashad Massoud made a remote (virtual) presentation, “Scaling up high-impact interventions”
Health 20 Summit Nov 13-14, 2014 Melbourne, Australia	• Tana Wuliji served as Rapporteur at the closing session of the meeting convened by the World Medical Association to coincide with the G20 Summit
X Kangaroo Mother Care International Conference Nov. 17-19, 2014 Kigali, Rwanda	• Goldy Mazia from the MCSP Project presented results from ASSIST´s work on Kangaroo Mother Care in the LAC Region, in coordination with the LAC Newborn Alliance
IHI National Forum Dec. 7-10, 2014 Orlando, FL	• M. Rashad Massoud, Edward Broughton and John Ovretveit led the *Learning Lab*, “Frugal Improvement and Spread: Doing More with Less” • Maina Boucar and Stella Mwita also attended.
2015 Prince Mahidol Award Conference	• M. Rashad Massoud made a remote (virtual) presentation, “Universal Health Coverage Ensuring quality care for all!”

Conference	USAID ASSIST Staff Participation
January 27-31,2015 Bangkok, Thailand	
Global Health Mini-University March 2, 2015 Washington, DC	• Simon Hiltebeitel and Sidhartha Deka presented in the session "Data Viz Makeover: Approaches for Improving Data Visualizations" • Taroub Faramand, Megan Ivankovich, and Elizabeth Silva led the session "Gender Integration: The Key to Sustained Improvements in HIV Programs"

- **Three articles published and one accepted for publication in peer-reviewed journals**: Four articles by ASSIST staff were published or accepted for publication: one on provincial-level quality improvement activities in Afghanistan (*Conflict and Health*); a letter to the editor in *Lancet* about reducing inappropriate antibiotic use in Georgia; one on experience supporting close-to-community providers in Ethiopia and Tanzania (Human Resources for Health); and one on the effect of improved TB-HIV services on declining TB notification rates in Swaziland (*Public Health Action*). Five additional articles were submitted for publication during the two quarters. (See **Table 8**.)
- **Published five case studies, three technical reports, three short reports, 22 annual reports, and two tools** during the first two quarter of FY15 – indicating the large amount of effort dedicated to annual reporting in the first quarter of the new fiscal year. During the second quarter of FY15, we began a conscious effort to develop video content to complement our written publications. Four videos – one related to facility-level improvement in India and three related to the Lesotho-Uganda knowledge exchange carried out in February 2015 – were developed in the second quarter. One video related to community support to improve TB care in Uganda is under development. The links to the four completed videos are shown in **Table 8**. All USAID ASSIST publications may be accessed from the Resources section of the project website: https://www.usaidassist.org/resources.

Table 8. USAID ASSIST Project publications (Oct 2014 – March 2015)

Articles Published or Accepted for Publication in Peer-Reviewed Journals
Rahimzai M, Naeem AJ, Holschneider S, Hekmati AK. 2014. Engaging frontline health providers in improving the quality of health care using facility-based improvement collaboratives in Afghanistan: Case study. Published 22 October 2014 in *Conflict and Health*. Manuscript number: 5641720412983154.
Broughton E, Chitashvili T, Hill K, Cherkezishvili E, Shengelia N. 2014. Antibiotic Use Worldwide. Published as correspondence in the December 2014 issue of *The Lancet*: http://www.thelancet.com/journals/laninf/article/PIIS1473-3099(14)70986-7/fulltext
Haumba S, Dlamini T, Calnan M, Smith-Arthur AE, Ghazaryan V, Ehrenkranz P, Preko P. Declining Tuberculosis Notification Trend Associated with Strengthened TB and Expanded HIV Care in Swaziland. Accepted for publication in IUATLD *Public Health Action* 25Feb2015 Manuscript PHA-01-15-0008.R1.
Lunsford SS, Fatta K, Stover KE, Shrestha R. 2015. Supporting CTC providers through a community health system approach: Case examples from Ethiopia and Tanzania. *Human Resources for Health.* Accepted for publication on 8 March 2015. Published online on 3/28/15: http://www.human-resources-health.com/content/13/1/12
Articles Submitted for Publication in Peer-Reviewed Journals
Stern AF. Use of Community Health System Model to Improve Linkage of Pregnant Women to Facilities in Mozambique through the Partnership for HIV-Free Survival. Submitted 12/18/14 to *JAIDS* Special Supplement edited by Pierre Barker.
Massoud MR, Mensah-Abrampah N, O'Neill ID. Health system strengthening: a system is as strong as the result it delivers – a health systems pipeline analogy. Submitted to *International Journal of Health Planning and Management* on 1/19/15. Manuscript number HPM-15-00010.
Taylor M, Dlamini M, Byarugaba H, Wuliji T, Haumba SM. Commentary on IST Coordination. Submitted to *Human Resources for Health* on 1/26/15 (MSID: 2870671531580782)

Massoud MR, Shakir F, Livesley N, Muhire M, Jean-Baptiste R, Megere H, Karamagi-Nkolo E, Gaudreault S, Marks P, Jennings L, Ottosson A. Applying a Gaps Analysis Framework to Improve Care for Patients on Antiretroviral Therapy. Submitted to *JAIDS* Special Supplement on 2/10/15.
Sarin E, Lunsford SS, Sooden A, Rai S, Livesley N. Incentives of ASHA workers in two districts in India: Learnings from a qualitative study. Submitted to *BMC Health Services Research* on 3/25/2015.
Case Studies (Date Published)
Improving labour and postpartum care at Budhlada Sub-divisional Hospital in Mansa District, Punjab, India. *Case Study* (October 2014)
Reducing post-partum haemorrhage in Ghuman Community Health Centre, Punjab, India. *Case Study* (November 2014)
Improving communication between nursing shifts to improve care in Hisar District Hospital, Haryana, India. *Case Study* (December 2014)
Improving assessment and monitoring of women in labour at District Women's Hospital, Pauri, Uttarakhand, India. *Case Study* (December 2014)
Improving Linkages between Health Facilities and Communities in Muheza, Tanzania. *Case Study* (January 2015)
Technical and Research Reports (Date Published)
Evaluation of Primary Health Care Supervision in Mpumalanga Province. *Technical Report* (October 2014)
Pilot of the Hhohho Regional Coordination Agency in Swaziland. *Technical Report* (March 2015)
Increasing diagnosis of childhood TB in Swaziland: Clinical utility and validity sample collection and diagnostic methods among children. *Research and Evaluation Report* (March 2015)
Flyers and Short Reports (Date Published)
Services to Strengthen the Performance of Community Health Workers (2-page flyer) (December 2014)
The USAID ASSIST Project. Where do we work (2-page flyer) (December 2014)
Ensuring an Effective Continuum of Response and Cascade of Care for Persons Living with HIV in Uganda. *Short Report*. (January 2015)
Annual Reports (Date Published)
USAID ASSIST Project Annual Performance Monitoring Report FY14. Performance Period: October 1, 2013- September 30, 2014 (November 2014)
ASSIST Botswana Country Report FY14 (December 2014)
ASSIST Burundi Country Report FY14 (December 2014)
ASSIST Cote d'Ivoire Country Report FY14 (December 2014)
ASSIST Democratic Republic of Congo Country Report FY14 (December 2014)
ASSIST Georgia Country Report FY14 (December 2014)
ASSIST Haiti Country Report FY14 (December 2014)
ASSIST India Country Report FY14 (December 2014)
ASSIST Indonesia Country Report FY14 (December 2014)
ASSIST Kenya Country Report FY14 (December 2014)
ASSIST Lesotho Country Report FY14 (December 2014)
ASSIST Malawi Country Report FY14 (December 2014)
ASSIST Mali Country Report FY14 (December 2014)
ASSIST Mozambique Country Report FY14 (December 2014)
ASSIST Nicaragua Country Report FY14 (December 2014)
ASSIST Nigeria Country Report FY14 (December 2014)
ASSIST South Africa Country Report FY14 (December 2014)
ASSIST Swaziland Country Report FY14 (December 2014)

ASSIST Tanzania Country Report FY14 (December 2014)
ASSIST Uganda Country Report FY14 (December 2014)
ASSIST Research and Evaluation Report FY14 (December 2014)
ASSIST Documentation and Knowledge Management Report FY14 (December 2014)
Tools (Date Published)
A Guide to Improving the Quality of Safe Male Circumcision in Uganda (February 2015)
Improvement Methods Toolkit (March 2015). Available at: https://www.usaidassist.org/toolkits/improvement-methods-toolkit
Multi-media
"Common Pitfalls for New Improvement Teams: A Story from New Delhi, India". Narrated PowerPoint (March 2015). Available at: https://vimeo.com/102854943
Lesotho-Uganda Knowledge Exchange visit for the Partnership for HIV-Free Survival. Available at: https://vimeo.com/123231180 (March 2015)
"Value of Exchange" from the PHFS Lesotho-Uganda Knowledge Exchange Visit, February 2015. Available at: https://vimeo.com/123231179
"Reflection on Coaching" from PHFS Knowledge Exchange Visit. Available at: https://vimeo.com/123231178

- **Launched the ASSIST *British Medical Journal (BMJ) Quality Improvement Reports* program**: In January 2015 we launched the USAID ASSIST subscription to the BMJ Quality program, which allows subscribed users to submit quality improvement project reports following the SQUIRE guidelines for reporting on quality improvement interventions. The one-year subscriptions, which became effective on January 1, 2015 and which cost US$150 per subscription, allow USAID ASSIST staff and counterparts to develop an unlimited number of quality improvement reports for peer-reviewed publication in *BMJ Quality Improvement Reports* (http://quality.bmj.com/journal). On Feb. 25, 2015, Lani Marquez presented a webinar on the program for ASSIST staff. As of the end of March 2015, 32 staff have activated subscriptions and two quality reports have been started.
- **Managed Jim Heiby's QI Book Project:** During the period, Dr. Jim Heiby and Ms. Rhea Bright of the USAID Office of Health Systems worked with Ms. Feza Kikaya to devise an effective approach for entering the next step of the case book project. A detailed case book timeline was developed that outlined the action items, deliverables and expected date of completion for each phase of the project, which includes notifying questionnaire authors of feedback regarding their submissions, finalizing guidance materials to disseminate to case study submitters, designing the collection, review and technical support of case studies, and planning for approaching commercial publishers. Through the development of this timeline, the team realized that hiring a QI intern to assume some tasks would be greatly beneficial to the efficiency and speed of the project. In March, Ms. Kikaya participated in an interview panel with Dr. Heiby and Ms. Bright. Four stellar candidates were interviewed by phone, and after a thorough review process that included short essays and a one-page writing prompt, the team decided on one intern. The intern will join the team in June 2015. In addition, the team finalized a package of materials that will be sent to questionnaire submitters and potential case study authors in mid-April 2015. Next quarter, the team will conduct webinars and provide other forms of technical support to assist authors with designing and writing their case studies for consideration in Dr. Heiby's book.
- **Kenya ANC improvement collaborative story selected in USAID Health Systems Strengthening Case Studies contest:** The project's submission of the story of the Kenya antenatal care improvement collaborative as an example of health systems strengthening was selected in November 2014 as one of the top ten cases of health systems strengthening by the USAID Global Health Bureau Office of Health Systems, out of 145 submitted candidates. The top cases can be accessed at: https://hssglobalcall.hsaccess.org/top-cases.
- **Recognition in F1000 Faculty of the Year 2014 Award**: Dr. M. Rashad Massoud and his editorial team of Danika Barry, Nana Mensah-Abrampah, and Amanda Ottosson were recognized in March 2015 for their "significant contribution to the Faculty of 1000 Recommendation service over the past year."

- **Presented technical webinars**: USAID ASSIST staff and partners presented six webinars on improvement approaches and results during the first and second quarters of FY15:
  - On Oct. 16, 2014, USAID ASSIST AOR Dr. Jim Heiby presented the webinar, "Process Improvement In African Healthcare Systems: A 5-Year Agenda," sponsored by the International Center for AIDS Care and Treatment Programs (ICAP) on his perspectives on the future of health care improvement in African health systems. The Quality Improvement Webinar series is supported by the ICAP as part of its support to the U.S. Centers for Diseases Control and Prevention's Quality Improvement Training program, which is supported by the U.S. President's Emergency Plan for AIDS Relief (PEPFAR).
  - Dr. John Byabagambi was a featured presenter in the PEPFAR webinar, "Women and Voluntary Medical Male Circumcision" on Wednesday, November 19, 2014. A recording of the webinar is available at: http://www.healthcommcapacity.org/hc3resources/webinar-women-voluntary-medical-male-circumcision/.
  - Dr. Diana Chamrad spoke on USAID ASSIST community-level work in Uganda and Kenya in the panel, "Strengthening Families: Empowering Primary Caregivers" on November 20, 2014 as part of a two-day meeting convened by the PEPFAR OVC Task Force.
  - On January 13, 2015, the project sponsored a Partnership for HIV-Free Survival (PHFS) webinar for the global community of donors and implementers supporting PHFS. Roland Van de Ven of the Elizabeth Glaser Pediatric AIDS Foundation and Luke Dausse of USAID ASSIST presented their experiences in Tanzania and Mozambique of leveraging community health systems strengthening for prevention of mother-to-child transmission of HIV.
  - As part of the 2015 "Introduction to Quality and Quality Improvement" ICAP training course, Dr. Edward Broughton presented an ICAP webinar on February 25, 2015 on using cost-effectiveness analysis to assess the efficiency of improvement interventions.
  - Dr. M. Rashad Massoud presented the webinar "Quality and Safety in Developing Countries" on March 11, 2015 to an international audience of development and health care professionals and students. The webinar was hosted by ISQua. A recording of the webinar is available at: http://isqua.org/education/webinars/march-2015-webinar-with-rashad-massoud.
- **Spanish-language newborn care webinars**: USAID ASSIST continued to host Spanish-language webinars on newborn care under the aegis of the Salud Materno Infantil website and with co-sponsorship of the LAC Newborn Health Alliance. Four webinars were sponsored in the first half of FY15:
  - "Prospects and challenges for newborn health in Latin America" was presented by Dr. Pablo Duran of PAHO (November 5, 2014)
  - "Intercultural aspects of newborn care" was presented by Dr. Mario Tavera Salazar of UNICEF Peru (January 10, 2015)
  - "Essential care for every baby" was presented by Dr. Carl Bose of the American Academy of Pediatrics (February 3, 2015)
  - "Prevention and early diagnosis of retinopathy of prematurity" was presented by Dr. Pedro J. Acevedo, a pediatric ophthalmologist (March 25, 2015)

Activity 3. Build capacity in improvement

Overview: In addition to the capacity-building that occurs as part of country assistance, the project has a mandate to develop tools, content and training resources that can be useful to anyone interested in improving health care and services for vulnerable children. This is achieved by making tools and materials to support capacity building in improvement available on the USAID ASSIST website, trainings and technical presentations for USAID ASSIST staff and partners, as well as through work to refine a competency framework for improvement skills, which has also been supported through the USAID East Africa-funded activity with the Regional Center for Quality in Health Care in Kampala (reported under Field Support-Funded Activities).

Accomplishments and Results:

- **Technical presentations to USAID ASSIST staff during the quarter:**

- On Nov. 20, 2014, leaders from the Healthcare Delivery Department of the Jönköping County Council, Sweden, presented via webinar to USAID ASSIST staff on “Creating a culture of knowledge sharing & integration of human dynamics – Experiences from Qulturum & Jönköping County, Sweden”
- On Dec. 17, ASSIST convened a virtual panel on evaluating improvement interventions with Dr. Frank Davidoff of Darmouth Dr. Ovretveit of the Karolinska Institute, Dr. Tom Bossert of Harvard, and URC’s Dr. Edward Broughton, moderated by Dr. M. Rashad Massoud.
- On February 19, 2015, three quality leaders from the Sitaram Bhartia Institute of Science and Research, a 70-bed nonprofit hospital and medical research center in Delhi, shared their inspirational experiences of seeking to infuse their hospital with improvement thinking. Abhishek Bhartia, the hospital CEO, shared insights about the barriers to quality in Indian hospitals. It took several years of determination and a variety of improvement projects to turn the tide and see important gains in patient satisfaction and experience. Dr. Rinku Sen Gupta Dhar, who recounted a moving story of how she dedicated herself to reducing cesarean rates in her own practice and unit after a tragic event.
- On March 6, 2015 and March 30, 2015 Cathy Green held a Webex seminar on Testing and Implementing Changes using Plan-Do-Study-Act cycles to all ASSIST staff.
- On March 30, 2015, Dr. Alex Rowe of the CDC presented the findings of the systematic review of 498 studies on improving health worker performance in low- and middle-income countries. He also explained how ASSIST staff and others can access the open data set for secondary analyses.

- **GHeL proposal for course on Health Care Improvement**: USAID ASSIST proposed in FY15 to develop as part of Global Technical Leadership activities a health care improvement course with the Global Health eLearning (GHeL) Center to introduce USAID staff, ministry of health officials, health care managers and other global health professionals to principles and approaches that can help health care and social service workers continually improve the work that they do and make care better. The purpose of the course is to help demystify improvement and create a deeper understanding of how to differentiate approaches. In January, the GHeL and USAID ASSIST AORs approved the course proposal and agreed it will be funded through the Office of Health Systems Cross-Bureau Support. For this activity, we are working closely with the JHUCCP, which manages the GHeL platform and provides technical assistance in course design. In February and March 2015 the author’s training for the course was conducted and the learning objectives were developed.

Planned Activities Next Quarter: April - June 2015

- Present a policy seminar, six sessions, and a paper at the pre-conference Scientific Symposium (Dr. Massoud, Dr. Martin Muhire, Dr. Esther Karamagi-Nkolo, Dr. Nigel Livesley, Dr. Edward Broughton, Dr. Victor Boguslavsky, and Dr. Jorge Hermida). Country delegations from Kenya, Lesotho, Malawi, South Africa, Tanzania, and Uganda will also participate in the policy seminar and conference.
- Develop and submit abstracts for the Global Maternal and Newborn Health Conference (Mexico City, Oct. 18-21, 2015), the International Conference on Family Planning (Nusa Dua, Indonesia, Nov. 9-12, 2015), and the REPPSI Forum (Victoria Falls, Zimbabwe, September 1-3, 2015)
- Dr. Massoud will deliver a keynote address on health care improvement at the International Council of Nurses (ICN) Congress in Seoul, South Korea (June 19-23, 2015)
- Dr. Edward Broughton will deliver two workshops on cost-effectiveness analysis for health and human service programs at the American Evaluation Association’s Summer Institute in Atlanta, GA (May 31-June 3, 2015)
- Continue developing new ASSIST case studies, ASSIST videos, and develop full case study for Dr. Heiby’s book
- Submit USAID semi-annual report FY15 (May 15, 2015)

KNOWLEDGE MANAGEMENT

Background

Building on the experiences of HCI's knowledge management system and web portal, USAID ASSIST supports the deliberate harvesting of what we are learning from the implementation, evaluation, and research work we do at the country level and the application of that learning in the design, implementation, and scale-up of improvement activities, with a focus on learning related to USAID's two strategic objectives of Ending Preventable Child and Maternal Deaths and AIDS-Free Generation.

Applying knowledge management (KM) principles and techniques, we integrate learning across countries and make that learning available through web portals and in face-to-face events, in a wide variety of formats, including case studies, blogs, improvement stories, technical reports, tools, and eLearning. We use social media to connect with implementers who can benefit from improvement methods and knowledge products. In addition, recognizing the value-added of addressing gender factors in health care access and delivery as part of improvement work, USAID ASSIST emphasizes gender integration as a key area of learning on how to make improvement activities more effective, drawing on the expertise of our partner WI-HER LLC.

Institutionalization/Sustainability Strategy

The role of knowledge management on the USAID ASSIST Project is to support the generation, documentation and transfer of knowledge of how to improve specific services and areas of care in specific settings. As such, KM activities support the scale-up and institutionalization of better care practices.

Program Overview

What are we trying to accomplish?	Scale
1. Implement and evaluate KM strategies for ASSIST	**Global and at the country level**
• Develop the capacity of ASSIST staff and counterparts to develop and implement KM strategies • Conduct studies to evaluate KM activities and demonstrate the value-added of deliberate KM strategies • Assist country and technical teams in defining learning questions and designing knowledge management aspects of improvement strategy design • Coordinate annual work plan development • Manage quarterly, semi-annual and annual reporting to USAID	Country level: Uganda Safe Male Circumcision Knowledge Management (SMaCKM) cost-effectiveness study
2. Document learning from improvement	**Global**
• Support staff to apply KM approaches to connect implementers and generate learning and insights from improvement activities • Support country and technical teams to design processes to document and synthesize learning from improvement • Support staff to develop and disseminate knowledge products	
3. Manage the ASSIST knowledge portal and related websites	**Global**
• Operate the ASSIST knowledge portal and related sites, including the India toolkit and www.maternoinfantil.org, and develop new sites in response to country requests • Make key learning and improvement information available on the ASSIST web portal using multiple media, including tools, videos, slide decks, reports, and blogs • Search out and cross-post relevant content from ASSIST partners, other USAID cooperating agencies, and other technical organizations, including case studies	

What are we trying to accomplish?	Scale
4. Integrate gender considerations in improvement activities	**Global**
• Support country and HQ teams in integrating gender considerations in the planning and implementation of improvement activities • Document impact of addressing gender factors on improving care quality and outcomes	
5. Promote the use of improvement knowledge	**Global**
• Conduct improvement-related webinars/virtual trainings, and discussion forums, including partnering with other organizations to house such activities on other websites • Use social media channels to promote ASSIST knowledge products, the application of improvement approaches, and ASSIST knowledge portal content • Promote resources posted to the ASSIST knowledge portal through listservs, blogs, and presentations • Support ASSIST country teams in creating local knowledge repositories and disseminating knowledge products	

Cross-cutting Activity

Accomplishments and Results by Activity (October 2014 – March 2015)

Activity 1: Implement and evaluate KM strategies for ASSIST

Overview: This activity is aimed at developing the capacity of ASSIST staff and partners to apply knowledge management principles to the design of improvement strategies and apply, as appropriate, knowledge management techniques in the gathering, synthesis, and spread of learning to address the question, *What have we learned to improve this aspect of care?* Such approaches complement data and help implementers to generate insights about how results were achieved, what were the most important changes that led to those results, and what advice implementers would give to others to apply what they learned. Our own learning agenda is to study and evaluate how KM approaches can add value to improvement work.

Accomplishments and Results:

- **Designed and implemented a knowledge handover meeting in Kampala, Uganda to support the transfer of guidance and change ideas for safe male circumcision (SMC)** (March 18-19, 2015). Approximately 79 participants attended both days, including: 15 experienced site representatives, 39 new site representatives from 10 new sites, 12 district coaches (7 experienced coaches and 5 new coaches), 4 implementing partner staff, and the head of the MOH SMC program. Eight ASSIST Uganda staff were involved in the meeting as facilitators. The meeting design used mainly small group discussions wherein 3-4 representatives from new sites met with 1-2 representatives from experienced sites and coaches to talk through implementation questions related to the key areas covered in the MOH SMC standards. The meeting also used talk

Gallery walk to review plans from new sites to apply what they had learned in the SMC knowledge handover meeting. *Photo by Lani Marquez, URC.*

shows, a gallery walk, and peer-to-peer discussions to address implementation issues and guidance for new teams and coaches.

- **Support for annual reporting.** A large part of the KM team's efforts in the first quarter of FY15 related to supporting the development of the project's annual work plan for FY15 and annual reports for FY14, including 19 country reports. Annual reporting involved summarizing key results achieved in each country and technical area.

Activity 2. Document learning from improvement

Overview: This activity focuses on supporting ASSIST country and technical teams to develop products that synthesize learning from country programs, consolidate successful changes include intervention packages and tools that can be readily spread to new sites as well as case studies that explain what specific actions teams took to achieve results. While the primary users of these products are in country, they are also be disseminated globally through the ASSIST knowledge portal and social media.

Accomplishments and Results:

- **KM team support to the HIV aims, indicators and content meeting in Durban** (Nov 2014). Lani Marquez and Sidhartha Deka led exercises to consider country needs and cross-cutting project processes to maximize future sharing, continued learning and efficient use of meeting products to strengthen HIV/PMTCT improvement work across the ASSIST Project (Mission and core-funded.) A repository of all meeting materials was kept on the ASSIST portal for all participants to access, which included draft aim, indicators, and content developed by each technical subdomain team.
- **KM support to PHFS community of practice and Lesotho-Uganda knowledge exchange** (Feb 9-13, 2015). ASSIST staff from Uganda and Bethesda facilitated interactive sessions to harness learning from participants in the knowledge exchange. The deliberative designs of these sessions intended for the participants from Lesotho to not only comment on what they observed in their meetings with the Uganda Ministry of Health and the site visits but to reflect on what action must be taken to improve care when they return to Lesotho. Sidhartha Deka also conducted video interviews (https://vimeo.com/123231180). One set of interviews were conducted with participants from Lesotho about their impressions of the exchange with the Ugandan PHFS team along with their perspectives on the challenges and opportunities to improve PMTCT care in Lesotho. Another set of interviews were conducted with Ugandan district-level staff who have been coaching ASSIST-supported sites and touched upon "what it takes" to be a good mentor and coach.
- **The KM team supported the publication of five case studies and one guide**. Listed in the Global Technical Leadership section table of publications, these included four case studies from India and one from Tanzania. Progress was made on other knowledge products related to patient self-management, community health systems, and injection safety.

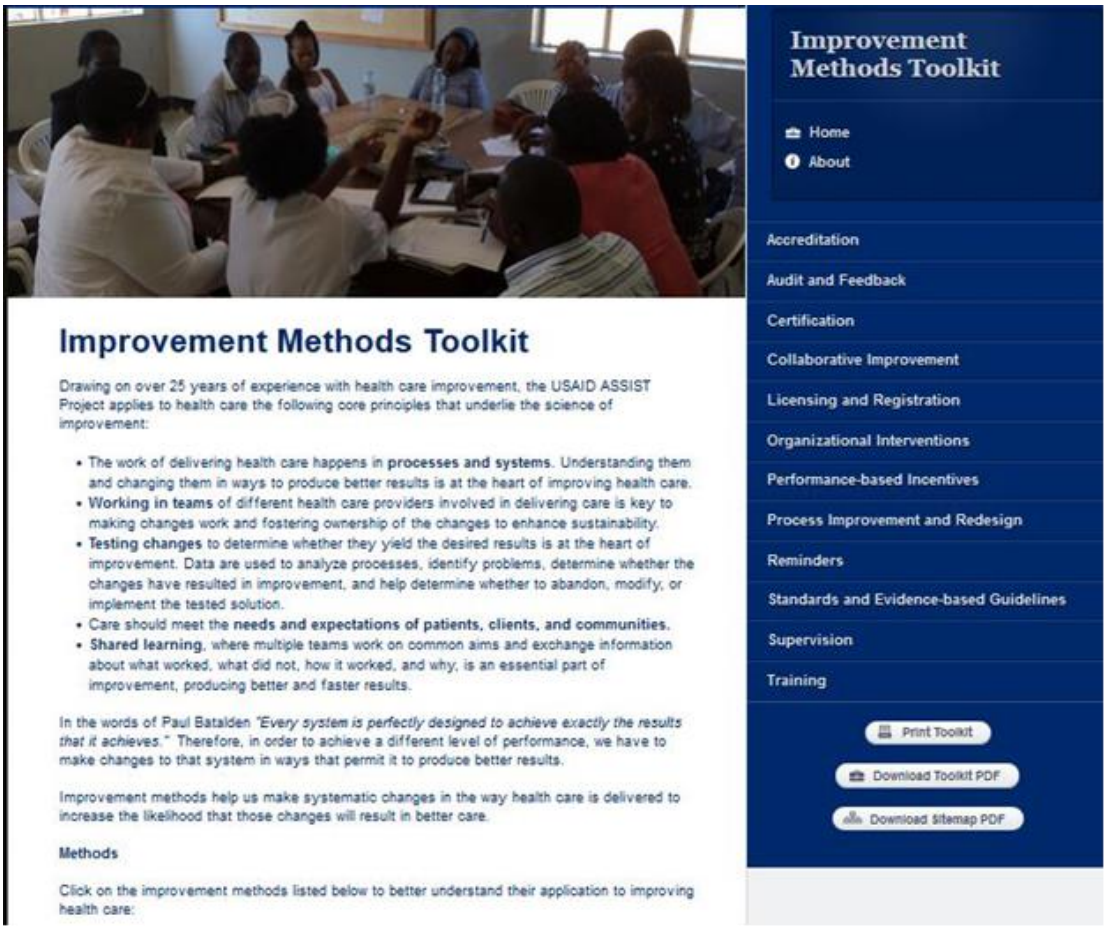
Activity 3. Manage the ASSIST knowledge portal and related websites

Overview: With support from JHUCCP, we continue to enhance the ASSIST knowledge portal with new content and features. The project also continues to support the www.maternoinfantil.org Spanish-language web portal for maternal and newborn care to test how web-based mechanisms can support improvements in care at low cost. This activity also involves liaising with other groups and knowledge portals related to ASSIST's areas of work, to identify opportunities for collaboration and cross-posting of content.

Accomplishments and Results:

- **Launched the Improvement Methods Toolkit on the ASSIST knowledge portal** (https://www.usaidassist.org/toolkits/improvement-methods-toolkit) (March 2015). Placed on a more user-friendly and interactive platform, the toolkit is a one-stop resource for those interested in understanding how the application of various improvement methods can improve health care (see **Figure 102**). We plan to develop more toolkits on building competencies for improvement, managing learning, and managing improvement data in addition to new toolkits on technical topics, such as male circumcision.

Figure 102. Screen capture of the Improvement Methods Toolkit



- **Improved security through Drupal upgrade** (March 2015). CCP upgraded the version of Drupal used to run the knowledge portal to version 7.35 to ensure security. Developers at CCP also enabled a feature that allows the project to catalog video resources. A new video page will be created in the next quarter to act as a repository of video resources, such as short video documentaries from the field and tutorials on managing data.
- **Continued development of the LAC newborn health community of practice co-sponsored by USAID ASSIST and the LAC Newborn Health Alliance**. During Q1 and Q2, Elizabeth Silva provided technical support and managed the technology for four webinars carried out during this period. Ms. Silva and the URC media team also provided support to develop graphics, templates and announcements related to the Salud Materno Infantil web site, the Spanish-language webinars, and the new virtual collaborative to reduce newborn infections in hospitals in Latin America, Red INFECC.
- **Continued growth in ASSIST knowledge portal usage**. As shown in **Table 9**, usage of the portal continued to grow over the first two quarters of FY15. According to the analytics service Quill Engage, portal users were most engaged with resources such as the "Instruction Manual for Implementing a Gaps Analysis Framework to Guide Quality Improvement Decision-making in ART Programs" and the case study "Improving the process of antenatal care to increase detection of women with high-risk conditions in Zonal Hospital of Mandi, Himachal Pradesh, India".

Table 9. ASSIST knowledge portal sites usage (Oct 2014-March 2015)

Measure	October-December 2014	January-March 2015
Total visits	8,163	10,753
Unique visitors	5,942	7,872

Measure	October-December 2014	January-March 2015
Average duration of visits	3:00 minutes	3:39 minutes
Average page views per visit	2.69 pages/visit	2.83 pages/visit
New visitors	69%	71%
Top 10 countries of origin of users	1. United States (3,915 visits) (48.0%) 2. Uganda (376 visits) (4.6%) 3. India (369 visits) (4.5%) 4. Kenya (288 visits) (3.5%) 5. United Kingdom (239 visits) (2.9%) 6. South Africa (189 visits) (2.3%) 7. Cote d'Ivoire (146 visits) (1.8%) 8. Tanzania (130 visits) (1.6%) 9. Canada (128 visits) (1.6%) 10. Nigeria (109 visits) (1.7%)	1. United States (4,112 visits) (38.2%) 2. Uganda (2,080 visits) (19.34%) 3. India (492 visits) (4.6%) 4. Kenya (412 visits) (3.8%) 5. United Kingdom (315 visits) (2.9%) 6. Indonesia (219 visits) (2.0%) 7. Canada (217 visits) (2.0%) 8. Tanzania (193 visits) (1.8%) 9. South Africa (169 visits) (1.6%) 10. Cote d'Ivoire (146 visits) (1.2%)

Activity 4. Integrate gender considerations in improvement activities

Overview: The gender integration activity seeks to build capacity in gender integration in all ASSIST-supported countries by developing tools and instructional guidance to support staff in addressing gender issues that affect health outcomes and care quality. This activity, led by partner WI-HER LLC, also seeks to increase awareness of gender-based factors affecting quality and outcomes among staff and partners, and to increase knowledge sharing and expand the evidence base for gender integration in improvement work. We are also working to ensure that gender issues are adequately captured in monitoring and evaluation activities so we can begin to measure the effectiveness and impact of gender integration in improvement.

Accomplishments and Results:

- **Gender integration technical support to Ukraine** (Oct 2014). Megan Ivankovich, Program Officer for WI-HER LLC, traveled to Ukraine to provide technical support to the USAID ASSIST Project in Ukraine. Mrs. Ivankovich provided support to analyze and disseminate the results of a gender-related survey for which data had recently been collected, developed and conducted two customized gender integration trainings, and provided recommendations for integrating gender into programming.
- **Gender integration technical support to Malawi** (March 2015). Elizabeth Silva traveled to Malawi to provide technical support to identify gender-related issues affecting the program and on sex-disaggregated data collection and analysis. Ms. Silva provided two trainings on gender integration in improvement for vulnerable children improvement teams and also provided support for the integration of gender issues in the ASSIST-supported VMMC activities which are beginning. Ms. Silva briefed USAID ASSIST Activity Manager Sola Onifade and USAID OVC Specialist Antonio Kasote on ASSIST's approach and activities to integrate gender to ensure improved outcomes for vulnerable girls, vulnerable boys and their families in Malawi, and on her scope of work including the gender sensitization trainings and how the USAID ASSIST OVC work in Malawi supports the USAID Country Development Cooperation Strategy objectives. Ms. Silva also briefed USAID VMMC advisor Zebedee Mwandi on the USAID ASSIST Project's activities to integrate gender into VMMC and results from Uganda and discussed how the ASSIST-supported Malawi VMMC work will address gender issues, including through integrating gender-sensitive indicators into the VMMC baseline assessment and ongoing monitoring mechanisms.
- **Gender integration technical support to Zambia** (March 2015). Ms. Silva traveled to Zambia to provide gender technical support to the NACS project in Zambia. Ms. Silva worked closely with ASSIST Resident Advisor Robert Musopole to identify gender-related issues and differing health-seeking behaviors that can affect nutrition status and access to services, and she provided support to the project to collect and analyze sex-disaggregated data. Ms. Silva provided a gender integration in improvement session at Copperbelt University and met with FANTA and LIFT representatives to brief them on ASSIST's gender integration approach and the importance of integrating gender into NACS

activities. Ms. Silva met with ASSIST Zambia Activity Manager Helen Khunga and USAID Advocacy and Human Rights Specialist Ngaitila Phiri at the U.S. Embassy to share ASSIST's approach and activities to integrate gender into NACS services and to brief Ms. Khunga and Ms. Phiri on Ms. Silva's scope of work, including meetings, trainings and next steps, including how the USAID ASSIST NACS work in Zambia supports the USAID Zambia Country Development Cooperation Strategy objectives, which prioritize gender equality and equal access to health services.

- **Gender integration resources developed** (February-March 2015): To support technical teams to implement the USAID ASSIST approach and steps to address gender issues using the science of improvement, WI-HER gender specialists developed two resources, one detailing how to identify and respond to gender-related gaps in services or programs to improve outcomes, and the other explaining why it is critical to address gender issues in the Partnership for HIV-Free Survival. The guidance on identifying and addressing gender-related gaps is illustrated with examples from three technical areas: HIV and chronic care, orphans and vulnerable children, and NACS. A draft of the step-by-step guide was presented to ASSIST staff during a technical webinar on February 17, 2015.
- **Tracked experiences with addressing gender issues in improvement in all ASSIST countries:** An ongoing function of Ms. Silva on the USAID ASSIST knowledge management team is to track progress in addressing gender-related factors as part of improvement efforts at the country level. **Table 10** summarizes gender integration activities by country for the October 2014-March 2015 period.

Table 10. USAID ASSIST gender integration activities (Oct 2014 – March 2015)

Country	Illustrative ASSIST Gender Integration Activities
	Africa
Burundi	**PMTCT:** The team conducted and analyzed the results of a gender-related study, "Factors Associated with HIV Testing among Male Partners of Women in Antenatal Care," and has integrated findings from the analysis into the program design. The team is also tracking male partner involvement in PMTCT and tested changes to increase male involvement in the PMTCT.
DRC	**NACS**: ASSIST DRC collected sex-disaggregated data over the previous quarter and identified that women are more likely to be seen at the clinic monthly, but the percentage of females whose nutrition status was accurately calculated was lower than the percentage for males. Further analysis will be done to identify additional issues, underlying causes and changes to test to achieve possible solutions.
Kenya	**MNCH:** ASSIST Kenya responded to gender-related barriers to ANC by initiating male partner testing, working to involve and educate male partners during couples' visits to ANC clinics. **OVC:** The team identified and addressed gender issues including early marriage, female genital mutilation, unequal nutritional access, and late/no birth registration. The team promoted changes to respond to the needs of girls, and educate and sensitize parents, caregivers, community health volunteers, and older children on prevention, basic treatment, and referrals to health clinics. **VMMC:** The ASSIST Kenya team identified that boys who had undergone VMMC had dropped out in high rates in part due to the cultural norm that they were now men and responded by working with community leaders and creating a mentoring program between male college students and boys undergoing circumcision, which contributed to a decrease in dropout rates.
Lesotho	**PHFS:** ASSIST has identified gender-related issues affecting PHFS health outcomes including high rates of adolescent pregnancy and its negative impacts on girls who then have to drop out of school. The team has also identified the potential for involving male partners and mothers-in-law in the services related to the retention of mother-baby pairs in treatment.
Malawi	**OVC:** The team has integrated gender by collecting and analyzing sex-disaggregated data, and conducting root cause analysis to identify the underlying gender-related gaps in educational performance between girls and boys and has proposed changes to test to overcome the issues. Staff have been trained in gender integration and two gender integration trainings were conducted for improvement teams. **VMMC:** ASSIST staff have been trained on gender integration and gender was integrated into the VMMC baseline assessment and the monitoring tools. Gaps and opportunities to integrate gender will be identified as the program begins.
Mali	**MNCH:** The ASSIST Mali team identified a gender-related barrier to women's low ANC attendance, lacking transportation money from their male partners, ASSIST has worked with two

Country	Illustrative ASSIST Gender Integration Activities
	villages to initiate a social funding program to support ANC and delivery costs for women at health centers.
Mozambique	**PHFS:** The team identified that the non-participation of male partners affected early testing, enrollment, and retention of pregnant mothers in the PMTCT program, and identified mothers-in-law as key decision-makers within families and involved them in activities to improve retention of mother-baby pairs. ASSIST Mozambique also sensitized religious leaders to the importance of ANC and asked the religious leaders to share the message with their congregation, which also led to an increase in ANC visits.
Niger	The team responded to gender-related issues affecting PPFP uptake by involving husbands at the Konni District Hospital team, where changes were tested that showed promising changes in attitudes: designation of a special space for counseling, making FP services available 24 hours a day instead of only morning, taking advantage of PP women's discharge day to conduct couples' counseling on PPFP, and sending an invitation to husbands (by phone) to be present at their wives' hospital discharge (and thus use this opportunity to conduct PPFP couples' counseling). These changes were shown to be very successful in increasing uptake in family planning.
Swaziland	**TB/HIV:** The team addressed gender-related challenges to strengthen implementation of TB/HIV prevention, care, and treatment. Through collecting and analyzing sex-disaggregated data, the team identified that uptake is lower among males and designed changes to test to overcome barriers that prevent men from remaining in treatment. The team has also designed innovative community mobilization and health promotion awareness campaigns targeting most at-risk groups, such as young men and elderly women.
Tanzania	**PHFS:** The team has tested involvement of male partners to improve maternal and newborn retention and also to improve male patients' health, to test and enroll them in care if they test positive. Changes tested have resulted in an increase in male partner testing in sites integrating gender compared to data for sites not integrating gender. **OVC:** Two sex-disaggregated OVC databases were designed to support the field office to collect and analyze gaps affecting girls and boys to better meet the needs of vulnerable girls and boys. **HIV/TB:** Teams are disaggregating TB screening and loss to follow-up results by sex. Attendance at CTC reflect that 4 times as many women are receiving ART care, and the team is working to respond to this gap.
Uganda	**COR (TB/HIV):** The team collected and analyzed sex-disaggregated data, identified that more women than men were being initiated on ART among TB/HIV co-infected clients, and identified gender issues causing this gap. The team has proposed changes to test to increase ART uptake among males. **SMC:** The team worked to increase female partner involvement in SMC which had previously been identified as a barrier affecting outcomes. ASSIST has worked with implementing partners to create an awareness-raising campaign about the importance of female partner involvement and to provide education sessions and services tailored to females in addition to male patients. **PHFS:** 20+ clinics utilized gender-related interventions: encouraging male partner involvement, involving male community leaders/volunteer health workers, utilizing family support groups, and offering male-focused services. The work is focusing on isolating the effects of gender interventions on increasing retention rates of HIV-positive mothers and their babies. **SMGL:** Sites are tracking male involvement through improved couple counseling and male involvement at maternity and young child/postnatal care clinics. **OVC:** The team is responding to gender gaps in school re-integration for male and female vulnerable children and gender issues identified in economic strengthening efforts, including the potential increase of gender-based violence.
Zambia	**NACS:** Technical staff and partners were trained in gender integration, sex-disaggregated data has been collected and one gender integration training has been conducted. Gaps will continue to be identified and will be responded to strategically to improve nutrition outcomes.
Asia	
India	**MNCH:** ASSIST India engaged and educated family members about warning signs of postpartum complications and informed male family members about the importance of ANC and PNC through meetings with decision-makers including husbands and mothers-in-law, and couple's counseling. The team conducted a qualitative research study in FY14 to determine the effects of family, community, and gender norms on the work of Indian community health workers. The findings contributed to the planning of a ToT on gender and social inclusion for community QI teams to

Country	Illustrative ASSIST Gender Integration Activities
	take place in Q3 in Delhi. Three staff members from ASSIST participated in a USAID Gender, Policy and Measurement Program workshop about gender integration and combatting GBV.
Europe and Eurasia	
Georgia	**NCD:** The Georgia team integrated gender into the program by collecting and analyzing sex-disaggregated data and identified a gender-related gap in CVD risk factor calculation. The team addressed this challenge and has improved the screening and management of CVD risk factors in primary care.
Ukraine	**NCD:** The team analyzed the results of a survey to determine the gender-related factors influencing tobacco and alcohol use among pregnant women and girls and developed a brief about role of gender related to alcohol and tobacco use among pregnant women and adolescents and presented the brief to QI teams during a learning session and monitoring visit meetings,The staff have been trained in gender integration and a gender integration and sensitization training took place for trainer-of-trainers in October 2014.
Latin America	
Nicaragua	**HIV/AIDS:** Training for medical and nursing students addressed gender-related issues including stigma, discrimination, sexual diversity, and gender-based violence. The trainings were designed to address the strong sentiments of discrimination and stigma directed towards persons living with HIV among students and faculty. A gender, gender-based violence and human trafficking module was also completed and three universities have been trained in the new curriculum.

Activity 5. Promote the use of improvement knowledge

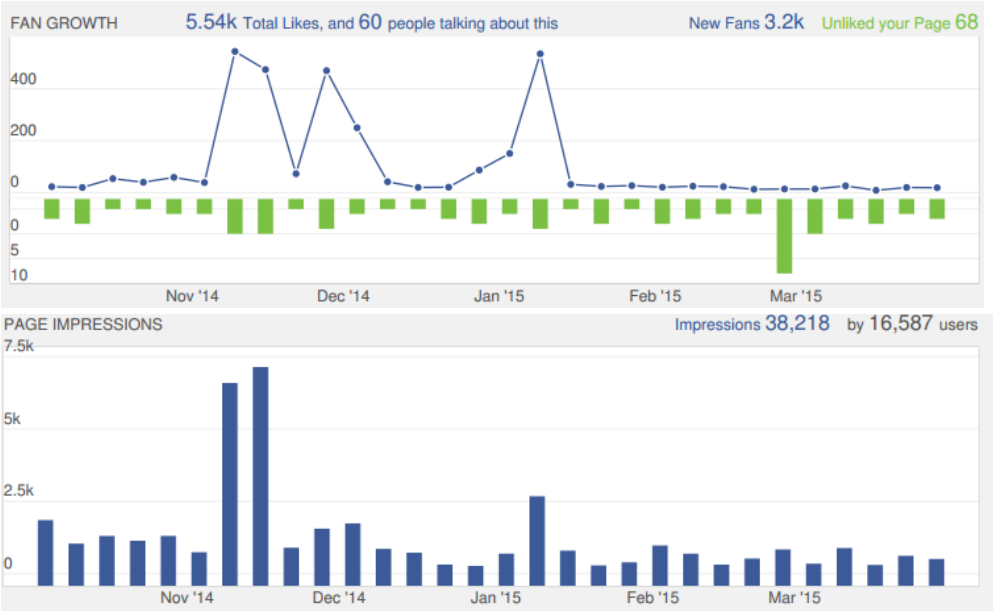
Overview: USAID ASSIST promotes the use of improvement knowledge through websites, communities of practice, social media, listservs, and knowledge-sharing events. ASSIST's social media pages highlight new content on the ASSIST website, participate in world health campaigns of relevance, cross-promote tools, resources and learning implemented by other implementing projects, and highlight staff participation in key conferences. We have continued to send out monthly updates to subscribers of the ASSIST listserv to alert them to new resources on the ASSIST web portal. At the global level, we engage with the Partnership for HIV-Free Survival, FANTA, the CORE Group, Healthy Newborn Network, the LAC Newborn Health Alliance, and other implementers to integrate improvement best practices and learning about how to improve care in specific topic areas in their websites and field programs.

Accomplishments:

- **Promoted KM resources at 2014 ISQua Rio workshop, Rio de Janeiro** (October 5-8). ASSIST staff led a half-day session on Managing Knowledge to Improve Care. The session focused on building participants' skills to use KM techniques to capture learning from improvement work and introduced simple rules of KM. Throughout the session, the ASSIST website was promoted as a source for more KM resources. We also presented a poster on use of KM techniques and handed out cards to promote accessing KM resources on the ASSIST portal.
- **Promotion of improvement resources through Facebook:** The ASSIST Facebook page ended the reporting period with 5,458 "likes". The majority of users engaged with the page were male (67%) with females representing 33% of users. Pakistan remained the most popular country among Facebook users, with additional representation from Georgia, United States and India. Unlike the ASSIST Twitter, most Facebook users following the project page are between the ages of 18-24.
- **Increases in new Facebook users**: As indicated in **Figure 103**, 3.2k new users liked the ASSIST Facebook page during the period. The page had 38k impressions, which indicates the number of times users potentially saw any content associated with the ASSIST Facebook in their News Feed or Ticker, or by visits to the page directly. The spikes in fan activity evident in mid-November, mid-December, and mid-January were likely triggered by posts that generated a higher than normal level of engagement. In mid-November, posts that attracted such activity included content related to the ASSIST blog on gender knowledge cafes and promotion of the PEPFAR webinar on women and voluntary medical male circumcision featuring ASSIST Uganda's John Byabagambi. In mid-December, popular content included promotion of the ASSIST blog on challenges facing the ASHA female community health workers and the cross-promotion of EnCompass' Equist Platform. In mid-January, the high engagement content included promotion of Megan Ivankovich's blog on the gender

integration training in Ukraine and the announcement of USAID's recognition of ASSIST Kenya in its selection of Top Ten Health Systems Strengthening Cases. All of the high-engagement content posted on the Facebook page contained dynamic photos and links to external websites. This metric reiterates the significance of posting content that includes visuals. Overall, page activity has remained consistent with prior trends in regards to demographics and content type. A goal moving forward is to analyze the Facebook users engaged in the project page and strategize on ways to further target the intended audience versus actual audience.

Figure 103. ASSIST Facebook fan growth and page impressions (Oct 2014 – March 2015)



- **Promotion of improvement resources through ASSIST Twitter:** During the reporting period, tweets that garnered the highest levels of engagement were those that centered on Twitter campaigns for global health events, as well as tweets that linked to the Twitter pages of partner organizations. The Twitter campaigns in which @usaidassist participated included #GBVChat to advocate against gender-based violence, #IDG2014 in celebration of International Day of the Girl, #HSR2014 to promote ASSIST's participation in the Third Global Symposium on Health Systems Research and #TAGASSIST, which was created to track live-tweeting at the ASSIST Technical Advisory Group meeting. In addition, the promotion of blogs and resources that involved fellow global health implementing partners and donor agencies resulted in vibrant engagement around the content tweeted.
- **Organized full-day tweetchat relay to mark the 16 Days of Activism Against Gender-Based Violence Campaign, reaching 1.2 million people** (Dec 10, 2014). ASSIST took the lead role in organizing the Tweetchat relay titled "Innovative Approaches to Respond to Gender-Based Violence." Collaborating organizations included Knowledge for Health (K4Health), The Asia Foundation, Promundo, Chemonics, World Vision, and The TOPS Program. The ASSIST team led one hour of the global tweetchat and discussed using improvement approaches to respond to gender-based violence, with guest expert Dr. Taroub Faramand of WI-HER LLC. The ASSIST tweetchat hour reached more than 375,000 people, while the entire relay reached 1.2 million people.
- **Tweeting by ASSIST staff expanded our reach**: Tweets from ASSIST staff further reinforced @usaidassist's engagement in these key content areas.
- **Growth in ASSIST Twitter followers**: The @usaidassist Twitter closed the reporting period with 1,097 total followers, of which 329 were new followers. The project sent 373 tweets, of which 115 tweets were plain text, 204 tweets included links to pages, and 54 tweets included photo links. During the period, the project handle had 560 mentions and 419 retweets. The majority of followers during the period were men between the ages of 25-34; males represented 52% of followers and women 48%.

During the period, the @usaidassist Twitter page sustained a consistent level of engagement among its followers. Per metrics provided by the social media management tool SproutSocial, @usaidassist achieved an overall engagement score of 50% and an influence score of 72% during the period, which is consistent with performance from prior quarters. These scores are reflective of the project's "tweeting behavior"; 50% of tweets posted were classified as conversations, meaning they included @mentions of and @replies to other twitter accounts. The remaining tweets (50%) were classified as updates, or tweets that were sent out to all followers without @mentions or @replies. Of the tweets that were classified as conversations, 10% were to new followers, and 90% were to existing contacts.

These metrics reiterate the need for @usaidassist to engage a greater percentage of new followers based on the demographics known about the audience receiving the tweets. A goal for the next quarter will be to analyze @usaidassist followers to determine whether the project's actual followers match the intended audience, and to tailor messages accordingly.

Knowledge Management Products and Activities

The headquarters-based KM team contributed to the following knowledge products during the first two quarters of FY15:

- **Case studies:**
  - Improving labour and postpartum care at Budhlada Sub-divisional Hospital in Mansa District, Punjab, India
  - Reducing post-partum haemorrhage in Ghuman Community Health Centre, Punjab, India
  - Improving communication between nursing shifts to improve care in Hisar District Hospital, Haryana, India
  - Improving assessment and monitoring of women in labour at District Women's Hospital, Pauri, Uttarakhand, India
  - Improving Linkages between Health Facilities and Communities in Muheza, Tanzania.
- **Produced blog series for International Day of the Girl Child on October 11 and International Women's Day on March 8:** Each blog series highlighted how ASSIST's approach of addressing gender issues by using an improvement approach leads to improved health and education outcomes for women and girls globally. Blogs included perspectives from field office staff in Tanzania, Malawi, Nicaragua and Kenya.
- **Other tools and guidance products:**
  - A Guide to Improving the Quality of Safe Male Circumcision in Uganda
  - Improvement Methods Toolkit on the USAID ASSIST web portal (https://www.usaidassist.org/toolkits/improvement-methods-toolkit)
  - Steps to Identify and Close Gender-Related Gaps Using Improvement Approaches (https://www.usaidassist.org/resources/steps-identify-and-close-gender-related-gaps)
  - A Quality Improvement Approach in PHFS that Responds to Gender Issues (https://www.usaidassist.org/resources/quality-improvement-approach-partnership-hiv-free-survival-responds-gender-issues)

Planned Activities Next Quarter: April - June 2015

Activity 1: Implement and evaluate KM strategies for ASSIST

- Contribute to a manuscript on the Uganda male circumcision knowledge handover
- Publish guidance on design of knowledge handovers on the ASSIST website

Activity 2: Document learning from improvement

- Provide a KM training and technical support for the ASSIST Mali team (Fatta and Kikaya)
- Conduct a KM training for the Democratic Republic of Congo team (Fatta)
- Support the knowledge sharing in the Tanzania National QI Forum (Fatta)
- Support country teams to develop case studies and knowledge products

Activity 3: Manage the ASSIST knowledge portal and related websites

- Launch a video page on the ASSIST website

- Support the start-up of the LAC newborn virtual collaborative
- Create a VMMC CQI toolkit on the ASSIST knowledge portal

Activity 4: Integrate gender considerations in improvement

- Provide technical support in gender integration to Kenya and Tanzania (Ivankovich)
- Develop new gender briefs and tools for gender integration in NACS

Activity 5: Promote the use of improvement knowledge

- Support the design of the Kenya-Tanzania PHFS knowledge exchange and PHFS quarterly webinars
- Continue to promote new website content and ASSIST events through Twitter and Facebook

RESEARCH & EVALUATION

Background

Through USAID ASSIST, the research and evaluation (R&E) unit provides technical assistance and guidance on country-led research and syntheses of learning across country- and centrally-funded projects on several improvement topics, including the validity of improvement-indicator data, sustainability and institutionalization, spread, and economic analysis. The R&E unit is working to disseminate knowledge generated by these studies through web-published reports, peer-reviewed journal articles, and presentations at relevant international meetings to encourage wider adoption of improvements methods.

There is a substantive demand for evidence of the effectiveness and efficiency of improvement activities, both within and beyond the countries in which the USAID ASSIST Project is providing support for improvement. The rigor and thoroughness with which the evidence is collected, analyzed, and presented is important for promoting continuation of the activities in ASSIST-supported and other low and/or middle-income countries (LMIC). The R&E unit works with this principle foremost in mind when designing and executing research and evaluation activities.

Institutionalization/Sustainability Strategy

ASSIST is conducting several studies that examine sustainability either directly or indirectly, some of which are described below. The R&E unit also provides support for improving research and evaluation understanding and capacity in countries supported by ASSIST. This includes presenting research findings as well as research methods to country MOH counterparts and other implementing partners. We also often involve MOH stakeholders in the research process directly by asking for their input in protocol development, data collection, and producing the report. This promotes engagement in the activity, which can lead to sustainability of the activities and the overall approach to improving health care.

Program Overview

What are we trying to accomplish?*	At what scale?
1. Validation of 25% of improvement indicators	
• Demonstrate that data reported by the ASSIST project are accurate, reliable and relevant	No less than 25% of total number of country reported indicators with completed validity assessment
2. Collecting data from control groups for 10% of indicators	
• Demonstrate the attributable impact of ASSIST interventions on improvement indicators	Comparison reports on no less than 10% of country-reported indicators
3. Evaluating design of improvement activities for lower- and middle-income countries	
• Advance learning in improvement science in low and middle income countries	Every ASSIST country program
4. Evaluation of methods and approaches for effective design and implementation of scale-up	
• Advance global knowledge on scale up of improvement interventions	Selected ASSIST country programs with scale up activities
5. Economic analysis of improvement activities	
• Advance global learning on comparative advantage and economic efficiency of QI activities	At least one economic analysis (may be basic cost report to full cost-effectiveness analysis) for every ASSIST country with an improvement program

6. Sustaining improvements and institutionalizing the capacity to continuously improve	
• Contribute to global learning on sustaining and institutionalizing improvement methods to ensure sustainability beyond life of the project	At least two studies on sustainability and institutionalization of improvement after direct involvement of the project has ceased
7. Generating learning from multi-country studies	
• Advance knowledge on improvement intervention and how they work in different settings	At least one study that either combines or compares and contrasts improvement interventions and their effect in more than one country
8. Capacity building for research and support to country programs	
• Build research and data management capacity of HCI staff	Every ASSIST country program
9. Disseminate knowledge gained through ASSIST R&E activities	
• Contribute to the quality improvement and global health fields	Globally available

Cross-cutting Activity

During the first half of FY15, the project had 25 research studies in planning or underway in 10 countries, as listed in **Table 11**.

Table 11. List of ASSIST studies as of March 31, 2015

	Country	Study	Research Area	Status	Program Area
1	Burundi	Factors associated with not returning to health centers among pregnant women who tested positive for HIV	Improving care	Planning	HIV & AIDS
2	Burundi	Factors associated with HIV testing among male partners of pregnant women	Improving care	Finalizing	HIV & AIDS
3	Burundi	Evaluation of PMTCT improvement intervention including validation	R&E mandates	Data collection April-May 2015	HIV&AIDS
4	Cote d'Ivoire	Evaluation of HIV improvement intervention including validation	R&E mandates	Protocol drafted	HIV & AIDS
5	DRC	Baseline Assessment of HIV services	Improving care	Data collection April-May 2015	HIV &AIDS
6	India	Female community health worker familial and social factors that contribute to job engagement	Improving care	Analysis and writing	RMNCH+A
7	Malawi	Evaluating Household Economic Strengthening Activities for Vulnerable Children and Families in Malawi	Improving care	Baseline data collected	OVC
8	Mali	Impact of anemia community collaborative intervention in Mali	Design of improvement activities	Planning	MNCH

	Country	Study	Research Area	Status	Program Area
9	Mali	Institutionalization of improvement in Mali	Institutionalization	Planning	MNCH
10	Mali	Evaluation of MNCH intervention including validation	R&E mandates	Planning	MNCH
11	Swaziland	Validation of new diagnostic technologies for pediatric TB cases	Improving care	Completed data collection	TB
12	Swaziland	Injection Safety, Waste Management Practices and Related Stigma and Discrimination in Swaziland: A national assessment, exploratory study, and evaluation	Improving care	Analysis and writing	HIV & AIDS
13	Swaziland	Screening in maternity to ascertain TB status (SMART) study in Swaziland	Improving care	IRB Submission / response	HIV & AIDS / TB
14	Tanzania	Factors influencing loss to follow-up among PLHIV in Morogoro, Tanzania: The experience from patients who returned to care	Improving care	Data collection planned for April 2015	HIV & AIDS
15	Tanzania	A qualitative evaluation of "Assuring Infants and Mothers Get All PMTCT Services" (AIMGAPS)	Design of improvement activities	Analysis and writing	HIV & AIDS
16	Uganda	The effectiveness and efficiency of applying the chronic care model to clients with HIV in Uganda: A non-randomized controlled evaluation	Design of improvement activities	Analysis and writing. Ongoing data collection in control sites	HIV & AIDS
17	Uganda	Improving the quality of safe male circumcision in Uganda: An evaluation and qualitative exploration	Improving care	Analysis and writing	HIV & AIDS
18	Uganda	Impact of Community-based Quality Improvement on Retention and Adherence	Design of improvement activities	Delayed until FY15	HIV & AIDS
19	Uganda	Integration of Family Planning into HIV Care: A Cost-Effectiveness Analysis	Design of improvement activities	Planning	HIV & AIDS
20	Uganda	The effectiveness and efficiency of integrated service delivery to HIV-positive mothers and their babies in Uganda	Design and implementation of scale-up	Baseline data and midline collection complete	HIV & AIDS
21	Uganda	Safe Male Circumcision Knowledge Management (SMaCKM)	Design of improvement activities	Baseline data collection complete	HIV & AIDS
22	Uganda	Improving Linkages Between Village Child Protection Committees and the National Child Protection System in Uganda	Improving care	Protocol in Ethics Review	OVC

	Country	Study	Research Area	Status	Program Area
23	Uganda	Assessing the cost-effectiveness of supporting savings groups to improve OVC access to services in Uganda	Design of improvement activities	Concept notes with Uganda mission for review and approval	OVC
24	Ukraine	Improving Alcohol and Tobacco Control during Pregnancy in Ukraine	Design of improvement activities	Baseline data collected, program underway.	MNCH
25	Multi-Country Africa	Building Partnership: Experiences from the Partnerships in Community Child Protection in Africa	Design of improvement activities	Writing	OVC

Accomplishments and Results by Activity (October 2014 – March 2015)

Activity 1. Validation of 25% of improvement indicators

Overview: Improving health and welfare systems is a data-driven process. The R&E team is working to ensure the information collected in improvement activities is as accurate and useful as possible in each setting in which ASSIST works. To do so, we are engaged in several research activities that investigate the validity of data collected in the project. Information derived from these studies is directly used to inform improvement activities to facilitate good decision-making among those implementing system changes in ASSIST-supported activities.

Accomplishments:

- **Developed a protocol for data validation in Cote d'Ivoire** (March 2015).
- **Developed a protocol for data validation in Burundi** (March 2015).
- **Began analysis of data validation for ART clinics in Uganda** (February 2015).
- **Began data analysis of the quality improvement team performance data collected in Kenya** (February 2015).
- **Completed data collection and preliminary analysis of data for MNCH indicators in India** (March 2015).

Activity 2. Collecting data from control groups for 10% of indicators

Overview:

Given the dynamic settings in which ASSIST is often operating, the case for attributing changes in outcomes or processes of care delivery is difficult to establish without a valid comparison group. The R&E team works to include controls (non-ASSIST intervention groups) into all activities when it is feasible.

Accomplishments:

- **Developed a protocol for collecting data from control groups in Cote d'Ivoire** (March 2015).
- **Developed a protocol for collecting data from control groups in Burundi** (March 2015).

Activity 3. Evaluating design of improvement activities in LMIC

Evaluating Household Economic Strengthening Activities for Vulnerable Children and Families in Malawi

Overview: In Malawi, the USAID ASSIST Project has been supporting vulnerable children and families through HES activities. The objective of the improvement activity is to increase the proportion of children in household who participate in HES activities who are linked to necessary essential services, encompassing food security, health, education, and HES.

Accomplishments: Designed a pre/post evaluation and collected baseline data. Five villages are included in the sample, along with 5 villages which will function as controls. Baseline data were collected in February 2015 from 145 children in the intervention and control sites. In the next quarter, baseline data will be analyzed and improvement activities will be underway. Endline data collection is anticipated for Quarter 1, FY16.

The effectiveness and efficiency of integrated service delivery to HIV-positive mothers and their babies in Uganda

Overview: In Uganda, under the Partnership for HIV-Free Survival, the ASSIST Project has been working to improve retention of mother-baby pairs. A pre-post evaluation was designed to capture the effectiveness of the improvement efforts in meeting this objective. The study also included a midline qualitative component to understand the client experience of the new service delivery approaches and gather feedback on how to further improve the quality of care.

Accomplishments: Conducted midline qualitative interviews with 39 women in December 2014 who received HIV services along with their babies at four facilities in Uganda. Respondents were an average of 29 years and average age at diagnosis was 25.6 years. Of respondents, 27 were married, six reported being in a relationship, one was separated, two were widowed, and three were single. They had an average of four children. Respondents had been on ARVs an average 2.45 years and had been receiving services at the facility where they were interviewed for an average of 3.2 years. The pre-tested interview guide included questions on demographics, initial experiences in care, experiences with the changed service delivery modes, and suggestions for improving care. Direct observation was conducted at each facility by two data collectors. Observation included exploring how services were delivered prior to the introduction of the improvement activity and what changes were implemented as a result of the improvement work with details on how they were implemented.

Factors associated with HIV testing among male partners of pregnant women in Burundi

Overview: In Burundi, a baseline assessment conducted by HCI in 2012 found low participation of pregnant women's partners; only 6% of pregnant women enrolled in the ANC who were tested for HIV had a partner who was also tested. ASSIST is providing support for the implementation of an improvement collaborative focused on improving the quality of PMTCT services in eight provinces of Burundi; this study is being carried out in the four initial provinces supported by the project (Kirundo, Muyinga, Kayanza and Karusi). In order to improve the involvement of men in maternal and child health care, including PMTCT, in the intervention area of the ASSIST project, it is important to understand the perceptions, attitudes and beliefs about the involvement of male partners in maternal and child care, and identify culturally acceptable strategies that can be adopted to improve the participation of men.

In collaboration with the National Program against HIV, ASSIST conducted a study that will contribute to the understanding of the low involvement of male partners in maternal and child services. The results of the study will help develop strategies to improve the involvement of partners of pregnant women enrolled antenatal care to improve the efficiency of maternal and child services, including PMTCT in ASSIST-supported sites in Burundi. Two measures of partners' involvement are used: 1) Accompanying spouse to the ANC visit; 2) Getting tested for HIV during wife's pregnancy.

The overall objective of this study was to identify factors that promote or hinder the involvement of male partners in maternal and child health services in the intervention area of the ASSIST project in Burundi. Results will be used to develop recommendations to promote male involvement in maternal and child health programs in general, including PMTCT. Specifically, the study aimed to:

1. Identify factors that facilitate or hinder male partners accompanying pregnant women to their ANC visit

2. Determine the factors that facilitate or hinder voluntary HIV testing among partners of pregnant women enrolled in ANC.

3. Determine the factors that facilitate or impede the sharing of HIV status within couples.

Accomplishments: A French report has been written and is under review by the team. The French report and extended English summary will be finalized next quarter.

Study to examine individual and facility-level determinants of loss to follow-up from ART services in health facilities in the Morogoro Region of Tanzania and understand factors that may promote return to care among clients who are lost to follow-up

Overview: People living with HIV/AIDS who miss three or more consecutive clinic appointments are labelled as LTFU. Continuing high rates of LTFU in antiretroviral treatment programs among HIV-positive patients waiting to start treatment and those already on treatment are a symptom of health system problems. The ensuing lack of adherence to ART can lead to high morbidity and mortality rates and treatment resistance, which is complex and expensive to manage. It is therefore important to determine factors that lead to LTFU so that targeted interventions can be developed and implemented to improve retention. Specifically, as USAID ASSIST is in the process of scaling up improvement activities for HIV patients in Morogoro, we need to understand why patients are lost to follow-up so that the improvement intervention package can be further enhanced.

The overall objective of the study is to explore individual- and facility-level determinants of loss to follow-up from ART services in health facilities in the Morogoro Region and understand factors that may promote return to care among clients who are lost to follow-up. The study aims to address the following specific objectives:

1. To determine the percentage of ART clients who are LTFU in health facilities providing HIV services in Morogoro Region.
2. To determine facility-level factors that promote or hinder LTFU among ART patients in health facilities providing HIV services in Morogoro Region
3. To determine the individual-level factors that promote or hinder LTFU among ART patients in health facilities providing HIV services in Morogoro Region
4. To determine gender-related factors contributing to LTFU among ART patients
5. To determine the factors that promote return to care among LTFU patients

Methodology: This cross-sectional study will use a combination of qualitative and quantitative methodologies such as structured and semi-structured in-depth interviews and focus group discussions to explore factors that lead to treatment discontinuation from the perspectives of clients, PLHIV, group representatives, home-based care providers, Care and Treatment Clinics (CTC) health providers and managers. All 40 health facilities that have CTC services from the six Morogoro districts will be selected. Semi-structured interviews will be conducted with 344 clients with a history of LTFU and 344 clients with no history of LTFU. Six focus group discussions (FGD) will be conducted with representative from PLHIV groups to obtain information on common factors that influence LTFU from ART services and recurring themes from their experiences receiving CTC services. In-depth interviews will be conducted with 40 home-based care (HBC) providers and 40 health care workers and managers to collect information on factors that promote on inhibit loss to follow up through their experience locating LTFU clients and providing home services to PLHIV. In-depth interviews will also be conducted for selected clients of ART to get their perspective on retention factors for HIV services. For quantitative data, descriptive frequencies and percentages will be obtained as well as Chi-square tests to assess differences between clients with a history of LTFU and those with no history of LTFU in terms of key factors. Odds ratios (OR) and 95% confidence intervals will be obtained using logistic regression to determine factors associated with LTFU status. Qualitative data will be transcribed and coded using a priori themes guided by the questions and themes that emerged from a subset of the responses.

Accomplishments: Ethical approval was obtained from the National Health Research Ethics Committee of Tanzania in February 2015 and URC IRB in March 2015.

Baseline Assessment of HIV services in the Democratic Republic of Congo.

Overview: USAID ASSIST is supporting the MOH of DRC to improve nutrition services for HIV clients through the integration of NACS into HIV care and treatment, in coordination with other implementing partners. The baseline assessment will identify the strengths and weaknesses of HIV/AIDS services in DRC with a focus on NACS, PMTCT, retention in care, and adherence to therapy. Findings from the assessment will inform the design of a quality improvement program.

Accomplishments: Data collection began in April 2015 and is planned through May 2015.

Activity 4. Evaluation of methods and approaches for effective design and implementation of scale-up

Study on the effectiveness and efficiency of integrated service delivery to HIV-positive mothers and their babies in Uganda

Overview: ASSIST works in 22 facilities across six districts of Uganda to improve retention of mother-baby pairs in care, to attain universal breastfeeding and improved nutrition of mother-baby pairs, and ensure that HIV-exposed infants are protected through ARVs. In 2014, ASSIST-Uganda began spreading the best practices identified in this demonstration phase to an additional 87 facilities across the country. Currently, services for HIV-positive women and their babies tend to be provided at ART clinics and post-natal clinics, requiring mothers to attend both clinics. In an effort to improve retention of mother-baby pairs in care there has been a movement toward merging service delivery so mother-baby pairs can receive care at the same time or strengthening the linkages between post-natal and ART services to ensure mothers and their babies receive the necessary services.

The objective of this study is to evaluate these different modes of service delivery among the 87 spread facilities with particular attention to infant feeding and retention into care of mother-baby pairs. The specific research questions for this study are:

- How do mothers experience and perceive care across the different modes of service delivery (i.e., services provided in ART clinics, post-natal clinics, or clinics where the services are merged)?
- How effective are the different modes of service delivery compared to the current mode of service delivery in terms of initiation on ART if indicated, receiving routine health services and retention in care?
- What is the incremental efficiency of the new modes of service delivery compared to the current mode of service delivery in terms of initiation on ART if indicated, receiving routine health services and retention in care?

Accomplishments: Completed midline data collection (March 2015).

Study of Safe Male Circumcision Knowledge Management (SMaCKM) in Uganda

Overview: ASSIST is working in Uganda to spread the improvement of safe medical circumcision in Uganda using knowledge management methods. This study, which is being conducted in 15 sites in partnership with JHUCCP, is using a three-armed comparison, with sites randomly assigned to one of the following arms:

- Simple handover of written materials
- Handover of written materials with an in-person handover meeting
- Handover of written materials with an in-person handover meeting and three follow-up coaching visits from ASSIST staff

Using direct observation of circumcision provision, this study will seek to answer:

- What is change in the quality of service delivered?
- Which dissemination method is more effective in improving care?
- What is the cost-effectiveness of different dissemination methods?
- How was KM implemented in the field?
- What KM methods do health care providers prefer?

Data collection by observations of delivery of care included: pre- and post-op interaction with patient, the handover meeting, and coaching visits.

Accomplishments: Completed baseline data collection (October 2014) and conducted the handover meeting (March 2015).

Screening in maternity to ascertain TB status (SMART) study in Swaziland

Overview: Globally, there is need to improve TB screening among both pregnant and lactating women, and to identify algorithms with high case detection to ensure rapid diagnosis and timely treatment initiation. We have designed a study to evaluate the sensitivity and specificity of the current TB screening tool for pregnant and lactating women (both HIV infected and not) and assess hypothetical enhanced screening algorithms, including additional symptoms and clinical/laboratory procedures and tests. In so doing, it is hoped that an optimum and cost-effective screening algorithm for pregnant and lactating

women can be identified. This cross-sectional analytical study design will collect data to assess current screening practices in the selected facilities. In Swaziland, it is anticipated that this study will allow for identification of the optimal screening tool for pregnant and lactating women. This, in turn, will help to improve maternal and child health outcomes in the country.

Accomplishments: The protocol has been submitted to the Swaziland IRB and will progress once approval has been secured. (March 2015).

Activity 5. Economic analysis of improvement activities

Overview: Determining the cost-effectiveness of improvement interventions is of great importance to guide decisions on what activities to support. The R&E team is actively working to get some economic analysis into at least one of all the country activities. It is also developing greater in-country capacity to perform economic evaluations and the ability to identify and collect appropriate financial data to facilitate these evaluation.

Accomplishments:

- **Dr. Broughton traveled to Swaziland and presented to the Swaziland ASSIST team and others in the Mbabane office on how to perform a cost-effectiveness analysis on improvement activities** (November 2014). This was part of capacity development for the team to facilitate the studies ongoing in the country that include economic analysis. The same was done in South Africa with the ASSIST team there as well as guests from the South African MOH.(February 2015).
- **Data collection continues in research activities such as the SMaCKM study in Uganda** (see Activity 4 above). Analysis of cost and effectiveness data is also currently underway for the chronic care work in Uganda and several studies from ASSIST activities in Georgia. (March 2015)
- **Dr. Broughton presented at the Institute of Medicine meeting on research on USAID's quality improvement work in LMICs.** He discussed the methodological issues in such research and evaluation and specific results obtained from ASSIST studies. (February 2015).

Activity 6. Sustaining improvements and institutionalizing the capacity to continuously improve

Overview: ASSIST is planning a study on institutionalization of improvement in Mali. This prospective study will examine the institutionalization of improvement in Mali over time. Facilitators and barriers to improvement will also be examined.

Accomplishments:

- A protocol for this study is being developed.

Activity 7. Generating learning from multi-country studies

Overview: ASSIST seeks to leverage the fact that it is working on the same or similar goals concurrently in several countries, sometimes with similar methods. Learning how improvement works or not in different settings can add significantly to the body of knowledge of health systems strengthening. The study listed below is just one example of such a multi-country approach.

Accomplishments:

- **A multi-country case study, "Supporting close-to-community providers through a community health system approach: Case examples from Ethiopia and Tanzania" was accepted for publication in the journal *Human Resources for Health* and was published on March 28, 2015.** See Activity 9 for more details.

Activity 8. Capacity building for research and support to country programs

Overview: There is limited capacity to perform rigorous evaluations of improvement interventions, including economic analysis and qualitative methods in health system strengthening. ASSIST is working to address this by presenting to ASSIST in-country staff, implementing partners, MOH counterparts and activity officers at USAID missions.

Accomplishments:

- **Sarah Lunsford conducted a virtual training on data collection for the Malawi Evaluating Household Economic Strengthening Activities for Vulnerable Children and Families in Malawi** (January 28, 2015).
- **Astou Coly went to Cote d'Ivoire to provide technical support for R&E activities** (March 2015). In addition to the developing a protocol to meet ASSIST R&E mandates, She provided support for the development of a data quality assessment tool and a monitoring and evaluation manual.
- **A francophone webinar on data quality was organized** (February 11, 2015). The Burundi team shared their experience using a newly developed data quality assessment tool. This newly developed tool is used to monitor the equality of data collected and reported by quality improvement teams. During the webinar, Astou Coly also gave a presentation on the R&E mandates that each country needs to meet. The webinar was attended by Burundi, Cote d'Ivoire, Niger and Mali country teams.
- **During his trip to India, Simon Hiltebeitel led a discussion with the ASSIST India staff on data presentation and visualization** (February 12, 2015). Mr. Hiltebeitel also worked with ASSIST India research staff to address several data management challenges.

Activity 9. Disseminate knowledge gained through ASSIST R&E activities

Accomplishments:

- **Prepared and submitted a paper entitled "Supporting close-to-community providers through a community health system approach: Case examples from Ethiopia and Tanzania"** to *Human Resources for Health*, which was accepted and published on March 28, 2015 (http://www.human-resources-health.com/content/13/1/12/abstract)
    - This paper includes two cases studies, one from Ethiopia and the other from Tanzania. They examine the Community Health System Strengthening (CHSS) model, an improvement approach that draws on existing formal and informal networks within a community, such as lending, religious, and youth groups, to support close-to-community providers, such as community health volunteers and health extension workers. The model brings together representatives from existing community networks, close-to-community providers, and health facility staff into a community team who identify gaps in services, test solutions, and monitor results. Team members from the community support close-to-community providers by disseminating health messages and referring community members to services.
    - In the Ethiopia case, the CHSS model was applied to support 18 communities to increase HIV testing among pregnant women, increased utilization of antenatal care services, and improved sanitation. By working together in a team, community groups became better informed about the available services and more comfortable making referrals. They were also able to spread health messages. As a result, more pregnant women registered for antenatal care and were tested for HIV during implementation, health extension workers conducted more postnatal visits, and more households had functioning latrines.
    - In the Tanzania case, the model was applied to five communities who worked on improving HIV testing and retention. Community members spread messages about HIV testing and helped identify people who had dropped out of treatment, referring them to home-based care volunteers. The program observed increased HIV testing and a reduction of patients lost to follow-up.
- **Prepared and submitted a paper entitled "Incentives of ASHA workers in two districts in India: Learnings from a qualitative study"** to *BMC Health Services Research* (March 25, 2015).
    - This study examined the role incentives play in motivating CHWs in India. Accredited Social Health Activists (ASHAs) are female CHWs in India who provide a range of services, including reproductive, maternal, neonatal, child, and adolescent health.
    - ASSIST conducted qualitative interviews with 49 ASHAs and one member of each ASHA's family to explore the role of family, community, and health system in supporting ASHAs in their work. The results from the thematic analysis of the interviews were that incentives were empowering, as a source of household income inspiring a sense of self confidence, but were also a source of distress for ASHAs and their families as incentive rates are low and payments irregular and often incomplete. Further, ASHAs dedicate their own time and resources to perform their duties, and

incentives are not well aligned with the effort required and out-of-pocket costs ASHAs incur. As a result, sometimes ASHAs prioritize and promote those services that yield higher incentives, not those that are the most appropriate for their clients. ASHAs and their families maintain hope that their positions will eventually result in a regular salary, which contributes to retention.
  - The study recommends that the incentive scheme be revised to better reflect out-of-pocket costs and the time and effort ASHAs require to complete tasks, improving communication to ASHAs about incentives and responsibilities, and improving the system of payment to ASHAs to make it more timely and complete.

- **Dr. Broughton presented at the Institute of Medicine as noted above (January 2015)**
- **Dr. Sarah Lunsford delivered two presentations at the annual meeting of the American Evaluation Association in Denver, CO** (October 15-18, 2014). The first presentation was entitled *"Evaluating a Community Health System: Lessons from Tanzania".* The second presentation, which she delivered on Edward Broughton's behalf, was entitled *"Improving healthcare for NCDs in Georgia".*
- **Simon Hiltebeitel and Sidhartha Deka, along with colleagues from JSI, DHS, and JHU-CCP, presented a session entitled,** "**A Data Viz Makeover: Approaches for Improving Data Visualizations**" at the Global Health Mini-University (March 2, 2015).

Planned Activities Next Quarter: April - June 2015

- Finalize the following research products:
  - Listening to patients and providers: Experiences of applying the Chronic Care Model to HIV services in Uganda
  - AIMGAPS facility-based evaluation
  - Improving the quality of VMMC in Uganda: A mixed methods study of quality standards adherence and post-procedure follow-up
- Data collection for Tanzania loss to follow-up study
- Data collection for validation and control groups in Burundi
- Data collection for DRC baseline assessment
- Finalize study report for Burundi male partners involvement report
- Astou Coly will travel to DRC and Burundi to provide technical assistance for research and evaluation activities.

6. Obstacles and Remedies

Obstacles: While the work under ASSIST is proceeding, there remain serious funding issues, in particular the discrepancy between the timing of the funding and the work planning requirements. During the first two quarters of FY15, ASSIST received three different modifications with additional funding for continuing and new scopes of work, presenting a challenge in terms of planning and resourcing the work. This has consequences for the timing and speed by which project activities can be implemented. More serious consequences can happen if an activity goes into closedown mode and is then expected to ramp up. The staffing implications of such erratic timing of funding makes managing the work and paying due diligence to our country staff very difficult in view of the host country labor law requirements we also have to abide by. Moreover, the ASSIST Project and URC have been put in the risky financial position of forward-funding activities in order not to lose momentum of some mission- and core-funded activities and not have to re-start project activities from the beginning if and when funds are made available.

Remedies: Please expedite the obligation of funding actions that are pending. Please communicate to the bureaus and missions that delays will result in damage to the technical progress of work as well as relationships with Ministries of Health and partners on the ground.

7. Analysis and Explanation Costs

Additional obligations in mission funding were received in the second quarter of FY15, hence ASSIST staff were able to strengthen and expand many of the activities. This expansion increased the burn rate to the expected level for a project of this size and complexity.

8. Performance Monitoring Plan

Table 12 summarizes progress through March 31, 2015 on achieving the targets in the ASSIST performance monitoring plan.

Table 12. Progress on USAID ASSIST Project performance monitoring indicators through March 31, 2015

Project Management					
#	Indicator	Baseline	End of Project Target	Progress as of March 31, 2015	Data Source/ Collection methods
1	# of Annual Work Plans submitted on-time to the AOR	0	5	3	Transmission of deliverable to the AOR
2	# of Annual Project Reports submitted on-time to the AOR	0	5	2	Transmission of deliverable to the AOR
3	Gender Framework submitted within 90 calendar days of the cooperative agreement effective date	0	1	1	Transmission of deliverable to the AOR
4	# of Annual Research and Evaluation Reports submitted on-time to the AOR	0	5	2	Transmission of deliverable to the AOR
5	# of quarterly financial reports submitted on-time to the AOR	0	20	9	Transmission of deliverable to the AOR

6	# of Semi-annual Performance Monitoring Reports submitted on-time to the AOR	0	10	4	Transmission of deliverable to the AOR
7	Final Report of the cooperative agreement submitted on-time to the AOR	0	1	NA	Transmission of deliverable to the AOR
Documentation and Knowledge Management					
#	Indicator	Baseline	End of Project Target	Progress as of March 31, 2015	Data Source [Benchmark]
1	Knowledge Management Plan submitted within 90 calendar days of the cooperative agreement effective date	0	1	1	Transmission of deliverable to the AOR
2	# of Documentation and Knowledge Management Reports submitted to AOR	0	5	2	Transmission of deliverable to the AOR
3	Design of ASSIST Knowledge Portal submitted to AOR for approval	NA	1	1	Written approval by AOR [Benchmark: completed in year 1]
4	# of country case studies	0	30	22	[Benchmark: 20 completed by the end of year 3]
5	# of research and evaluation studies examining the KM system as a whole or components	0	4	2	[Benchmark: four completed by the end of year three]
6	% of ASSIST country teams with at least one team member with basic competencies in KM and documentation	0	100%	60% (12/20)	Country program quarterly and annual reporting; special surveys
7	% of assisted countries that apply KM approaches to conduct synthesis and knowledge harvesting exercise each year	7% (1/14)	100%	65% (13/20)	Country program quarterly and annual reporting; special surveys
8	Average # of knowledge products developed per country	0.6 (9/14) (FY13)	3	(9 + 29 + 7 = 45/20) = 2.3	Country program quarterly and annual reporting
9	% of assisted countries with local repository of improvement knowledge	0%	Baseline + 25%	5%	Country program quarterly and annual reporting
10	# of communities of practice supported on the ASSIST knowledge portal	0	3	1	HQ quarterly and annual reporting
11	# of virtual learning events supported by the ASSIST KM system	0	3	4 + 8 = 12	HQ quarterly and annual reporting

Global Technical Leadership					
#	Indicator	Baseline	Target	Progress	Data Source/ Collection methods
1	# of articles on improvement methods and results published in peer-reviewed journals	NA	10	4 + 4 = 8	Publication
2	# of assisted countries with national health care improvement policies and strategies	3	Baseline + 5	4	Country program quarterly and annual reporting
3	# presentations given by ASSIST staff at global health technical conferences	NA	25	116	HQ and country quarterly and annual reporting
Field Operations					
#	Indicator	Baseline	Target	Progress	Data Source/ Collection methods
1	% of integrated country design plans signed by country and USAID stakeholders	NA	100%	88% (15/17)	Country Improvement Plan signed
2	% of annual country reports submitted on-time	NA	100%	100%	Dates of submission of annual country reports to AOR
3	% of annual country reports that examine magnitude and spread rate of improvement	NA	100%	100%	Review of annual country reports
4	% of country-reported indicators externally validated	NA	25% of reported indicators	33%	Country quarterly and annual reporting
5	% of improvement indicators tracked with a QI and non-QI intervention comparison groups	NA	10% of reported indicators	18%	Country quarterly and annual reporting
6	% of countries collecting and analyzing sex-disaggregated data for improvement when relevant	86% (6/7) (FY13)	100%	82% (9/11)*	Country quarterly and annual reporting
7	% of country programs tracking expenditures for the purpose of economic evaluation (integrated into the country plan)	0	80%	30%	Accounting records
8	% of integrated country design plans that address relevant gender-related barriers	43% (3/7)	30%	88% (15/17)	Review of integrated country design plans, review of project planning

USAID APPLYING SCIENCE TO STRENGTHEN AND IMPROVE SYSTEMS PROJECT

University Research Co., LLC
7200 Wisconsin Avenue, Suite 600
Bethesda, MD 20814

Tel: (301) 654-8338
Fax: (301) 941-8427
www.usaidassist.org