

MID-TERM EVALUATION REPORT

“Child Survival and Health Program for Kvemo Kartli and Imereti, Georgia”



Cooperative Agreement Number:

GHS-A-00-04-00025-00

October 1, 2004 – September 30, 2009

Submitted to:

US Agency for International Development

USAID/GH/HIDN/NUT/CSHGP

Room 3.7-72B

Washington, DC 20523-3700

Submitted by:

HEADQUARTERS

A Call to Serve International
601 Business Loop 70 West, Suite 113
Columbia, MO 65203

FIELD OFFICE

A Call to Serve - Georgia
7, Vazha Pshavela Ave.
Tbilisi, Georgia 0160

Date of Submission: October 30, 2007

ACTS MTE Consultant: David Newberry

Key MTE Participant Team:

David Newberry, Global Consultants, Inc.

Patricia J. Blair, MD, Headquarters Backstop

Giorgi Tsilosani, MD, PhD, Field Office, Chief Medical Officer

Revaz Tataradze, MD, PhD, CSP Director

Eteri Suladze, CSP Project Manager

Editor: Vicki Leighty, Leighty Consulting Services

ACKNOWLEDGEMENTS

A Call to Serve (ACTS) International and ACTS Georgia wish to recognize those that directly contributed or participated as technical or expert resource in this Mid-Term Evaluation.

The Georgia Ministry of Labor, Health and Social Affairs (MoLHSA) participated at every level of operation during the Mid-Term Evaluation exercise.

Staff from every health facility took precious time from their busy work day to meet with the team and share experiences, ideas and data during their interviews, as well as valuable suggestions for working more cohesively with the CSP. All those interviewed expressed support for the project and a commitment to improve and expand their services to their community.

We wish to thank the professional medical service caregivers and the clinicians and their support staff for their motivation and dedication to meeting the needs of their patients.

Mothers, infants and children and other community members seeking medical care services in facilities visited, were strong in their recognition of the quality of services offered, both curative and preventive.

The community focus groups were inspiring, and their response was proactive and fully participative for each individual attending.

Finally, the cohort of young children we observed was simply beautiful to see, as happy individuals with the potential for long healthy lives.

The ACTS Georgia staff serves as a role model for an organized team focused on the important activities of saving the lives of mothers, infants and children.

TABLE OF CONTENTS

Acknowledgements	1
Table of Contents.....	2
List of Acronyms.....	4
Summary	5-6
Assessment of Progress Made Toward Achievement of Project Objectives	7-27
Technical Approach.....	7-12
<i>Brief Overview of Project.....</i>	<i>7</i>
<i>Progress Report by Intervention Area.....</i>	<i>9</i>
<i>New Tools or Approaches.....</i>	<i>12</i>
Cross-Cutting Approaches	13-27
<i>Community Mobilization</i>	<i>13</i>
<i>Communication for Behavior Change</i>	<i>14</i>
<i>Capacity Building Approach</i>	<i>18</i>
Project Management	28-33
Planning.....	28
Staff Training	28
Supervision of Project Staff.....	29
Human Resources and Staff Management.....	29
Financial Management	29
Logistics	30
Information Management	31
Technical and Administrative Support	32
Mission Collaboration.....	32
Other Issues Identified by the Team	34
Conclusions and Recommendations.....	35-36
Results Highlights.....	37-41
Action Plan/Revised Work Plan.....	41-49

Attachments.....	50-126
A. Baseline Information from DIP	51
B. MTE Survey (LQAS) Report	53
C. Evaluation Team Members and Titles	70
D. Evaluation Assessment Methodology	71
E. List of Persons Interviewed and Contacted	73
F. CD with electronic copy of the report in MS Word 2000.....	82
G. Special Reports	83-108
1. <i>Hospital Assessment by Randall Floyd, M.D. and Laura Hillman, M.D.</i>	83
2. <i>Georgia Diary by Laura Hillman, MD</i>	90
3. <i>Child Rights Protection Association “Claritas XXI” Report</i>	94
4. <i>Follow-up Observations on the Integrated Management of Childhood Illness Report</i>	104
5. <i>Summary of Five Hospitals Delivery Log</i>	108
H. Project Data Sheet Form	109-116
I. References and Resources	117-124
1. <i>References</i>	116
2. <i>Map of Georgia and Intervention Target Regions</i>	116
3. <i>Maternity Facility Assessment (MFA)</i>	117
4. <i>Comparison of LQAS MTE Results in Rural and Urban Areas of Focus ...</i>	121
5. <i>Structured interview with Obstetrician</i>	122
6. <i>Structured interview by a Neonatologist</i>	123
7. <i>Neonatal Transport Death Chart Audit</i>	124
J. Political Structure in Georgia	125
K. CSP Relevance to Millennium Development Goals	126
1. <i>The Government of Georgia is a signer to the UN Millennium 8 Development Goals</i>	126
2. <i>CSP Relevance to USAID Georgia Mission Strategic Priorities</i>	126

LIST OF ACRONYMS

AAFP	American Acad. of Family Physicians	LQAS	Lot Quality Assurance Sampling
ACTS	A Call to Serve	M&E	Monitoring and Evaluation
ALSO	Advanced Life Support Obstetrics	MCH	Maternal and Child Health
ANC	Antenatal Care	MDG	Millennium Development Goals
ARI	Acute Respiratory Infection	MFA	Maternity Facility Assessment
BCC	Behavioral Communication Change	MICS	Multiple Indicator Cluster Survey
BF	Breast Feeding	MIS	Management Information System
BFH	Baby-Friendly Hospital	MMR	Measles, Mumps and Rubella
CDEM	Center for Disaster and Emergency Medicine	MMSG	Mother-to-Mother Support Groups
CIF	Curatio International Foundation	MNC	Maternal and Newborn Care
CMO	Chief Medical Officer	MOH	Ministry of Health
CORE	The Child Survival Collaborations and Resources Group	MoLHSA	Georgia Ministry of Labor, Health and Social Affairs
CS	Child Survival	MP	Medical Personnel
CSP	Child Survival Program	NCDC	National Center for Disease Control
CSHGP	Child Survival Health Grant Program	NCDC	National Communicable Disease Center
CSTS	Child Survival Technical Support	NGO	Non-Governmental Organization
DIP	Detailed Implementation Plan	OB/GYN	Obstetrics/Gynecology
DOSA	Discussion-Oriented Self- Assessment	ORS	Oral Re-hydration Salt
ECD	Early Child Development	ORT	Oral Re-hydration Therapy
EOP	End of Project	PHR	Partners for Health Reform
EU	European Union	PVO	Private Voluntary Organization
FE	Facility Assessment	RH	Reproductive Health
FP	Family Planning	RV	Reaction of Vasserman
GMA	Georgian Medical Association	SDS	State Department of Statistics
GNMC	Gudharshi National Medical Center	SO	Strategic Objectives
HIV	Human Immunodeficiency Virus	SPSS	Statistical Package for the Social Sciences
IEC	Information, Education, Communication	STI	Sexually-transmitted Infection
IMCI	Integrated Management of Childhood Illness	TRM	Technical Reference Materials
IMR	Infant Mortality Rates	UNICEF	United Nations Children's Fund
JSI T&R	John Snow Inc. – Training and Research Institute	USAID	U.S. Agency for International Development
KPC	Knowledge, Practice, Coverage	VRF	Vishnevskaya-Rostropovich Foundation
LOE	Level of Effort	WRA	Women of Reproductive Age
		WHO	World Health Organization

SUMMARY

A Call to Serve (ACTS) International and its affiliate, ACTS Georgia are in the third year of implementation of a five-year Child Survival Program (CSP). This is the first CSP in Georgia and the project targets 37,648 children less than five years and 144,648 women of reproductive age in the Kvemo Kartli region and in cities of Chiatura and Zestaphoni in Imereti region. Target populations are mothers, infants and children under five years of age, in the two most economically depressed areas. Increased mortality among mothers and children occurred after the 1991 collapse of the Soviet Union.

The goal of the “Child Survival and Health Program for Kvemo Kartli and Imereti, Georgia” is to reduce maternal, neonatal infant and child morbidity and mortality. The goal is being achieved through three principal objectives:

1. Improved quality of M/C survival services.
2. Improved behavior and maternal and child health practices within households, the community and among health care professionals and health managers.
3. Increased availability of M/C health care services and increased access to adequate standard case management.

Interventions include: Maternal and Newborn Care (MNC) 25%, Breastfeeding Promotion (20%), Nutrition (15%), Case Management of Diarrhea (25%) and Case Management of Pneumonia (15%), with the latter two combined into one intervention area: Management of ARI/Pneumonia and Diarrhea (40%). Three crosscutting strategies are being used to achieve program objectives: (1) Behavioral Communication Change (BCC) approaches; (2) Institutional Capacity Building; and (3) Partnership Development for Social Mobilization. Integrated Management of Childhood Illness (IMCI) will be applied in the delivery of childcare services.

Main Accomplishments of the Project

ACTS has implemented the first successful health program in Kvemo Kartli. ACTS selected Kvemo Kartli at request of the USAID Georgia Mission. Previous health program efforts of other organizations had failed. The CSP targets 144,648 women of child-bearing age and 37,995 children under five for a total beneficiary population of 182,644. A mass media campaign was conducted in Kvemo Kartli region (population 535,546). Individual- and community-level interventions were conducted in focus areas, targeted to underserved minority ethnic groups. In focus areas, ACTS worked with 9 maternity facilities, 10 polyclinics and 60 ambulatories across 63 sub-districts in two regions (Kvemo Kartli and 2 sub-regions of Imereti).

The CSP has worked in close collaboration with the Georgian Parliament, Department of Public Health and MoLHSA. As result, successful legislations have been passed that have had positive impact on improving health in these regions. Fee-based birth registration was eliminated (Parliament Law passed in 2005), the Universal Iodization of Salt Law was enacted (Feb. 2005 “Law of Georgia on Prevention of Diseases Cases by Iodine, Other Micronutrients and Vitamins Deficiency) and a pending law requiring fortification of flour with iron and folic acid is moving forward, as direct result of ACTS leadership in securing a 3-year, \$1.5 million grant from GAIN.

A diverse and broad-based stakeholder network at national, regional and local levels has been developed. Physicians have been trained in IMCI, breastfeeding and WHO Baby-Friendly

hospital standards and Rustavi has become the first Baby-Friendly certified hospital in the area. Social inequality for women is no longer as great a barrier due to FGDs and other innovative approaches used to engage young mothers.

Overall Progress Made in Achieving Project Objectives

ACTS has made significant progress in reducing maternal, infant and child mortality through community programs and behavior change interventions. The CSP has successfully reached underserved and isolated communities and garnered a high level of community support.

Main Constraints, Barriers and Challenges

Unregistered births continue to challenge health care in the region. Transportation is a barrier that limits access to care. Cultural, language and religious traditions among families in Kvemo Kartli are diverse and require cultural and religious sensitivity. Women have traditionally been hard to reach due to social inequality. Training for healthcare professionals is needed on IMCI, breast feeding and Baby-friendly hospital standards. Lack of equipment at health facilities impacts quality of care and consumer decision to seek care. Lack of sufficient mortality tracking data in these rural and remote regions is a challenge. Medical malpractice, including maternal death is a manner of criminal, not civil law and may effect accurate reporting of these cases.

Capacity-Building Effects of the Project

Capacity building effects as result of the CSP include increased monitoring and evaluation skills for staff and utilization of a systems-approach. Program staffs have achieved a high level of competency in KPC, LQAS and other MCH technical skills, and strategic planning capabilities. Health worker performance, knowledge and skills have also increased.

Lessons Learned

The greatest lesson learned has been engaging populations in health interventions whose cultural, language, social and religious traditions have isolated them for generations. Developing trust between diverse communities takes time and committed work. Access to experienced CS peers throughout the world through the USAID/CORE network is uniquely helpful. Implementing CSP using rigorous evidence-based USAID CSGHP system (KPC baseline, DIP, MTE independent review) has improved ACTS' ability to communicate results and advocate for change.

Sustainability

Engaging a broad-based network of representative stakeholders from every facet of the community is essential in achieving long-term sustainability. Creating an educational climate for young women that is engaging and helpful, while respecting cultural values is critical. ACTS progress in both arenas has been exceptional.

Conclusions and Recommendations Resulting from MTE

ACTS agrees with the MTE conclusions and recommendations resulting from the MTE and will utilize the recommendations for future work and focus for the remaining two years of the CSP.

Grantee's Responses to the MTE Evaluation Recommendations

See Action Plan/Revised Work Plan on pages 38-45.

ASSESSMENT OF PROGRESS MADE TOWARD PROJECT OBJECTIVES

TECHNICAL APPROACH

Brief Overview of Project

The goal of the “Child Survival and Health Program for Kvemo Kartli and Imereti, Georgia” is to reduce maternal, neonatal infant and child morbidity and mortality in the Kvemo Kartli region and in the cities of Chiatura and Zestaphoni in the Imereti region. The total population of the target area is 535,546. This CSP serves two of Georgia’s most vulnerable health groups – mothers, infants and children under five years of age – within the country’s two most economically depressed areas. This CSP targets approximately 37,648 children less than five years of age and 144,648 women of reproductive age, 15 to 49 years of age.

The program goal is being achieved through three principal health objectives:

1. Improved quality of M/C survival services.
2. Improved behavior and maternal and child health practices within households, the community and among health care professionals and health managers.
3. Increased availability of M/C health care services and increased access to adequate standard case management.

The interventions include: Maternal and Newborn Care (MNC) 25%, Breastfeeding Promotion (20%), Nutrition (15%), Case Management of Diarrhea (25%) and Case Management of Pneumonia (15%), with the latter two combined into one intervention area: Management of ARI/Pneumonia and Diarrhea (40%). Three crosscutting strategies are being used to achieve the program objectives: (1) Behavioral Communication Change (BCC) approaches; (2) Institutional Capacity Building; and (3) Partnership Development for Social Mobilization. Integrated Management of Childhood Illness (IMCI) is being applied in the delivery of childcare services.

Local partners include:

- *A Call to Serve-Georgia (ACTS-Georgia)*, affiliate of ACTS International, is the key partner for planning, coordinating, monitoring and evaluating all field activities and interventions, in consultation with the ACTS headquarters office.
- *The Ministry of Labor, Health and Social Affairs of Georgia (MoLHSA)* is the key government partner that works seamlessly with ACTS International and ACTS Georgia on a national level to assist with coordination and management of the project.

Contributing partners include:

- *Claritas XXI* assists in implementing program strategies, through a network of trained community health workers and providers key to child survival, to assure achievement of sustained improvements in community practices and health care services.
- *Vishnevskaya-Rostropovich Foundation (VRF)* assists by identifying community leaders and facilitating mobile teams that will ensure immunization coverage for the region. VRF also collaborates with ACTS in conducting joint community training.
- *Government of Georgia (GOG)* is the main ACTS stakeholder. Government administrative bodies at the regional and local level have been involved in the process of community mobilization, playing a critical role in the development of networks on the local level. The long-term sustainability of the CSP depends on the MoLHSA and public health department

adoption of the CS strategies piloted in ACTS CSP Kvemo Kartli to be piloted nationwide. Active participation in the pilot has been a learning experience for ACTS, the GOG and the national Georgian Fortification Program.

MTE Evaluation Process

In preparation for the CSP MTE, the MTE consultant, ACTS Georgia and ACTS HQ Team determined the process to be taken. A review of previous project documents (Detailed Implementation Plan [DIP], Annual Reports, and Related Documents) was done. Participatory roles and responsibilities were assigned and an interview took place with MoLHSA and medical facilities staff. Stakeholders and partners were invited to serve as evaluation team members. A participatory approach was determined as the preferred MTE method. A meeting with the USAID Mission took place. The MTE also involved field visits to MoLHSA facilities, focus groups, and additional implementations sites; interviews with MoLHSA officials, government partners, political stakeholders, clinic personnel, ACTS community groups, mothers attending clinics during facility hours, OB/GYN doctors who attend pregnant women for ANC services and polyclinic staff; multiple interviews with mothers and focus group participants; the collection of training data and analysis from agencies, facilities and FGDs; and site assessments at maternity and clinic facilities to observe deliveries and Caesarian-sections for technique, equipment capacity, emergency procedures and quality of care. Interviews were conducted with ANC doctors regarding techniques, protocols, and interactions between patients and physician was observed. Laboratory support and testing capacity were reviewed. Interviews were conducted to assess individual knowledge of the CSP. Additional interviews of facility, administration staff, individual professionals, clinic personal and facility roles and responsibilities in collaboration were reviewed. Indicators were assessed using an LQAS survey (Attachment B) conducted with 170 women with a child less than two years of age.

Constraints/Barriers Identified

Constraints and Barriers with the GOG included absence of national standard guidelines and case management protocols, hence, OB and neonatal care is not performed to a uniform standard. Physician training and assessments are provided by bilateral funding through NGOs, resulting in multiple trainings that vary in results. Physicians hold many certificates yet still are unable to implement standard core practices. Physician salaries are low and often not paid within 30 days. Government funding is the issue. The results of on-going health sector reform makes it difficult for the Government to set aside full funding to cover public health costs, while transitioning from public service to a combined private and public health care system. Greater coordination of efforts among bilateral and international PVO Programs needs to be addressed. As Georgia moves into a more sectarian health organization, the number of domestic and foreign collaborators working in the country has increased. This requires greater organizational collaboration between all agencies working in a region. Often bilateral development agencies (U.S., Swiss, Sweden, Japan, Britain) work on related, but uncoordinated programs, putting strain on regional officials who are required to provide the assistance. ACTS has since 1992 been a leader conveying cooperation meetings. The GAIN program is an excellent example of one nationwide program being implemented quickly and cost-effectively because one organization and one Georgian government agency has streamlined their working relationship. Development of a regional government system is needed to coordinate program activities to avoid duplication of efforts and assure that priority needs are being addressed. Lack of regional Georgian

government health information system limits ability to share information about various groups working in a region- many PVOS do not readily share successes or failures.

The nature of behavior change interventions make an “evidence-based” approach difficult to track. The CSP needs to adopt modifications to improve BCI measurement and provide FGDs, based on tangible feedback; and modify training sessions at the community level. Limited evidence-based practices in place (e.g., partographs used just 9% of the time).

The Maternity Facility Assessment (MFA) conducted by ACTS at six Kvemo Kartli maternity facilities (refer to attachments) documents the need for essential neonatal resuscitation equipment. Respiratory problems are the leading cause of neonatal death. These findings are supported by a general national survey in 2006 by UNICEF. In both surveys all hospitals surveyed lacked necessary neonatal resuscitation equipment. These findings point to a nationwide problem according to UNICEF - Assessment of Perinatal Care in Georgia. The study found that healthy term babies die each year due to lack of baby warmers in the delivery suite. Hospitals have no heat, or limited heat, thus healthy babies arrest in shock of a cold environment. Disparity of data on mortality needs joint review, with all partners focused on data collection review and consensus adaptation.

Progress Report by Intervention Area

For the MTE, progress made in each of four CSP intervention areas were measured by administering an LQAS survey of 170 mothers, with a child less than two years old. In September 2007, the LQAS survey was conducted in the Kvemo Kartli Region consisting of six districts: Dmanisi, Bolnisi, Tetri Tskaro, Marneuli, Gardabani and Tsalka.

The sample size was 19 respondents/SA plus three additional SA for Rustavi city. The purpose of the LQAS survey was to measure progress compared to benchmark data for MCH indicators to: 1) collect MTE data on health and nutrition status of children under five and women of reproductive age; 2) Identify the impact of implemented interventions on health behavior patterns; 3) Enhance capacity of ACTS staff in planning, conducting, data collection and analysis of KPC surveys; and; 4) Revise the DIP and Action Plan based on the results obtained.

ACTS has made significant progress toward reducing maternal, infant and child mortality as documented by the LQAS data.. Graph 1 shows that in rural villages with focus CSP each of the seven process and results indicators for each of the four major intervention areas improved to meet or exceed the MTE benchmarks. Five of the indicators changed to exceed the MTE benchmark and 2 met the MTE benchmark. In comparison, Table 1 shows the magnitude of the indicator change in villages with focus (intensive interventions) compared to villages that received only regional type messages (e.g. mass media, government legislation) nonfocus CSP intervention. In the focus villages all seven indicators met or exceeded the MTE benchmark compared to the nonfocus villages where only 3 indicator changes met or exceeded the MTE benchmark. Additional comparison of indicator changes in focus rural and urban settings are summarized in Table 2 of the appendix. Each of the seven indicators in focus rural and urban setting changed to meet or exceeded the expected baselines. Significantly higher indicator change values are observed in the focus urban setting than in the focus villages. Further investigation is needed to determine actual causes of these differences.

Chart 1. Baseline-Target-LQAS data for 6 SA of Kvemo Kartli with intensive focus.

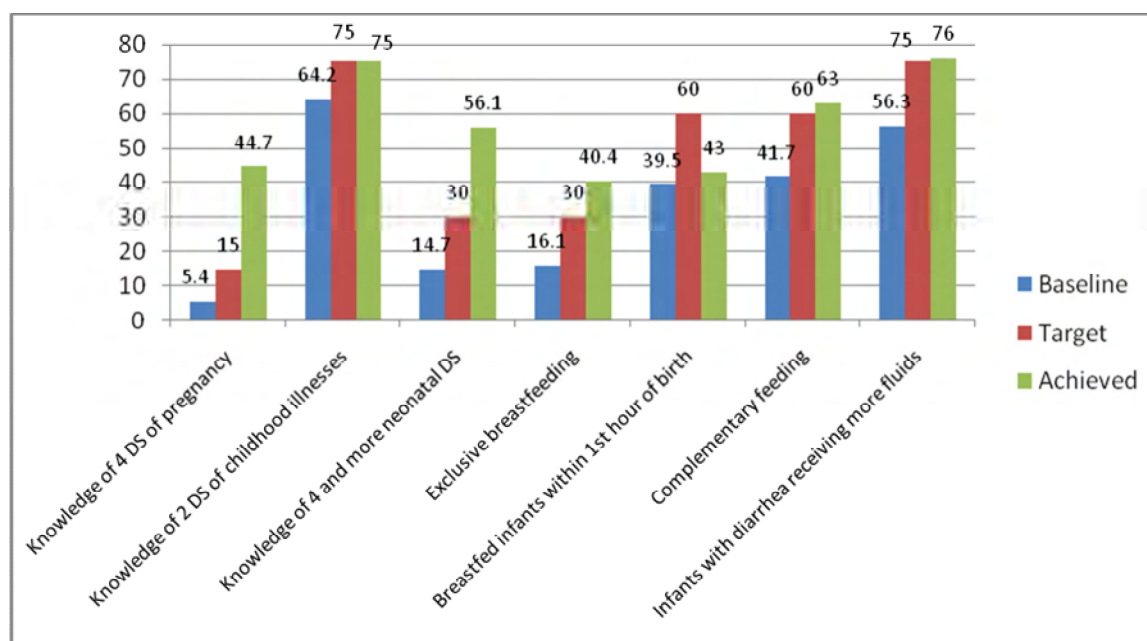


Table 1a: Results by Intervention at Mid-Term Evaluation (2007)
Comparison of LQAS MTE Results in Focus and Non-focus Villages

INDICATOR	BASELINE (KPC) 2005	MTE Target 2007	MID-TERM 2007 (LQAS)		
			FOCUS VILLAGES rural	NONFOCUS villages rural	2009 End of Program Target
Maternal and Newborn Care (25%)					
Behavior Process Indicator					
1. Percent of mothers who could report 4 and more danger signs of pregnancy	5.4%	15%	44.7%	40.6%	30%
2. Percentage of mothers who could report 4 and more neonatal danger signs	14.7%	30%	56.1%	44.9%	55%
Breastfeeding (20%)					
Results Indicator					
1. Percent of children aged 0-23 months who were breastfed within the first hour after birth	39.5%	45%	60.0%	40.2%	60%
2. Percent of children 0-23 months, who were exclusively breastfed for 6 months	16.5	30%	57.2%	38.8%	60%

Nutrition (15%)					
Results Indicator 1. Percent of infants aged 6-9 months who received solid foods with breast milk;	41.7%	60%	63.0%	50.9%	85%
Pneumonia/Diarrhea (40%)					
Behavior Process Indicator 1. Percentage of mothers who could report at least 2 danger signs of childhood illnesses	64.2%	75%	75.0%	60%	85%
Results Indicator 2. Percent of Children aged 0-23 months with diarrhea in the last two weeks who were offered more fluids	56.3%	75%	76%	65.0%	85%

Table 1b: Results by Intervention at Mid-Term Evaluation (2007)
Comparison of LQAS MTE Results in Focus and Non-focus Villages

INDICATOR	BASELINE (KPC) 2005	MTE TARGET 2007	MID-TERM 2007 (LQAS)		
			FOCUS VILLAGES rural	FOCUS CITIES URBAN	2009 End of Program Target
Maternal and Newborn Care (25%)					
Behavior Process Indicator 1. Percent of mothers who could report 4 and more danger signs of pregnancy	5.4%	15%	59.9%	63.0%	30%
Behavior Process Indicator 2. Percentage of mothers who could report 4 and more neonatal danger signs	14.7%	30%	66.2	69.6%	55%
Breastfeeding (20%)					
Results Indicator 1. Percent of children aged 0-23 months who were breastfed within the first hour after birth	39.5%	45%	59.2	62.3%	60%
Results Indicator 2. Percent of children 0-23months, who were exclusively breastfeed for 6 months	16.5	30%	57.2%	60.1%	60%

<i>Nutrition (15%)</i>					
<i>Results Indicator</i> 1. Percent of infants aged 6-9 months who received solid foods with breast milk;	41.7%	60%	75.8%	78.9%	85%
<i>Pneumonia/Diarrhea (40%)</i>					
<i>Behavior Process Indicator</i> 1. Percentage of mothers who could report at least 2 danger signs of childhood illnesses	64.2%	75%	95.9%	93%	85%
<i>Results Indicator</i> 1. Percent of Children aged 0-23 months with diarrhea in the last two weeks who were offered more fluids	56.3%	75%	81.3%	91%	85%

New Tools or Approaches

Among the successful innovation techniques developed to engage people and build trust for the CSP in the targeted regions was the building of a broad-based stakeholder network. This inclusive stakeholder involvement is new for this region. It is broad-based and includes both community leaders and religious leaders whom the community knows and trusts. Focus Group Discussion (FGD) used as a method for qualitative monitoring and it is a new skill that the ACTS team has gained during this CSP. FGD are new to the young women and grandmothers in Kvemo Kartli, a historically isolated area where women have never before participated in such activities. Involvement of the MOH and public health departments in the community-based training was critical to program success. Community festivals infused with MCH messages were the first festivals offered since the fall of communism in 1991. The events offered dances, songs, sports competitions, award ceremony and traditional foods. Participants were diverse, with several different ethnic groups represented. Three health fairs were held in Kvemo Kartli, with Georgian military health units and the U.S. Military training and equipment health unit providing medical staff, equipment and medical testing equipment. Incentives helped to recruit participants to events and activities. Forms and posters were translated to the Azerbaijan language; and health care professionals served as interpreters to overcome language barriers.

CROSS-CUTTING APPROACHES

Community Mobilization

Successes and Lessons Learned:

Community mobilization projects have resulted in empowerment of women through discussion group activities and education sessions. The discussion groups have encouraged women to use healthcare services during pregnancy, childbirth and the postpartum period. Discussion groups have served as a medium for identifying barriers that prevent pregnant women and mothers from seeking care, such as transportation, cost factors and cultural inappropriateness. They have also served as a means for learning about the technical competence, methods, and supplies used for normal deliveries and obstetric emergencies at the health facilities. They provided opportunity for the promotion of behavior change strategies to prevent medical problems through the early detection of warning signs, followed by a referral to health facilities for treatment. Information gathered from these sessions was synthesized to formulate guidance on how to implement quality assurance systems and partnership agreements between health and referral facilities, country government, NGOs, international PVOs, and donors.

The possibility of involving males, including fathers, in separate education sessions will be explored. As influential figures in the households, fathers should be aware of the danger signs during pregnancy and following delivery. The maternity clinics and hospitals have begun to permit family members to be present and to participate in the birthing event. It is timely for the CSP staff to conduct a pilot project to assess the potential for expansion. Regional Coordinators could recruit local male volunteer as discussion leaders to lead these groups. Community response in these hard to reach areas has been positive as shown by the large percentage of mothers attending four or more ANC visits and the active participation in the FGDs. Program activities continue to be monitored and modified based on data collection and FGD findings.

Constraints/Barriers Identified:

Barriers that CSP staff have encountered in efforts to involve the targeted women in these communities include cultural restrictions and household decision makers at the village level. In response, ACTS began forming focus group discussions (FGDs). Over time, this technique has expanded to include women of reproductive age and interested family members. The FGDs topics have included pregnancy, gestation, health and wellness, ANC and related behaviors. Three Power Point presentations were used to show intrauterine fetal development with case studies, and two other messages entitled “Five Recommendations for Pregnant Moms” and “Nine Recommendations for Mother of Children under-five.” The membership has been expanded to include Mother-to-Mother Support Group and Female Family Member Discussion Group. The MTE team monitored several of these presentations and found them to be of high quality, with active participation by all members. To increase the number of births that are registered, ACTS will explore a partnership with churches and mosques. When women were asked how many regularly attend church/mosque services, all responded affirmatively. If churches and pastors get involved in promoting birth registration, the number of births registered could increase substantially.

Communication for Behavior Change

Successes and Lessons Learned:

Much of the project's activities have been directed to behavior change through local families, community leaders, political officials and health care staff by increasing knowledge on a variety of behaviors related to proactive health practices and skills in recognizing illness signs and when to seek treatment. Community leaders and health professionals have also been trained on IMCI aspects of wellness and illness in order to be able to participate in the behavior approach (Attachment G). Experienced mothers and grandmothers are involved whenever and wherever possible.

BCC strategies are in place in the ACTS CSP. The project is continuously expanding on the activities used to address major BCC practices. Increasing the immediate registration of new births, the number of ANC visits per pregnancy, immunizations, facility deliveries and visits for illness are some of the BCC targets. By expanding the areas for birth registration to churches and through a voucher program, which rewards mothers for visiting an ANC at least four times with a delivery at a healthcare facility free of charge development will continue toward BCC goals.

In addition, community-training sessions can be used to explain and encourage the use of immunization cards, as well as serve as a platform to openly discuss home deliveries. By addressing the subject of home births and scheduling visits for pregnant mothers to view birthing areas at hospitals, community members will begin to rely on health facility services more. The challenge is explaining the benefits of delivery in a healthcare facility without disregarding traditional beliefs and cultural practices.

Education sessions regarding home deliveries will also focus on standardizing a list of recommended materials to have available for a home delivery "birthing kit". Similarly, with the treatment of childhood illnesses, visits to healthcare facilities are also being promoted, without disregarding tradition or culture. This is also addressed through education sessions that focus on health warning signs and symptoms pointing to need for professional care. These education sessions are targeting men, since they influence decisions made on behalf of children and family members.

As a result of BCC interventions, comparisons conducted at MTE indicate several improvements in behavioral problems targeted by the FGD and measured 2007. These surveys found negative attitudes and opinions related to local physicians and hospitals, fear surrounding the use of vaccines and concerns regarding breastfeeding. This process of FGD, assessment of results, and modification of future community sessions will become a standard operating procedure. Emphasis will be directed to a clearer presentation of why choices in behavior have better or worse outcomes. This is based on the CSP's application of the basis of BCC, which states rational and cognitive behavior is stable even when artificial stimulators are of a variable nature, specifically, participants should be aware of the necessity and benefits of their behavior choices.

The IMCI course is designed to help health workers acquire new skills to manage sick children more effectively. Health workers may find it difficult to begin using these skills when they see children in their health facilities. Often they need help in applying what they have learned during

the course to their work situation. Follow-up after visits are another essential component of the IMCI training process. A follow-up visit is designed to support the transfer, application, and reinforcement of new skills acquired during training. At least one follow-up visit is conducted within four-to-six weeks of the training course in order to assist health workers and health facilities with the transition to integrated case management. Objectives of the follow-up visits are: (1) Improvement in accepted clinical skills of the trained medical staff; (2) Identification of the problems faced by medical staff; (3) Analysis of the results and improvement in implementation of the program; and (4) Assessment of essential equipment available.

Using the follow-up visits, a trained supervisor can assist health workers to apply their recently acquired knowledge and skills and overcome workplace challenges. Other follow-up methods include supervising medical staff during patient visits, reviewing medical records and patient charts maintained by medical staff, questioning caregivers after their visits, and practice skills learned if there is time. Follow-up observations are recorded on special forms developed by WHO that are later used to summarize information on two final reporting forms. An IMCI course was conducted in 2006, the follow-up conducted between November 6th and 15th of that year (Attachment G). During the follow-up visit, benefits of the program identified by the doctors included:

- Easy to understand and use;
- Provides precise diagnoses;
- Details are foreseen by the program;
- Refers patients to hospitals when necessary;
- Reduces the necessity of therapy with antibiotics that are not approved;
- Reduces the frequency of complications and hospitalization;
- Important for children survival; and
- It's economical both for population and state.

Local government officials provide appropriate facilities for training sessions without charge, with the understanding that ACTS will return to provide advanced training. The local community invites ACTS to deliver health message at local celebrations and events. To enhance this working relationship with stakeholders, ACTS asks all stakeholders to review information provided and includes community representatives in this review process. In addition, stakeholders are provided with a work plan of activities and invited to participate with ACTS in monitoring the plan. The stakeholders are supplied with a list of training activities and statistical analysis for child health from the baseline KPC on which the CSP is based. LQAS standards have been in use for establishing parameters for both annual reports. ACTS CSP staff has been trained on-line, through the Johns Hopkins University outreach training in conjunction with CSTS.

Primarily, the CSP engages mothers, mothers-in-law, and pregnant women in-group and individual sessions based on concerns generated through surveys, the DIP KPC, and issues raised during community focus group sessions. As the CSP are implemented, additional facets of knowledge and needs for counseling will become more specific. The second level of counseling is through partnerships with local and regional level officials regarding the management and operational of the partnership's mutual needs and capacity-building aspects. Community-based focus is based on modified UNICEF IMCI training and standard CSTS components of empowerment.

Regional officials engaged in a workshop held in Rustavi, which was attended by about 30 key persons representing administrative, medical facility staff, USAID, and the ACTS CSP implementation Team. The various needs for documentation and data have been recognized. A second meeting would be beneficial to further define the CSP's role, as well as individual contribution and ownership of the program.

The MTE process was not able to develop a format or evaluation mechanism for measuring either the extent that the partograph is used, or what necessitates its use in the process of Managing Complications in Pregnancy and Childbirth it might be used. The MTE team, therefore, recommends this tool be assessed during the next operational year and assessed as part of the Final Project Evaluation.

ACTS has researched mechanisms for understanding and implementing tasks and strategies established in the development of the DIP. Their expanded search for communication in Behavior Change included an exchange visit to Mercy Corps CSP in nearby Azerbaijan. In June, 2006, ACTS Georgia team members, including Drs. Trish Blair, Ketino Shangria, and Nana Gumbaridze, traveled to Azerbaijan to participate in the Mercy Corps CS Final Evaluation conducted by Sandy Wilcox. In the fall of 2006, ACTS Georgia CSP leaders, Dr. Rezo Tataradze, ACTS Georgia CS Director, Dr. Tamar Lobjanidze, district coordinator, Ms. Liana Ushveridze, financial manager and others traveled to Azerbaijan to observe the Mercy Corps program first hand and to discuss areas of interest between the two programs.

With respect to data collection on program activities, ACTS Georgia CSP staff, other implementation partners, and the MoLHSA are making use of findings and decision-making based on data and collaboration.

ACTS CSP Team initiated the "Healthy Moms for Healthy Kids" festival which was conducted in Dmanisi. It was described in the media as an event in which about 2,000 participants learned about improved healthy practices and behaviors based on themes of nutrition and health. ACTS Team organized the festival in collaboration with USAID, World Vision, Alliance for Improved Nutrition of Georgia, Tbilisi Lions Club, and the Dmanisi Administration. The project will be continued in five remaining regional centers of Bolnisi, Tetrtskaro, Tsalka, Marneuli and Gardabani. Four additional health fairs were conducted in collaboration with the US military. During these fairs, free examinations and health screenings were provided and healthy behavior sessions were conducted. These approaches will be expanded and continue to focus on healthy mom and kids. About 200 women, children and men were given check-ups, training and blood pressure screening by U.S. Military personnel.

The CSP will add a behavior change marker to the community training sessions. Staff will design and distribute cards for mothers to return to any health service center they attend. Any service, either prevention or curative will collect these cards and simply place them where they can be collected on a monthly basis. The CSP staff will analyze focus groups data to determine breastfeeding barriers that can be addressed by behavior change modification and motivational techniques. Concerns raised during the FGDs will be used to determine knowledge gaps on breastfeeding and to gather information on influences which affect women's decisions regarding

breastfeeding. Formation of male discussion groups focusing on pregnancy and breastfeeding issues is also being considered.

ACTS has taken the lead in iron and foliate enrichment of flour in Georgia. It was officially passed into law that such fortification additives become mandatory.

Future Recommendations for the CSP:

The MoLHSA is working with ACTS and other PVOS in the health care sector to identify as a top priority the development, enactment into law and training for all Georgian physicians on international standards and guidelines. ACTS successful CSP program should continue to:

- ✓ Work with the GOG at national regional and local levels.
- ✓ Maintain and nurture the broad-based network of stakeholders in the targeted regions.
- ✓ Invigorate the community with community pride and health messages through the innovative use of the community festival and health fair approach.

Based on findings, data collected, and lessons learned from the implemented program activities, future objectives for the CSP should include:

- Physician Skills Improvement and Sustainability: Work with the MoLHSA to develop an evidence-based continuous medical education program for physicians that would include training follow-up and direct observation of practice.
- Community Education: Improvements in community training session content should be based on repeated field experiences, continued FGDs, surveys and expanded types and participants, such as mother-in-law, father, and grandfather education and support groups. Mother-to-mother BF support groups should be explored.
- Improve Health Issues: In addition to flour fortification program to combat anemia, there is the need for comprehensive de-worming assessment with funding non-CSP /MoLHSA.
- Protection of Health of Physicians: Advocate for Hepatitis A vaccine to be included in the Hepatitis B vaccination program that will launch in 2008 by VSP.
- Behavior Changes and Capacity Building: All post soviet countries were part of the same health care system. Visiting other CSP programs in the former Soviet Union and developing training and monitoring tools specific to this region where 94% of all deliveries are hospital-based. Mechanisms for establishing behavioral change measures and proxy measures conducted as operational research; this is new for many PVOS in Georgia. CSP should consider additional trainings, such as BEHAVE course using CSTS and other consultants. ACTS Georgia should continue partnership and dialogue with MoLHSA, as national health sector reform is designed and implemented. ACTS International and ACTS Georgia will continue assessing transition of clinical and hospital facilities from government-owned to private management through facility assessment of clinical proficiency and essential equipment. The establishment of life-saving conditions and support with MoLHSA for full-term infants, perinatal, and neonatal aspects should continue. Full coordination with UNICEF, USAID, WHO and CSP activities should continue. ACTS Georgia will continue to assess progress and identify problems through HIS system, LQAS, Focus Group Surveys, additional surveys and track progress on monthly basis. Management and programmatic decisions will be made on basis of findings from data collected and analyzed. ACTS Georgia will provide USAID Mission with routine 3-to-4-paragraph briefing monthly to keep communication flowing.

Capacity Building Approach

ACTS International and ACTS Georgia are implementing sustainable MCH programs through improvements in strategic planning, organizational and human resources development, and management information systems. ACTS is working to improve capacity of its local partner, the MoLHSA and selected health care facilities of the two target regions, to deliver and sustain the delivery of effective, high quality MCH programs. Clinical facilities and equipment inventories were assessed during the MTE by ACTS International. Their findings form a component to the DIP interventions for saving the lives of mothers and children at birth. Remedial actions for replacing equipment and other lifesaving essentials will be undertaken by the U.S. Department of State and ACTS International. Enhanced training and development of protocols will be provided by MoLHSA. ACTS International established a multi-year contract with Horizon Research Services (HRS), a U.S.-based private research company, to assist both HQ and field staff in achieving these goals.

Table 2: Objectives and Indicators for Assessing Success in Achieving Specific Capacity Building Objectives

Objectives	Indicators	# Completed
To increase MCH technical knowledge and skills among staff at all levels.	• No. of HQ staff that have participated in CS technical workshops and worked on a CSHP project	6
	• No. of field staff that have participated in CS technical workshops and worked on a CSHP project.	10
To increase use of latest CS technologies.	• No. of ACTS health projects that use CS technologies, such as the BEHAVE framework	6
Improve data collection and analysis in health programming.	• No. of programs that replicate methods used in the implementation of the CSHP (e.g., survey methodologies and analysis).	1
To scale up/expand successful models. A CTs is the lead organization with Georgia Parliament implementing National Flour fortification.	• No. of health project that include components that can be scaled up (e.g., social mobilization, volunteer recruitment and retention, community education, etc.) the flour fortification program is underway.	national flour fortification program is underway.
Share and integrate lessons learned into health and child survival programming.	• No. of discussions/seminars arranged at both HQ and field level to share lessons learned.	10

Progress in meeting these objectives has occurred within ACTS International and ACTS Georgia, with local partner organizations, in health facilities, with health worker performance and through training implemented.

Strengthening the Grantee Organization has been accomplished by addressing the goals of: a) expanding programming capacity in Child Survival, Reproductive Health, and MCH; b) developing partnerships with other NGOs, particularly those with strong community presence in the targeted rural areas; and c) building staff capacity to design, implement and evaluate evidence-based practice in Child Survival and Reproductive Health. Capacity-building progress within the grantee organization has included the development of monitoring systems, increasing competence and skill levels of program staff, and establishing a new program office.

ACTS International and ACTS Georgia have worked in the health arena in Georgia for more than 10 years. ACTS became the first U.S. NGO in Georgia and has worked closely with the MoLHSA, the Georgian National Center for Disease Control and Public Health, and with U.S. PVOs working in Georgia. A unique quality of ACTS International and ACTS Georgia has been its sustained directorship and staffing, resulting in continuity of programming, community relations, and reliable memory. ACTS Georgia has undertaken a development role in the health arena (i.e., supporting of the Georgian Medical Association and the National Georgian Family Physician's Association, providing advisory services to Parliamentary Committees and to the MOH), as well as in NGO development and establishment of nation-wide health-related coalitions (Cardiovascular Prevention Committee, Health Promotion Alliance). This phase of Georgia's adjustment, which has created both the need and the opportunity for ACTS International to expand efforts in humanitarian aid and development, includes undertakings toward sustainable, community-based health programs in MCH.

Monitoring systems in place to measure the activities of program staff and CSP include:

- Weekly staff coordination meetings
- Monthly and quarterly reports of the senior program staff to the Program coordinator and Chief Medical Officer (CMO) and the HQ backstop
- Monthly timesheets to ACTS HQ
- Monthly and Quarterly financial reports to ACTS HQ
- Quarterly Match contributions to ACTS HQ
- Routine constraint identification with cause and effect analysis

To develop the capacity of the staff to measure program change, a three-day staff orientation workshop was organized between January 12th and 14th, 2005. The objectives of this workshop included: (1) Discussion and review of activities to determine what worked well and design strategies to improve weaker areas; (2) Briefing on key objectives and strategies; and (3) Informing staff about the upcoming KPC survey, timeline, and logistics. The goal of this workshop was to prepare the staff to effectively implement the project using the key approaches. Other trainings have included: CORE-based web education, Three-part Monitoring and Evaluation (LQAS) – on-line access to CSTS quality tools for implementation, management and measurement of CSP, CORE/USAID/CSTS meetings and training (e.g. Core spring and fall meetings), BEHAVE training, CSTS operation research training, in-country training by ACTS HQ staff and consultants and USAID mission coordinating meetings special events and presentations (e.g. World Health Day).

ACTS International has provided technical expertise to ACTS-Georgia for program evaluation, building upon well implemented monitoring systems that ACTS-Georgia has developed to track program outputs. ACTS International will assist its local partner in expanding skills in quantitative and qualitative data collection for effective program development. ACTS International will continue to support enrichment of staff through on-the-job training, exchange visits to other Child Survival projects, participation in U.S.-based public health program training; and university exchange programs and scholarships to build its skills for maternal and child health projects and participation in CORE Group activities.

A Division of Maternal and Child Health has been created, with a non-voting representative on the ACTS Executive Board through the Division Director, who will participate in all strategic planning processes undertaken by the full Board and the President. This Division will provide coordinated oversight for MCH programs generated by ACTS International and ACTS Georgia for Georgia, as well as for other countries of interest. The major challenge for ACTS Georgia CSP is linkage with facilities and partners for continued technical support.

Future ACTS Georgia organizational development will be measured by 1) Conducting regular organizational reviews (Direct Observed Self Assessment [DOSA]); 2) Conducting outcomes assessments and evidence-based decision making to select program interventions; and 3) Creating professional development training program based on an annual assessment conducted jointly by ACTS International and ACTS-Georgia. ACTS International will further expand and enhance its capacity to plan and implement effective community-based health programs in CS and health. The transition phase of Georgia's adjustment to its status as an NIS soon will close, and that is creating the need and the opportunity for ACTS International to expand its efforts in humanitarian aid and development to include sustainable, community-based health programs in maternal and child health.

On-going staff activities will include: establishing milestones for the remainder of the CSP based on the delivery of sustainable components, continued selection of health care and service care providers on the basis of their capacity to change, inclusion of national, regional, and local partners and focus on community organizations and groups such as families. Other areas of specific focus for capacity building will include:

- Increasing capacity to assess CSP progress in implementing DIP interventions
- Improving community and focus groups monitoring supported by the project and to provide appropriate data sharing numbers and specifics on clients served
- Devising a formal means of sharing and communications with, to and for all partners.
- Web camera communication system to enhance HQ and field communication.
- Website containing all of ACTS CSP document and other useful resources for use by the ACTS HQ and Field offices and consultant and by special request.
- Visit to the Mercy Corps CSP Azerbaijan program; participation by staff in the final evaluation of the Mercy Corp CSP Azerbaijan program

A new Georgian field office was leased to increase capacity of ACTS to implement the CSP. Several factors were considered in selection of an appropriate office space (e.g., size, cost, security and availability of electricity and telephone services). The central field office is located in Tbilisi and readily accessible to staff. Within the program area, the field offices were open and their location was chosen so that they are easily accessible to beneficiaries and partners. Some basic items were procured, including, computers, printers, radios (HF and/or VHF), furniture, and stationary. Program vehicles were also purchased at the start of the program with matching funds. The new office space allowed the CSP to develop a reference library to provide technical manuals and other publications on child survival, maternal and child health, evaluation and needs assessment, among other topics (including CSTS, CORE, and the BEHAVE reference materials). The Maternal and Child Health Resource Library in Georgia is being used by the CSP staff and by the Tbilisi State Medical School among other Georgian entities.

Capacity building at the local level is encouraged. Local government officials provide complementary facilities for trainings, and invite ACTS to provide advance training. The local community invites ACTS to deliver health messages at local celebrations and events. To enhance this relationship with stakeholders, ACTS involves all stakeholders in the review process of the information that CSP staff provides to the community. In addition, stakeholders are provided a working plan of activities and invited to join ACTS in monitoring the plan. They are also supplied a list of trainings and statistical reports on which the CSP is based.

MCH technical skill development is achieved through continued professional education activities. Drs. Tsilosani and Tataradze, supported by the WONCA Bursary Fund for the 17th World Conference of Family Doctors in conjunction with the American Academy of Family Physicians (AAFP) Scientific Assembly, attended the Advanced Life Support in Obstetrics (ALSO) courses in Orlando, Florida in October 2004. The ALSO Provider Course is a two-day course for all maternity care providers including physicians, nurse midwives, registered nurses, and other clinicians. Using an evidence-based curriculum, the course provides lectures and interactive workstations, utilizing pelvic mannequins and other activity-appropriate medical equipment. A one-day course, the ALSO Instructor Course focuses on specific teaching skills required for adult learning, including how to teach interactive workstations and workstations using mannequins and other equipment; and how to give feedback, lecture and teach workstations using slides. Drs. Tsilosani and Tataradze successfully completed provider and instructor courses. As result of the training that Drs. Tsilosani and Tataradze received at the ALSO course, ALSO provider and instructor courses were administered in Georgia in November 2004 within the framework of “Physicians with Heart,” a Partnership of the American Academy of Family Physicians, the American Academy of Family Physicians Foundation, and Heart-to-Heart International. The ALSO training was supported by a grant to ACTS Georgia from USAID to fund materials and travel for 60 doctors throughout the country to attend this course. Assistance has also been provided to ACTS by friends and colleagues at World Vision. Thanks goes to the late Lyndon Brown, MPH and Fe Garcia, MD, MPH who expressed willingness to provide information and materials on CS that have greatly improved ACTS’ capacity for program success.

ACTS will establish a resource data bank of MCH-relevant national and regional data, reports, articles, and program descriptions for use among the network participants. Through conferences, symposia, training workshops, collaborations, publications, and annual partner meetings, CS best practices will become integrated into the health and social service programs of Georgian-based organizations. As a result of participation in the MCH network, member agencies will increase their capacity to deliver quality MCH programs and integrate MCH into related program efforts. For example, Claritas has extensive expertise in the BFHI, an initiative that almost exclusively focuses on breastfeeding; training in BCC principles and the selected MCH interventions can only expand the capacity of Claritas’ program efforts.

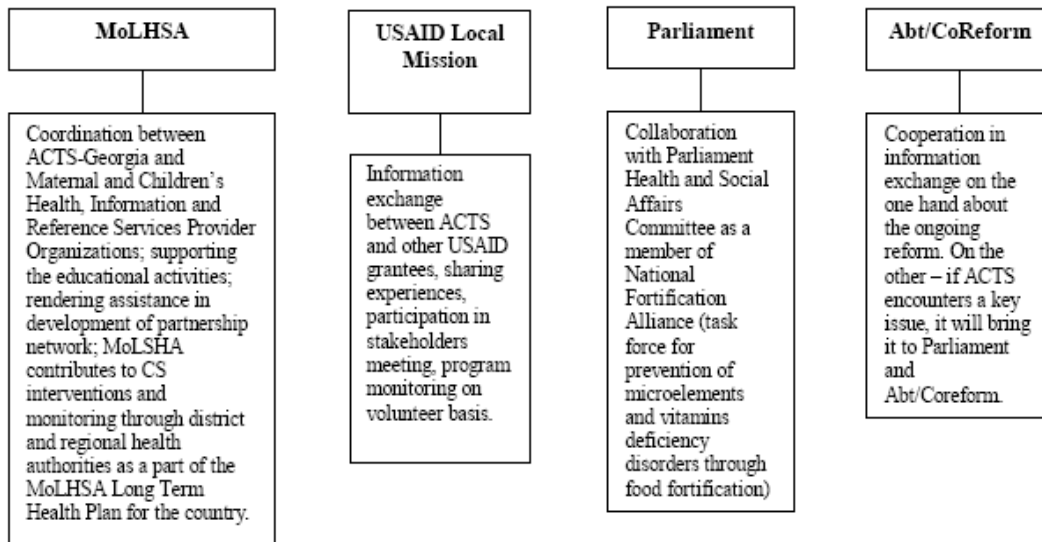
ACTS Georgia is providing leadership in MCH for collaborating partners by giving them the training and expertise necessary to integrate this project’s activities with their own. The long established and effectively functioning working relationships between ACTS International, ACTS Georgia, and MoLHSA, along with a history of NGO support, development and collaboration, makes sustainable programming efforts a reality.

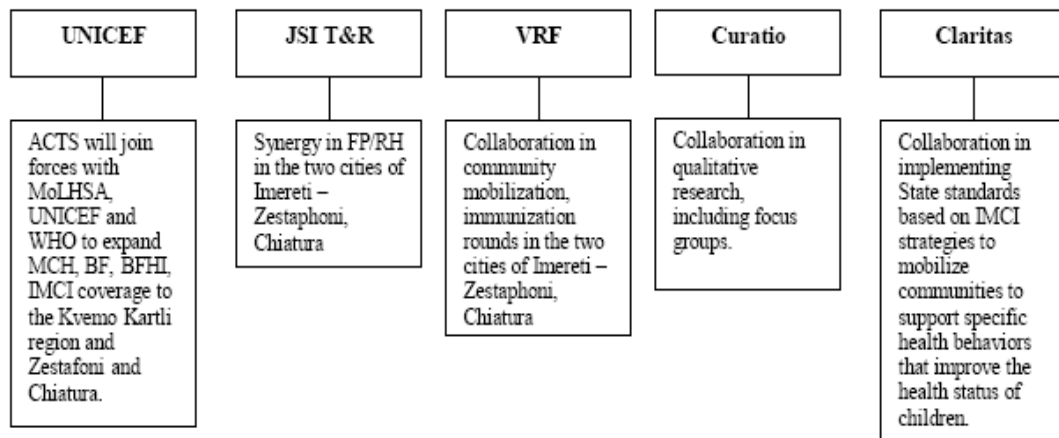
Strengthening local partner organizations has been accomplished through the continuous sharing of CSP information, training, and services. In addition to signing a Memorandum of Understanding (MOU) with the MoLHSA on March 25th, 2005, successfully negotiated agreements with CSP partners included:

- Ministry of Labor, Health and Social Affairs (MoLHSA) of Georgia and its Public Health Department
- CRPA/Claritas XXI
- Women Wellness Care Alliance “HERA” (West Georgia)
- Union for Social Protection of Citizens of Georgia “Tanadgoma”
- Vishnevskiaia-Rostropovich Foundation (VRF) for the Health and Future of Children in Georgia (NGO in Kvemo Kartli)

A capacity assessment was completed to determine the training needs of program staff and partners after agreements were in place. A pre-implementation workshop was held to orient partners to the program and to encourage commitment from a larger group of stakeholders. Participants in the two-day workshop included health center staff, rayon (district) health facilities staff, regional health department staff, district and commune chiefs and representatives from health-related PVOs working in targeted regions. The workshop informed stakeholders about the CSP, explained how the program fit with ACTS’ other community development activities and helped ACTS gather stakeholder input regarding implementation issues. The workshop was successful in building participation, cooperation and ownership in the CSP, and provided helpful feedback for planning early activities, in particular the KPC baseline survey.

Diagram 1: Roles and Responsibilities of the Local Partners





No changes have been made from the roles and responsibilities outlined in the original DIP.

The MTE found that throughout the first half of the project, partners have been involved in considerable capacity building activities at all levels, especially through their participation in Health Facilities/Health Worker Strengthening that included participating in training, quality improvement, supervision/ supportive supervision, establishing links with the communities, materials/equipment and strengthening of meetings. Local partner capacities have increased to meet the organizational objectives and goals throughout the CSP, including expanding skills for qualitative and quantitative data collection. Challenges faced during the rest of the project will be the continued monitoring of program activities; however, through the increasing data collection skills of the local partner organizations should be manageable.

Health Facilities strengthening has occurred throughout the project to examine the equipment available and used, as well as the staff performance in relation to maternal and child health procedures. The professional ACTS International MTE Team members conducted their facility and review (Annex E). Concerns were raised regarding equipment, sterile conditions, and the physical condition of the facilities visited. While these reports are of professional quality, their relevance to the CSP is tangential to the DIP implementation and the MTE exercise. ACTS International and the U.S. Department of State have on-going ventures operative to address facility equipment upgrades and the replacement of related maternity and infant care and resuscitation essentials. A Health Facility Survey, results of which will be used during the second half of the project implementation period, was completed in the following locations:

- Dmanisi Ambulatory and Polyclinic Unit, maternity hospital
- Bolnisi Pediatric Polyclinic and Maternity Hospital

Concerns were raised regarding the health facilities center around a need for a sustainable and standardized store of equipment. Given that asphyxia accounts for 36% of fetal deaths this must be the major focus. High risk screening and improved prenatal/obstetrical care are important for reducing this number, however, the staff must be prepared to resuscitate the infant in any pregnancy. The ABC of resuscitation must be available. All hospitals had rubber suction bulbs to help clear airways following delivery. Father Adam’s hospital was the only hospital at which suction appeared available, it was a very old soviet portable machine that still worked and that was carried from the C-section room to the delivery room. For meconium deliveries they had

suction adaptors for ET tubes. All hospitals, except Dmanisi which had none, seemed to have a single laryngoscope with some but not all size tubes which in several cases was in a plastic bag which was taken to each delivery and the nursery as needed.

ACTS has supplied facilities with these materials (through another funding source and program); and the CSP has focused on promoting the creation of a standardized equipment list. The next step will be to find sustainable sources to acquire the equipment needed. ACTS will work with the Department of State and private donors to remedy problems encountered as part of our response to lessons learned. The community is affected by the capacity of the health facility, as shown by results of FGDs in the second year of the project. These suggested that women feel safer with health facilities in larger cities, specifically with the equipment used and the healthcare staff employed. If standardized equipment becomes available in each health facility in the program area, community members may gain trust for the services rendered and be more likely to use the services of local health care facilities.

Strengthening Health Worker Performance has been accomplished through training of medical personnel in IMCI, BF Hospital, and Breast Feeding has been conducted (See chart that follows).

Table 3: Health Worker Trainings Conducted in Rustavi

Trainings Conducted of Medical Personnel in Rustavi	Quantity	Facilities	Category of Trained Personnel	Number of People Trained	Duration of Training	Person Days of Training
1) Integrated Management of Childhood Illnesses (IMCI)	3 courses	Prophylactic Centers # 1 & 2	Doctors and Nurses	137	11 Days	1,507 Person days
2) Baby-Friendly Hospital Initiative (BFHI)	3 courses	Maternity House	Pediatric Doctors	60	5 Days	350 Person days
3) Breastfeeding	2 courses	Maternity House	Pediatric Doctors	60	5 Days	350 Person days
3 Interventions	8 courses	6 training sites	MDs & RNs	257	21 days	2,207 Person days of training

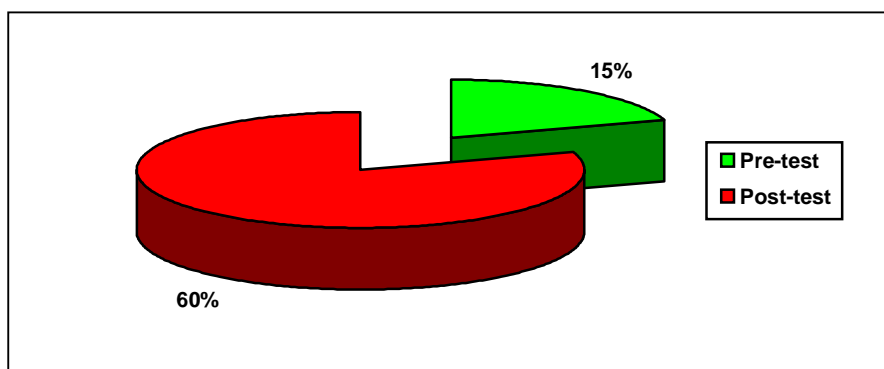
Site visits were used to assess performance of health workers. Assessments of health facility staff have shown that salary payments are low, but on time, and the staff remains highly motivated and dedicated to health care service and disease prevention. In addition, the staff provides thorough reports on incidents of cranial hypertension in infants from cause or causes unknown, as well as conducting disease surveillance and follow-up on communicable diseases. Site visits have allowed for open communication between health facility staff and CSP staff, which has increased the ability of CSP staff to address the issues raised. One example has been recognition of the inadequate amount of equipment available at some of the health facilities. Through site visits this problem was observed and strategies to improve the situation were developed. A standardized list has been developed of essential equipment for child and maternal care. Special

attention was focused on equipment and procedures needed for infant delivery room resuscitation and the necessary equipment and physician training.

The project is responding to gaps between performance standards and actual performance by introducing vigorous training of medical personnel in the field of MCH, using guidelines developed and/or recommended by the WHO Child and Adolescent Health Department. These standards are being applied to both preventive health and management of illnesses. IMCI serves as a main strategic approach to the problem of less than five morbidity and mortality. This strategy involves preventive and curative components. Following IMCI guidelines contributes to the improvement of case management skills of health workers through improvement of the performance of the referral level facilities. As a result of training conducted, health facilities are using the List of Essential Drugs complying with Eleventh WHO Model List of Essential Drugs to manage illnesses in lactating mothers.

A four-day seminar for community representatives was held on the basis of Pediatric Clinic of Rustavi region on November 8th through 12th, 2006. Twenty-eight community representatives attended the seminar that was held by the trainers: K. Sharangia, M. Beleshadze, and N. Gumbaridze. Special attention was dedicated to: safe motherhood, breastfeeding, early child development, healthy nutrition, immunization, diarrhea, cough and cold, and patient rights. Among seminar participants were representatives of medical staff, teachers, students, housewives and community counsel. The majority of participants were unaware of the information on the issues discussed at the seminar. The population became acquainted with state guarantees and patient rights with special interest. Pre- and post testing was held for the attendants.

Diagram 2: Pre- and Post-Test Results



A coordinative counsel was created for each community with access to a doctor, nurse and community representative. The aforementioned counsels will supervise activities of the community representatives and actively participate in the process of community education.

Sustainability Strategy: To date, data collection has included an analysis of focus groups of 170 women in order to gather knowledge, practices and the coverage of services concerning maternal and child health. Findings from these FGDs included concerns about all live births being registered and reliability of local doctors and maternity facilities. Many women felt that clinics in larger cities were safer and better staffed. Site visits have taken place to observe the equipment available for use in healthcare facilities, as managing postpartum hemorrhages and preventing hypothermia are two main ways to reduce maternal and infant mortality. The current Perinatal

Assessment Survey supported by UNCIF reported that basic supplies and equipment for assisting in deliveries were available at a majority of perinatal care providers. However, essential items for newborn resuscitation and life support, such as resuscitation bags and masks, endotracheal tubes, and umbilical catheters were not found in 7%, 20%, and 23% of cases, respectively. ACTS has served as a conduit for the import of drugs and medical equipment for healthcare facilities in the project area. In order to sustain equipment capacity, standardized lists have been created to display the essential equipment that should be in each facility. This is the first step in regulating the equipment necessary to perform safe procedures.

The USAID/GH/HIDN/Child Survival and Health Grants Program recommend a six-step process for sustainability planning and measurement. This process was adopted by CSP and is reflected in the sustainability plan. The following indicators have been selected to measure sustainability:

- Percent of infants, aged 0-5 months that were fed breast milk only in the last 24 hours (KPC; LQAS).
- Percent of children aged 0-23 months who were breastfed within the first hour after birth (KPC; LQAS).
- Percent of children aged 0-23 months with diarrhea in the last two weeks who were offered more fluids during the illness (KPC; LQAS).
- Percent of mothers who know at least two signs of childhood illness that indicate the need for referral to health care services (KPC; LQAS).
- Percent of children aged 0-23 months with diarrhea in the last two weeks who were offered catch-up feeding (KPC; LQAS).
- Percent of households who know how to use and store iodized salt (KPC; LQAS).

Health Service Characteristics

- Number of HF-based providers who receive continued education in IMCI protocol.

Local Organizational Capacity

- Percent of community leaders who will have met at least once per last two months.
- Percent of MMSG who have met at least once per last two months.

Local Organization Viability

- Percent of the community leaders meetings attended by local health providers
- Attrition rate of volunteers for reasons other than death, disability or movement from project area.

Community Capacity

- Percent of the villages with defined community leaders
- Percent of the villages with defined mother-to-mother support groups

All CSP maternity houses and units will undergo an external assessment process to evaluate the implementation of a ten-step breastfeeding initiative in the facilities. Primarily, facilities deciding to become Baby-Friendly Hospitals will conduct a self-assessment and send the results to Claritas XXI. The representatives of the NGO will review the results and decide if the hospital is ready for an external assessment. Prior to the assessment, an audit visit will be conducted in the facility to determine the time to full implementation of the standards and to highlight any weak areas that need attention. The audit visit lasts a full day and is run by two initiative external evaluators. It consists of interviews with randomly selected staff, pregnant women, and new mothers, using the same questionnaires and principles as are used at a full Baby-Friendly assessment. Findings and recommendations are reported at the end of the visit, as well as in a

written report. Following the pre-assessment visit, the full assessment is conducted by three external evaluators over three days. The assessment examines whether the Baby-Friendly standards are met. Findings and recommendations are again presented. If the health care facilities do not meet all of the standards, they are given time to implement changes and members of the assessment team return for an assessment at a later date.

Local staff and partners have been involved with the sustainability strategy. In regards to personnel and operational project costs, financial planning for the duration of the CSP included higher start-up costs so that for the tapering of the project, fewer funds will be needed. Alternative funding options have been examined for certain aspects of the CSPs. Specifically with the sustainability of essential equipment in health facilities, next steps in the project will be to determine alternative funding through local partners, so as not to rely solely on ACTS International. No formal sustainability design methodology was used.

PROJECT MANAGEMENT

PLANNING

The groups involved in planning are USAID Tbilisi, JSI T&R Institute, Curatio, Abt/CoReform, VRF, UNICEF, MoLHSA/Parliament, and “Claritas”. Project objectives have remained consistent with those listed in the DIP:

1. Improved quality of maternal and child survival services
2. Improved behavior and household health practices, in the community and among health care professionals and health managers
3. Increased availability of Maternal Child Health (MCH) care services and increased access to standard case management.

All partners and stakeholders were given copies of objectives. During project start up, two workshops were conducted for all parties explaining project goals, objectives and strategies. The translated project outline was distributed and issues were discussed in these workshops.

STAFF TRAINING

The current CSP is the first for the country of Georgia and also the first such USAID grant project for ACTS. Being the pioneer in this area has required that ACTS train and support the headquarters and field staff and introduce the project to the Georgian government, including the MoLHSA, the Georgia Parliament, and newly created Georgian CDC. There are three levels of training that have been provided. Training has been provided for the ACTS board of directors and headquarters staff in areas of financial and program reporting requirements to enable effective project oversight. Headquarters and field staff attended a new grantee orientation (2004), a private meeting with Liza Buckner, USAID Washington (2004), subsequent meetings on financial and compliance training (2005-2007). A 2007 financial training was provided for headquarters accountant by headquarters staff.

Key members of the ACTS field team (chief medical officer, program director and program manager) have attended specialized trainings, including: USAID/CORE training in KPC/LQAS (2003), USAID new grantee orientation (2004), Mini-University (2004), Update training (2005). The field office program manager provides training for Georgia staff and community volunteers involved in program implementation and evaluation. The KPC survey supervisors (initial survey in 2005 and for the MTE in 2007) were trained by Eteri Suladze, Program Manager. Eteri was trained in 2003 in a 2-week intensive USAID CSTS/CORE training in the U.S., along with one headquarters staff on KPC and LQAS survey technique. In addition, Ms. Suladze provided the trainings for the focus group leaders. ACTS consultant, Dr. Keti Shranghi has been trained and certified (maintains this certification at her own expense) by the WHO BF Hospital certification program. Dr. Shranghi trains ACTS Georgia and local hospital staff in targeted areas.

SUPERVISION OF PROJECT STAFF

ACTS Georgia staffs have effectively implemented the CSP program in regions of Georgia that are hard to reach. Historically the Kvemo Kartli area has been difficult to work in for new programs implementing behavior change interventions. ACTS Georgia has been uniquely able to engage the population by selecting and training regional staffs that are representative of the local populations who can deliver excellent and culturally competent programming among the diverse populations that reside in these areas.

ACTS Georgia has been able to develop a supportive health network of regional coordinators, community leaders, stakeholders and regional government officials who are working together to promote, plan and implement local events, such as health fairs, focus groups and education sessions. Because of the unique needs of the region, but due to limited resources, ACTS focused geographically on six smaller sub-regions. These sub-regions got results that were at or above the target zone. The general information has been useful and the KPC results have shown that the interventions have been useful. The CS program has prioritized its focus on areas of greatest need so that the project would be appropriate and realistic to the staff capacity and resources available for the project.

HUMAN RESOURCES AND STAFF MANAGEMENT

All job positions for the CSP are filled, personnel procedures are in place, and job descriptions are located at HQ. As found during site visits in program areas, personnel are highly motivated with the program goals. Attention and professional development is provided to staff through orientations, workshops, and trainings, which in turn assists in the creation of ownership of the program. Plans for assisting staff with paid positions following the cessation of the CSP duration will be implemented and followed for the remainder of the program period. Staff turnover has not been an issue during the program period.

FINANCIAL MANAGEMENT

The MTE Team concludes that the ACTS Georgia CSP is well planned, managed, and productively supervised. The CSP start-up costs were front-end loaded; therefore operational costs during the last half of the project will need good management, which is in place as shown by the Management Plan. The following table displays the CSP position and their LOE.

Table 4: CSP Staff Positions and Level of Effort

Management Plan					
Position	No.	Affiliation	Main Duties	LOE (%)	Paid/Volunteer
PVO – HQ					
Chief Medical Officer	1	ACTS Int'l.	Technical oversight and support for project; Lead DIP preparation, communicates with USAID.	20%	Paid
Fiscal Officer	1	ACTS Int'l.	Processes cash draw downs, transfers cash to the field, prepare SF269 and monitors country finance and budget.	50%	Paid
Administrative Assistant	1	ACTS Int'l.	Backstop program management and service point of contact for program related issues.	50%	Paid
Field Office					
Project Coordinator	1	ACTS – Georgia	Provides general oversight for project.	100%	Paid
CS Country Director	1	ACTS – Georgia	Provides project directions and programming guides.	100%	Paid
Project Manager	1	ACTS – Georgia	Overseeing planning, implementation and evaluation of the project activities.	100%	Paid
Financial Officer	1	ACTS – Georgia	General accounting duties, petty cash functions, completes general ledger.	100%	Paid
Office Manager	1	ACTS – Georgia	Executes routine administrative staff	100%	Paid
Project Director's Assistant	1	ACTS – Georgia	Assists project director and project manager in office administrative work including all required paper work, data entry into computer, organization of work meetings and workshops on the suites	100%	Paid
District Coordinators	4	ACTS – Georgia	Coordination of project activities at the district level, development of work plans, coordinating with IMCI and MNC coordinators, ensuring training facilities and supplies delivery to training sites.	100%	Paid
IMCI Coordinator	1	Claritas	Training events planning, calendar scheduling, coordination of materials preparation, adaptation of curricula, conduction of trainings.	50%	Paid
MNC Coordinator	1	Claritas	Training events planning, calendar scheduling, coordination of materials preparation, adaptation of curricula, conduction of trainings.	50%	Paid

LOGISTICS

The professional assessment of staff and facilities completed by the two professionals should be carefully reviewed from the perspective of ACTS International and criteria should be designed for seeking resources and equipment where possible. While the original DIP did not include plans for purchase of hospital equipment or facility restoration, site visits prior to and during the

MTE report findings on the necessity of these expenses. These investments could provide MoLHSA partners with incentive to restore other facilities outside the CSP area. One challenge is that the Health Information System (HIS) does not collect data on health worker performance; however, through routine site visits by CSP and local partner staff this aspect has been observed.

INFORMATION MANAGEMENT

The routine system includes collection of the data by facility-based staff and recorded on standard reporting forms to public health district level that are sent to higher levels in the system. Relevant data has been used to monitor and evaluate elements of program performance and progress towards CSP targets. The advantage of this method is that it uses routine systems and does not require additional resources. At the same time the official statistical data frequently differ from data of other surveys, so monitoring cannot be based only on official data, as the quality of the data is questionable.

The M&E plan is based on a series of data sources and methodologies that are complementary and will provide information on different levels of health system and community-based activities. Each project intervention has a particular M&E plan with different information needs and each uses different M&E instruments and methodologies. Progress toward achievement of objective outcomes is measured through baseline and final population-based surveys in years 1 and 5. Monitoring surveys continue to be used to evaluate effectiveness of the BCC strategy efforts. Annual evaluations continue to help refine messages and improve intervention design.

Progress toward program objectives is measured through quantitative and qualitative research during the project. There are several M&E components. Monitoring systems have been in place throughout the duration of the program, based on the BASICS HFA tool and LQAS methodologies. Data generated during the CSP includes a mix of:

- Field visits to MoLHSA facilities, focus groups and various implementations sites;
- Interviews with MoLHSA officials, government partners, political stakeholders, clinic personnel, mothers attending clinics during facility hours, OB/GYN doctors who attend pregnant women for ANC services and polyclinic staff;
- Multiple interviews with mothers and focus group participants;
- Training observations;
- LQAS surveys;
- Agencies, facility sources, and FGD qualitative assessments were conducted; and
- ACTS community groups were interviewed for participation and on focus group topics.

The ACTS CSP at MTE will revise strategies to provide community, facility, and service providers with special assistance to reduce maternal and neonatal mortality and to expand the training community outreach program using findings from FDGs. Thus, lessons learned from FDGs will be used to revise community session content. Other strategies will be considered and focus on improving MTE findings regarding behavior change modifications, and collecting data related to DIP intervention implementation.

TECHNICAL AND ADMINISTRATIVE SUPPORT

During the second year of the project, the ACTS team participated in three technical assistance workshops. They were:

- Two separate web-based, multi-part M & E training sessions by Bill Weiss, JHU and Don Carlo, Project Hope.
- Quantitative evaluation and operation research training provided by CSTS/CORE and USAID.
- A behavior workshop led by Bonnie Kittle and coordinated by CORE

ACTS International will build the capacity of its local partner, the MoLHSA and selected health care facilities of the two target regions, to deliver and sustain the delivery of effective and high quality MCH programs. Training among all levels of health care personnel, professional medical organizations, and administrators of health care facilities will occur cooperatively with the MOH (Resource Improvement, Training, and NGO Development). ACTS International has secured other donor commitments to cover costs of all commodities for the five-year program. These costs will constitute a portion of the project proposed 30% cost share.

MISSION COLLABORATION

Project objectives and overall strategy were discussed and negotiated in detail with the USAID local mission USAID/Caucasus, in Tbilisi, Georgia. Health Program Management Specialist Dr. Tamar Sirbiladze coordinates relations with the local mission. Denny Robertson, USAID Mission Director, Bob Wilson, Deputy Mission Director, Khalid Khan, USAID Office Director, Health & Social Development for Georgia and Azerbaijan and Melinda Pavin, Senior Technical Advisor Caucasus Mission Health Advisor were also informed about the goals and objectives of the project. In addition, presentations and discussions were conducted during the USAID health grantees meetings on November 11, 2004; February 23, 2005; and March 7, 2005.

The main USAID country objective is increased use of health and social services and changed behavior as Georgia leads the Caucasus region with the highest rate of abortion. Maternal and child mortality is on the rise.

Table 5: Health Indicators for Infant and Maternal Mortality in Georgia 1999-2004

Year	Maternal Mortality per 10,000		Infant Mortality <28days per 10,000		Early Neonatal Mortality <7days per 10,000		Perinatal Mortality per 10,000		# Live births	
	<i>ncdc</i>	<i>sds</i>	<i>ncdc</i>	<i>sds</i>	<i>ncdc</i>	<i>sds</i>	<i>ncdc</i>	<i>sds</i>	<i>ncdc</i>	<i>sds</i>
1999	51.3	22.7	23.4	n/a*	13	n/a*	32.1	n/a*	48,695	46,827
2000	49.2	22.5	21.1	n/a*	12.2	26.0	29.1	n/a*	48,800	46,765
2001	58.2	23.1	20.0	17.7	11.2	n/a	26.4	n/a*	47,459	46,006
2002	46.6	23.6	20.1	18.3	13.6	16.6	28.8	n/a*	46,605	45,033
2003	52.5	24.8	18.5	20.5	12.3	18.4	28.1	n/a*	46,194	44,093
2004	45.3	238	18.0	19.3	12.1	16.5	27.1	n/a*	46,512	47,022

Sources: National Georgia Center for Disease Control (*ncdc*), State Department of Statistics (*sds*)

*n/a = data not available

In order to slow and reverse these trends, USAID/Georgia activities are designed to increase access and education and improve healthcare for women. ACTS CSP contributes to this objective by implementing MCH interventions in the targeted areas. USAID mission activities are intended to also prevent and control the incidence of vaccine preventable diseases, tuberculosis, HIV, and sexually transmitted infections. Although these issues are non-specific intervention areas of the ACTS CSP, application of IMCI in the delivery of child-care services should complement mission efforts. Project objectives and overall strategy are discussed and negotiated in detail with the USAID local mission USAID/Caucasus, in Tbilisi, Georgia at all key points in the CSP process. All significant CSP events are coordinated with Dr. Tamar Sirbiladze Senior health program officer. Her help as well as the insights from the current USAID/Caucasus mission director, Bob Wilson has been helpful to maintain alignment with the USAID/Caucasus mission's SOs and IRs. The ACTS CSP is the only current Washington based funded USAID program in any of the three South Caucasian countries.

Specific times of USAID/Caucasus detailed CSP review have included:

- prior to program proposal submission - November 2003
- the detailed implementation plan (DIP) - April 2005
- field visit of USAID program officer Namita Agravata - July 2005
- HQ backstop field reviews - 2005 and 2006
- the annual reports - 2005 and 2006
- the mid-term evaluation process – 2007

USAID mission staffs are invited to all trainings, stakeholders meeting and discussions with MOLHSA and the health committee of the Georgian Parliament. Their participation has always been helpful. Selection of the location of the CSP is an excellent example of this working relationship. In 2003, the USAID/Caucasus advising ACTS on the CSP were Denny Robertson, USAID Mission Director, Bob Wilson, Deputy Mission Director, Khalid Khan, USAID Office Director, Health & Social Development for Georgia and Azerbaijan and Melinda Pavin, Senior Technical Advisor Caucasus Mission Health Advisor and Dr. Tamar Sirbiladze health officer who directly helps to coordinate the program.

Currently, Bob Wilson serves as the USAID regional director, Dr. Tamar Sirbiladze serves as the senior health program officer and Dr. Giorgi Khetchenshvili assists her. The MTE planning process was coordinated with Dr. Tamar Sirbiladze. The orientation that she provided to the MTE consultant and MTE team was invaluable

OTHER ISSUES IDENTIFIED BY THE TEAM

There are no other issues identified by the team.

CONCLUSIONS AND RECOMMENDATIONS

Project Strengths

The ACTS CSP has worked with health facilities, international and local partners and community members during the implementation of projects aimed at the decrease of maternal and infant mortality. Throughout the project cycle, the CSP and local partner organization staff have trained people at the community level, treated people at government facilities, 62 out of 137 women have taken advantage of the voucher card system, mothers and pregnant women have been educated on child health issues such as recognizing difficulties during pregnancies and signs of infant and childhood illnesses requiring treatment by a trained healthcare provider within 24 to 48 hours. In addition, 11 FGDs were arranged to allow women to discuss and learn about issues related to MCH.

The Mid-Term Evaluation Team followed a rigorous and programmed technical approach, much of which was based on participatory approaches. The planning stages of the evaluation allowed for collaboration between MoLHSA officials and partners. During the major assessment period, the evaluation focus was on observations, client interviews, clinical reviews, record reviews, and meetings with implementers and beneficiaries.

The LQAS KPC conducted during the MTE found that the behavior change indicators that were under the control of the mother changed in all regions. The most significant changes occurred in those regions where the ACTS CSP focused their educational training. In these regions the changes meet or exceeded the mid-term targets. In the regions where, because of limited resources, ACTS did not focus the training, the changes were less than the mid-term targets. Clearly these are the regions that ACTS CSP will focus on the last two years of the program, while sustaining gains in other regions.

Also noted is that in those situations where the young mother did not have control (e.g. in this culture taking the baby to the hospital involves the husband and mother-in-law making the decision) even when the mother knew what was best for the baby she was not always allowed to take the action. ACTS is considering how best to involve and educate these decision makers through Grandmothers and Dads clubs.

Challenges

The ACTS CSP Team should continue to focus on the community empowerment aspect of the project by further developing their discussion, assessment, and analysis for implementation adjustment process using an on-going basis for quality improvements.

The commitment of the MoLHSA to continue in supporting role as a CSP partner and implementation agent should be strongly supported and involved with the ACTS CSP interventions and strategies. It may be necessary to review and update MOU agreements as the on-going health sector plan is developed. It is suggested that the close communication with MoLHSA partners and officials continue on a planned basis with a section of the ACTS annual report devoted to a summary of these collaboration meetings and possible MOU/agreement adjustment with continued communications.

The reported degree of growth stunting is at a 15% level and there is a high prevalence of marginal malnutrition warrants a dialogue with WHO, UNICEF and the MoLHSA regarding the possibility for adding a de-worming component to the project. This could be done either through a school program or as a community mechanism for reinforcing health messages through a practical observable intervention outcome. Treated persons see the expelled worm, which strengthens trust and increases the validity and credibility to additional health messages. It also may be feasible to add Vitamin A or other micronutrient components, which could later be assumed by the ministry.

Measuring BCI changes is a challenge as the concepts are more abstract to study. One possibility to measure behavior change is for the ACTS CSP Team to design a card system to present to each family member who has completed the FGD training. These family members would be instructed to present the cards when attending any clinic for ANC visits, check-ups for infants or children, or when seeking treatment for an illness. Each facility partner would collect the cards in a container and give them to ACTS and CSP partners on a monthly basis to measure the frequency of health center visits for a BCI measurement. Cards could relate to specific services by varying color.

The amount and type of training probably should be reviewed for application, and especially for performance. Nearly every partner conducts training but the application of these training sessions appear fairly unclear. Recommendations are to review the comprehensive reorganization of training among partners, including the MoLHSA. This will assist in determining who is being trained for what in view of the national health sector reform.

The MTE findings recommend that a training needs assessment could be done among targeted cohorts where the intervention group receives training with the intent to improve performance. An intervention would focus on the clinical partner training needs, performance needed, and skills in conjunction with the population served and equipment available for use.

The professional assessment of staff and facilities completed by the two professionals should be carefully reviewed from the perspective of ACTS International and some criteria be designed for seeking resources and equipment where possible. While, it is not in the purview of the CSP to purchase equipment or restore aging facilities, it is apparent that improvements made by adding essential equipment and other clinic level institution needs will save lives and provide our MoLHSA partner with incentive to restore other facilities outside the CSP area.

RESULTS HIGHLIGHT

HIGHLIGHT # 1 - INNOVATION AND CAPACITY

COMMUNITY-WIDE FESTIVALS “HEALTHLY MOMS FOR HEALTHLY KIDS”

ACTS CSP sponsored a community-wide festival for celebrating healthy lifestyle messages and children’s activities, while engaging all the ethnic and age groups within the community to better understand healthy lifestyle messages.

Problem Being Addressed:

1. Engage community wide action and acceptance of maternal and child health messages in a community with diverse ethnic groups and at least one group that restrict the interaction with and among young women and the communities;
2. Rekindle community pride;
3. Develop community joint actions to empower the community; and
1. Celebrate educational, health and cultural excellence.

Project’s Input To Address It: ACTS CSP provided the idea and organization to implement it. ACTS CSP developed this idea for a community-wide festival and then engaged local government, health, and school, religious and business groups. Each group was given a task. They in turn helped engage regional and national leaders. ACTS CSP managed the planning and implementation, sought out and procured business sponsors and involved a stakeholder village board as central planning group. The school set up children sports events, provided location for the teenage peer theater and the young mother healthy life style trivia game. Business sponsors provided funding for communication, sports trophies and other medals and prizes. Local, regional and national media covered the event. Religious leaders opened and closed the day with prayers of thanks while governmental leaders proclaimed the event the “Dmanisi Healthy Lifestyle Celebration.” The regional governor, parliamentary representative, Gamkeblia (mayor) and the city council were on hand to declare the event open and to award sport, dancing, and singing competition medals.

Magnitude of the Intervention: 2,000 participants were directly involved in the day’s main activities of: sport competition, young mother trivia games, teen healthy lifestyle theater singing and dancing groups. The percent of the population touched by the intervention was close to 100% that includes spectators, participants, teachers, organizers, etc.

Results: The Dmanisi City Stakeholders committee voted to make this healthily lifestyle festival an annual event. The local, regional and national governmental and religious officials have also asked to make this festival an annual celebration. The schools, churches and mosque have volunteered their space for next year and the business sponsors have volunteered to sponsor the festival. In addition, the Gamkebila (mayor) and city councils of other towns have asked the ACTS CSP to plan similar festivals for their cities.

HIGHLIGHT # 2 - HEALTH FAIRS IN KVEMO KARTLI

Health Fairs, with a focus on maternal and child care were conducted in villages near the joint Georgian/U.S. military training site in Kvemo Kartli. Georgian and U.S. military physicians, nurses and laboratory technicians provided laboratory equipment for blood and urine testing and calibrated scales for correct weight. Local Georgian physicians, ACTS CSP staff and other government and health officials were included in the event.

Problem being addressed:

1. Provide additional prenatal evaluation and support for pregnant women, as currently only 57% of young woman in Kvemo Kartli have their first prenatal visit in the first trimester.
2. Engage families and the community in sharing responsibilities for improved aspect of maternal and child care which they can control.
2. Provide community outreach for the medical team members of the U.S. Army's "Train and Equip" program for Georgia.

Project's Input To Address It: ACTS CSP organized these fairs after Dr. Tamar's check, the USAID Health Affair Officer, asked ACTS to serve as a liaison between the U.S. and Georgian militaries and the communities.

Magnitude of the Intervention: Each fair lasted 4-7 hours and provided direct care for 50-80 patients. Percent of population covered by the intervention close to 100% as citizens were involved a spectators, participants, organizers, etc.

Results: The first three health fairs served 250 mothers and children. Exit interviews with the young mothers and later FDG document high satisfactory in a majority of women interviewed. Qualitative data included local physicians expressing appreciation and gratitude to work with the well trained and well equipped US doctors, nurses and laboratory technicians. Local leaders voiced approval that their citizens were able to have updated care. Measurement of blood glucose levels and hemoglobins level of pregnant women was viewed as important by participants and community leaders.

HIGHLIGHT # 3 - GRANTEE DEVELOPMENT OF EVALUATION CAPACITY

Problem to be Solved: As a new grantee, development of quantitative evaluation capacity. ACTS, as an organization who is a new USAID grantee, has benefited and built our headquarters and field staff capacity to develop indicators, conduct surveys with proper sampling techniques and analysis, and present the collected data in a meaningful manner. CSP input has been full participation in all activities offered by CSGHP/CSTS. CSGHP provides a structured approach to program development with very clear, well-written guidelines at every step from the presentation of the proposal to debriefing, to designing and conducting the knowledge, practice, coverage (KPC) surveys, and eventually creating the DIP. In addition, excellent quality technical assistance is provided by USAID, assisted by CSTS/ CORE. The learning environment of the USAID/CSTS mini university is the best training experience I have ever encountered. The group of concerned, invested and knowledgeable peer professionals and organizations is amazing. The high degree of open, generous sharing of information, techniques, lessons learned and moral support is extraordinary.

Magnitude of the Intervention: As a new grantee unfamiliar with many of the CSP intervention three short years ago, ACTS now has a peer group of hundreds of experienced professionals willing to be contacted and asked about any question that our field teams run into. In addition to this vast professional network, the CORE electronic network also creates helpful resources.

Overview of the CSP process: During the mini-university, all new grantees are assembled, presented with excellent evidence based didactic training sessions from experience academics working in public health fields. ACTS, a new grantee, had three people review our DIP before the conference and present ACTS with written feedback. An additional learning experience was that our organization reviewed and presented feed back to another Grantee on their DIP. As a result of the DIP review, ACTS strengthened our plan and made it more practical and better suited to the communities where we work.

Results: MoLHSA used ACTS' KPC data to submit to WHO, as representative of regional data. UNICEF MICS is a country area without regional values. The rigorous development of indicators with baseline levels and exercise of estimating annual and end of program benchmarks for both process (behavior change) and results (outcome) indicators provides quantitative data for evaluation of CSP achievements.

HIGHLIGHT #4 - CAPACITY DEVELOPMENT FOR LOCAL, REGIONAL & NATIONAL OFFICIALS

Problem to be solved: Need for evidence-based indicators at a national level to assess across programs and region.

ACTS Input: The Georgian MoHLSA received ACTS KPC and MTE data and found it interesting and helpful. Ongoing discussions center of use of KPC and MTE approach across programs and regions.

The CSP process defined by rigorous requirements is itself an innovative and capacity building experience. ACTS International and our affiliate field organization, ACTS Georgia works closely with the Georgian MoLHSA and the Georgian Parliament. Our individual and joint capacity to provide quantitative baselines and annual and end of program benchmarks improves monitoring and evaluation of program and decision-making.

Other PVO and bilateral groups from many nations are working in the country of Georgia during this difficult time of transition. Hundreds of health surveys have and are being conducted. Most surveys are one time snapshots of a situation. Rarely do any surveys re-assess the situation after an intervention has been made and then provide MoLHSA with quantitative data. The CSP's rigorous demands for ongoing re-assessment and comparison to the baseline survey data makes this program and its monitoring and evaluation process uniquely helpful to the MoLHSA.

The Georgian Minister of Labor, Health and Social Affairs has been very pleased with the CSP progress and would like to use its methods in other areas. As the country grows and the health needs become even more complex, the Ministry hopes to identify its own indicators and begin requiring all health programs to use the CSP approach of practical measurable indicators, with mid-term and EOP estimate results, which will be presented to the ministry at the start of all programs, at the program midterm and at the end of the program. This will for the first time give the ministry a method of assessing results across different programs and different geographic areas. With time, this could also provide an assessment of sustainability that would rank organizations based on the lasting nature of their work. ACTS CSP has been the only program to introduce this approach in Georgia.

Magnitude of the Intervention: Hundreds of millions of dollars are spent each year on programs in Georgia. As an example, the British government development agency is completing a \$40 million program implementing family practice in Georgia. How does one measure the success and sustainability of such large programs if there is no evidence-based approach?

Results: The Georgian MoLHSA includes ACTS CSP KPC data in annual national report to The World Health Organization (WHO) and is discussion wider use of evidence based indicator approach.

RESULTS HIGHLIGHT # 5 - NATIONAL SCALE UP- NUTRITION

Problem to be Solved: How to improve women and children health care on a national level. The Georgian government has taken several key steps to improve access, availability and quality of health care through legislation. Still, there remains a need to identify and implement programs with national impact. Current maternal anemia and spinal cord congenital anomalies are a problem in Georgia that is correctable by fortification of flour with iron and folic acid. ACTS, working with the Parliament of Georgia, and using an evidence based approach first learned through ACTS CSP program, secured a \$1,5million, three–year flour fortification program from the Geneva-based organization Global Alliance for Improved Nutrition (GAIN).

This program adds a vitamin-enriched premix at six flourmills, each milling 100 tons of flour daily. In 2008, there will be a national scale up to include all flourmills in Georgia. ACTS, as the lead organization, provides the organization administration and the technical training to add the pre mix vitamin compound to flour to the six pilot mills. ACTS is also setting up the testing of iron and folic acid levels in the mill laboratories.

ACTS Input: ACTS CSP provided the capacity and evidence-based knowledge that allowed ACTS and the Georgian Parliament to win this important Grant. In addition, ACTS CSP coordinates the healthily nutrition message in both the CSP and GAIN programs. ACTS has a separate team leading the GAIN grant and no USAID CSP funds or personnel are used in this separate funded GAIN grant; however, the synergistic messages are coordinate among the ACTS staff within each program.

Magnitude of the Intervention: With six high volume mills (100 tons per day per mill), starting fortification in fall of 2007, an estimated 1.4 million people will benefit as a total of 600 tons of fortified flour will be milled daily. Currently 100% of the populations of the three regions of 11 are affected. By 2009, the entire country’s population of five million will benefit. Also, in 2009, all administrative regions 100% of the population of five million will be affected.

Results:

1. Creation of a Georgian Alliance for Improved Nutrition, including the Parliament of Georgia and ACTS, as well as a group of large business and government stakeholders, PVOS and consumers.
2. Passage of A 2007 law that allows the millers to add folic acid and iron to wheat as it milled into flour
3. Passage of a second law in 2009 is anticipated, following the successful evaluation of the Georgian GAIN pilot phase

It should be noted that since the GAIN program has awarded countrywide grants to only 18 countries. ACTS received this GAIN grant as a direct result of our increased maternal and child health programming capacity acquired through CSP.

ACTION PLAN/REVISED WORK PLAN

Future Recommended Activities for the CSP:

Based on findings, data collected, and lessons learned from the implemented program activities, future activities for the ACTS CSP will include:

Community-Based Training

- Improvements in community training session education content should be based on repeated field experiences, continued FGD, surveys and expanded types and participants, such as mother-in-laws, fathers, and grandfathers.
- Consideration for breastfeeding support groups should be explored.

Monitoring and Evaluation

- Mechanisms for establishing behavior change measures and proxy measures conducted as operational research need to introduce to MOLHSA routine assessment.

Stakeholder Engagement

- Community stakeholder group will continue to be a prime ACTS CSP communication' strategy.
- ACTS Georgia should continue partnership and dialogue with MoLHSA, as national health sector reform is designed and implemented.
- ACTS International and the U.S. Department of State.
- The establishment of life-saving conditions and support with MoLHSA for full-term infants, perinatal and neonatal aspects will continue.
- Full coordination with UNICEF, USAID, WHO, and CSP activities will continue.
- ACTS Georgia staff will continue to assess progress and identify potential problems through HIS system, LQAS, Focus Group Surveys, additional surveys and tracking progress on monthly basis. Management and programmatic decisions will be made on basis of findings from data collected and analyzed.
- ACTS Georgia will provide USAID Mission with routine 3-to-4-paragraph briefing monthly. This should be considered an attempt to establish an informal communication process and should not be viewed as an official reporting obligation.
- Empower and value the anecdotal issue the FGDs identify. Currently, the primary issue is growing number of cases of worms. ACTS will work with MoLHSA and other partners to assess the magnitude of the program and develop cost-effective treatment.

Key Recommendations for the remaining 2 years of the CSP:

- Assisting hospitals to become baby-friendly certified.
- Continuing ACTS leadership role in promoting and monitoring the use of fortified flour.
- Collaborating with MOLHSA on adding de-worming facets to all.
- Nutrition projects.
- Monitoring BCC by implementing card system to track visits to ANCs and health facilities.
- Modifying existing MOU agreements with all partners, as needed.
- Modifying data collection for more in depth daily and weekly counts of services provided, beneficiaries and BHI measurements.
- ACTS Georgia should provide USAID Mission with routine 3-to-4-paragraph briefing monthly to establish an informal communication process.

- Exploring follow on funding to expand this successful CSP program and to continue activities in the Kvemo Kartli region.

RESPONSE TO MTE RECOMMENDATIONS

Maternal and Newborn Care

Recommendation: The national flour fortification program that will add iron and folic acid to bread is being implemented in Georgia by ACTS as the leader in cooperation with the Georgian Parliament. This effective program will reduce maternal anemia and spinal cord disease in babies. It is recommended that the CSP add the maternal anemia message and the folic acid important to the community-based messages and that CSP and the GAIN program join together to sponsor mass media in focus areas where the target has been achieved.

Response: ACTS will continue to lead the flour fortification process. The pilot with six mills coming on line is completed in 2008. The scale-up involves the entire country in 2009. ACTS and the Parliament of Georgia will advocate for the passage in 2009 of the law requiring fortification for all wheat milled in Georgia and all improved wheat.

Recommendation: ACTS should work at the hospital level to develop an affordable method to assist the GOG in training maternity hospitals in getting and maintaining WHO baby-friendly hospital certification.

Response: ACTS will work with the MOLHSA to develop cost-effective methods to maintain the BFH status for Georgian hospitals. Currently, Rustavi Hospital in Kvemo Kartli, as part of CSP, is the largest and only BFH in Kvemo Kartli. In the past, several hospitals in other parts of Georgia were certified as BFH under a UNICEF program. All have lost their certification because the cost of re-certification is not affordable. ACTS will also explore using the sister medical university relationship between Tbilisi State University and The University of Missouri School of Medicine to train TSU faculty to become WHO-certified BFH instructors. There is a modified BHF training program in use in Uzbekistan and ACTS will evaluate this with the Georgian MOH and the Georgian WHO representative.

Recommendation: Essential equipment is needed for maternity facilities for neonatal resuscitation. It is recommended that the equipment essential to neonatal resuscitation be identified by ACTS and presented to MOLHSA as the standard list of essential neonatal resuscitation equipment.

Response: ACTS will develop the list of essential neonatal resuscitation equipment required for each maternity delivery area and will work through another ACTS program/funding source to secure this equipment and provide instructions for the maternity units.

Recommendation: CSP should monitor BCC by implementing a card system to track visits to the ANCs and health facilities.

Response: ACTS will develop a plan for implementing a colored-card system to give to all women attending CSP courses, with instruction to take them to their ANC and give them to the physician. The card count will be assessed weekly.

Breast Feeding Promotion:

Recommendation: The MTE target for breastfeeding has been reached in the focus villages, and it is essential to continue the program of positive messages. ACTS should continue the successful community-based educational program, monitor the effectiveness of the messages through focus group and consider adding MMSG.

Response: ACTS will continue the community outreach for young women and will start a pilot MMSG and assess with FGDs the strengths and weaknesses:

1. Focus discussion groups for expectant mothers to define barriers to breast feeding could increase better understanding of the barriers.
2. Focus group discussion with the nursing staff that performs the consoling could provide better understanding about their perceived barriers.
3. Regular training update for the nursing staff to encourage young moms might include:
 - ✓ Direct observation of the consoling by nurse with suggestions for improvement.
 - ✓ Exit interviews with the young mother at the time of discharge to assess if she did start breast feeding within one hour and what, if any, instructions were given by the nurses; to obtain her self assessment of breast feeding knowledge, where she obtained her knowledge, and factors that promoted her willingness to breast feed. These exit interview results can be reported to the nursing staff to help improve care provided.

Nutrition:

Recommendation: It is recommended that community-based training continue to stress the importance of correct complementary feeding. This could also be a topic in the mother-to-mother support groups. Regular training updates for nursing staff should also include complementary feeding information. Monitor with exit interviews of the young mother. These exit interview results, can be report to the nursing staff during periodic updates.

Response: ACTS will continue the community outreach for young women and will start a pilot mother to mother group and assess with FGD the strengths and weaknesses:

1. Focus discussion groups for expectant mothers to define complementary feeding and gain better understanding of the barriers.
2. Focus group discussion with the nursing staff that performs the consoling could provide better understanding about their perceived barriers.
3. Regular training update for the nursing staff to encourage young moms might include:
 - ✓ Direct observation of the consoling by nurse with suggestions for improvement
 - ✓ Exit interviews with the young mother at the time of discharge to assess if she did start complementary and what, if any, instructions were given by the nurses; to obtain her self-assessment of complementary feeding knowledge, where she obtained her knowledge. These exit interview results can be reported to the nursing staff to help improve care provided.

Recommendation: Explore source of funding from international antihelmenthic de-worming groups and open negotiation with MOLHSA on implementing a de-worming component in all appropriate nutrition programs and projects.

Response: The anecdotal information emerging from focus groups of mothers and physicians indicate worm infestation is a growing public health problem. The GOG does not consider this a major cause of anemia. While this important issue is beyond the scope of the CSP,

ACTS will work with the MOLHSA to better define the problem. Once the situation is better defined, and if action is needed ACTS will approach donors outside the USAID/ CSP.

ARI/Pneumonia and Diarrhea:

Recommendation: Community-based training for young women should continue to teach the danger signs of illness; the need for additional fluids during illness, to add the MMSG, and to include messages about the warning signs of illness and danger signs that indicate the need to visit the doctor.

Response: ACTS will continue to work with young women in FDG to determine knowledge and practice barriers and will use MMSG to create similar groups of the other major family decision makers, Fathers and Grandmothers. Judy Abel Grandmother project will serve as a reference. These approaches will help identify barriers and develop practical solutions. Exit interview and FDG will assess the improvement.

Recommendation: Physicians and nursing should be given updated regular training on case management of pneumonia and diarrhea.

Response: ACTS will:

1. Develop continuing medical standards and medical information updates to be presented by the MoLHSA, Georgian Medical Association, as part of physician licensing and re-certification requirements.
2. Nurses will be encouraged to become more effective nurse educators. ACTS will hold FGD to learn what material the nurse need for teaching and what nurse incentives might be help. Hospital discharge exit interviews of mothers and direct observation of physician and nurse interaction with mothers will also be used.
3. ACTS will include in the new MMSG experienced mothers of children. FDG and support groups will expand to involve family decision makers (e.g., dad, grandmother and grandfather support groups).

Recommendation: Modifying data collection for more in depth daily and weekly counts of services provided, beneficiaries and BHI measurements.

Response: ACTS will develop a modified data collection system and chart audit to monitor results and collect more detailed information.

Community Mobilization:

Recommendation: Continue providing stakeholders with regular information updates that stress the value of their participation.

Response: ACTS will include relevant data updates and lessons learned from the community meetings and FGDs.

Recommendation: The CSP program should target remote villages where there is limited access to health care.

Response: ACTS will explore additional funding resources to allow the CSP to expand throughout this large region.

Communication for Behavior Change:

Recommendation: ACTS should continue the effective messages for Behavior Change and continue using ACTS CSP innovative community approaches of community wide festivals, health fairs, young mother games and support groups, and FGD incentive system.

Response: ACTS will conduct the community festival in Dmanisi again this year and expand the community festival approach to two other communities in year four.

Recommendation: Grandmothers and Fathers are key decision makers and need to be included.

Response: ACTS will develop an educational program for fathers and grandfather focused on the value of their role in the mother and infant lives and training them to recognize danger signs. Educational material for men will be developed.

Capacity Building:

Recommendation: Maternal and Child capacity of the GOG would be strengthened through legislation that mandates national standards for maternal and newborn care. These standards have been developed by Georgian experts in accordance with international standards.

Response: ACTS will work with the Parliament of Georgia health committee and other PVOS to advocate for reforms in this area.

Recommendation: Explore cost-effective way for the MoLHSA to establish and maintain WHO BFHI certification for Georgian hospitals.

Response: ACTS will explore the Sister-Medical School partnership it coordinates between Tbilisi State Medical University and the University of Missouri to consider a modified WHO Baby-Friendly Hospital training that could be conducted by faculty.

Recommendation: Regional to ensure sustainability of the positive changes that ACTS CSP has achieved, it is recommended that ACTS together with the regional governor of Kvemo Kartli establish a regional information system and set regional priorities to better coordinate bilateral and other donors.

Response: ACTS will meet with the regional governor and discuss what type of help or technical assistance is needed.

Health Facilities Strengthening:

Recommendation: ACTS assistance to the MOLSHA is needed to ensure full birth registration. The lack of full birth registration remains problematic. In 2005, the GOG eliminated the birth registration fee. However, the registration process still requires a visit by parents to a distant government office. Parents know the process, but many are unaware that the fee has been eliminated

Response: ACTS will: 1) conduct focus groups to determine the barriers and work with MOLHSA to achieve full registration; 2) Recommendation will be made to have birth registration on site at the hospital. This will eliminate one of the most common barriers; and 3) ACTS will work with MoLHSA to include birth registration information in the four prenatal visit requirements for physicians and nurses.

Recommendation: The MTE structured physician interview, MFA and direct physician practice review identified unacceptable gaps between the physicians’ theoretical knowledge and practical ability to perform proper neonatal resuscitation. Prime barrier was lack of necessary and proper size of essential equipment. During the ACTS MTE the physician assessment team developed the essential equipment list for neonatal resuscitation. ACTS should seek matching funds or in-kind donations to secure needed equipment and training for these physicians.

Response: ACTS will work through its donor network to secure, transport, install and train staff to use this essential equipment list for each of the Kvemo Kartli hospitals. The associated costs will be secured as matching funds and/or in kind or cash donations. This essential neonatal equipment list will be shared with MoLHSA and other interested PVOs and donors to set up sustainable acquisition and training for the nation. This process will be monitored and evaluated before EOP with a repeat MFA assessment, structured physician review and direct observations of neonatal resuscitation.

Recommendation: Continue to explore ways to improve staff education, training and development to increase competence and expertise.

Response: Regular review and self-assessment will identify the topics most needed for additional training. In 2008, two M and E training workshops will be conducted in training to include the new BCC card monitoring system and to better prepare regional and local stakeholders to assume follow up monitoring at the end of this program. Future needs will be discussed these workshop will concentrate on: 1) ACTS key staff; and 2) new and continuing local and regional coordinates.

REVISED ACTION PLAN

Table 7: Revised Work Plan for Years 4-5

Project Year	Year IV (2007-2008)				Year V (2008-2009)			
Finalizing and submitting MTE Report								
<i>Objective 1: Sustain changes in maternal care giving and care seeking behaviors (maternal and newborn care/breast-feeding/nutrition/pneumonia management/diarrhea management)</i>								
Updating BCC campaign based on MTE & LQAS findings								
BCC materials production								
BCC materials dissemination								
Monitoring BCC through introduction of a card system to track visits to ANCs and health facilities								
Development of three new presentations for fathers and mothers-in-law with inclusion of musical messages and collaboration with MoLHSA on adding de-worming facets to nutrition component of the project								
Development of educational TV spots to be aired vial local TV network								
Airing TV spots								
Preparation and conduction of Healthy Moms for Healthy Kids Festival								

Project Year	Year IV (2007-2008)				Year V (2008-2009)			
<i>Objective 2: Sustain improvements in the quality of health services available to children and their mothers</i>								
Conduct training for IMCI protocols among the personal of health facilities								
Follow-up for IMCI protocol implementation								
Working with MoLHSA to develop dissemination materials on evidence-based practice guidelines for maternity care								
Selecting HCF for pilot of evidence-based practice protocols								
Evidence-based training for identified health care professionals								
Semi-annual training updates for physicians/nurses in evidence-based obstetric practices and IMCI protocols								
Organize systematic distribution plan for essential supplies to support IMCI protocols and evidence-based obstetric interventions								
Distribution of IMCI supplies								
<i>Objective 3: Improve awareness, collaboration and capacity among public, private and NGO stakeholders to improve health impact of MCH projects</i>								
Train community health workers in BCC messages								
Semi-annual BCC updates								
In collaboration with Claritas, develop the training plan for district hospitals, clinics and ambulatory clinic workers in BFH practices								
Conduct quarterly meetings jointly with MOH staff and the ACTS-G CSP staff								
Conduct quarterly meetings with ACTS-G CSP staff and stakeholders								
Identify and train Field Staff in BCC								
Together with partners, conduct joint quarterly visits to target area hospitals								
Promoting and monitoring the use of fortified flour								
<i>Objective 4: Strengthen capacity of ACTS-I and its local partner to implement sustainable maternal and child health programs</i>								
Yearly strategy meeting, facilitated by consultant to conduct organizational analysis								
Develop a strategic sustainability plan								
Modifying MOU agreements with Claritas and Institute of Strategic Research								
ACTS-I to review and provide extensive feedback on annual BCC and training plans								
Hold annual one-day review workshops for NGO and MOH partners to evaluate successes and areas for improvement								
Attend CORE meetings spring and Fall								
Performance Monitoring and Evaluation								
Focus Group Discussions								
KPC – Final assessment								

Project Year	Year IV (2007-2008)			Year V (2008-2009)		
Modifying data collection for more in-depth daily and weekly counts of services provided, beneficiaries and BHI measurements						
Monitoring survey						
Confidential Client Surveys						
Operations research						
Modified Health Facilities Assessments						
Organizational development assessment/DOSA						

ATTACHMENTS

Baseline Information from DIP

MTE Survey (LQAS) Tool

Evaluation Team Members and Titles

Evaluation Assessment Methodology

List of Persons Interviewed and Contacted

CD with electronic copy of the report in MS Word 2000

Special Reports

Project Data Sheet Form

References and Resources

Political Structure in Georgia

A. Baseline information from the DIP

Nutritional Deficiencies:

Children aged 0-23 months in the target regions were grouped according to the WHO weight-for-age standards for underweight children (-3SD). The average percentage of underweight children among the three sub-regions is 4.0%. However, there is a significant difference between the sub-regions. While the percent of underweight children in sub-region 1 was 4.2%, the same index for sub-region 2 was nearly twice as high at 7.6%. The lowest value was observed in the sub-region 3, which was 1.4%. On the whole, KPC findings related to feeding practices for children aged 0-23 months in the target regions revealed comparatively low levels of malnourishment. They did reveal, however, a relatively high percentage of moderately underweight children in sub-region 1 and a surprisingly high level of severe overweight children (+3SD), 43.4% on average, (27.5% in sub-region 1; 42.6% in sub-region 2; and 55.6% in sub-region 3.) These findings justified selecting Nutrition and Microelements (micronutrients) as one of the project interventions at the 15% level.

Immediate Breastfeeding:

Though the majority (94.1%) of births of 0-23 month olds occurred in maternity hospitals with 95.3% of deliveries attended by a physician, only 39.5% of newborns were breastfed within the first hour. Again there is a significant difference between the sub-regions, 48.7% in sub-region 1; 62.6% in sub-region 2; and just 18.2% in sub-region 3. The significant variance among the three sub-regions is indicative of the variance across regions for health providers giving adequate instruction, as well as a weak demand from mothers to breastfeed immediately. These findings encourage planning of bilateral intervention, both at the health facility and community levels, with particular emphasis on the Chiatura and Zestaphoni cities in Imereti region, which exhibited the lowest percentage of children breastfed during the first hour following birth.

Exclusive Breastfeeding:

The KPC data on exclusive breastfeeding demonstrated that only 16.1% of children up to 6 months of age were exclusively breastfed, 17.1% in sub-region 1; 18.2% in sub-region 2; and 14.0% in sub-region 3. Thirty-two percent of mothers gave their child something to drink before breastfeeding. Forty-one percent of children age 6-23 months ate meat, fish or poultry, but not dairy products; 67.7% ate some food from an animal source including dairy products. Of the 223 mothers who had children in the age range of 0-5 months, 57.4% reported giving only breast milk to the child during the last 24 hours; 22.9% of infants aged 0-5 months received fresh fruit and vegetables; 9.4% potatoes; 17.5% grain food (wheat, corn, rice, etc); 17.5% dairy products; 6.3% meat, poultry, fish; 6.3% food prepared in butter, oil or fat; 4.9% food prepared from vegetables; other kinds of food (pumpkin, carrots, kidney beans, soy) 4.4%. The percentage of exclusively breastfed infants 0-6 months is low and justifies the breast-feeding promotion intervention in the target areas.

Continued Breast and Complementary Feeding:

Almost 49% of children aged 6-9 months and 30% of children aged 10-23 months were still breastfed. Of a total of 103 children aged 6-7 months, 43 (41.7%) received at least one solid food together with breast milk. Approximately 41% (40.7%) of children aged 6-9 months ate

meat or fish and 67.7% meat, fish, poultry and cheese and 57.8% reported feeding their children from one-to-seven times during the previous 24 hours with semi-solid food. On average, children were given this type of food 2.5 times (SD 1.3) per day. From those 520 mothers who pointed to how many times they gave food, 30.25% gave it twice, 28.5% once, 17.9% three times, 16.2% four times and 7.4% more than four times. Sixty-nine percent of mothers of children 6-11 months indicated that their children ate semi-solid food during last 24 hours.

B. KPC LQAS Report

Lot Quality Assurance Sampling Mid-Term Survey

REPORT

October 2007

“Child Survival and Health Program for Kvemo Kartli and Imereti, Georgia

HEADQUARTERS

A Call to Serve International
601 Business Loop 70 West, Suite 113
Columbia, MO 65203

AFFILIATE

A Call to Serve - Georgia
7, Vazha Pshavela Ave.
Tbilisi, Georgia 0160

Partner Organizations: Ministry of Labor, Health and Social Affairs of Georgia; Georgian Medical Association, Mother-Child Nutrition and Wellness Association- Claritas XXI, Women Wellness Center, Union for Social Protection of Citizens of Georgia “Tanadgoma”

Authors: Dr. Giorgi Tsilosani, Dr. Revaz Tataradze, Ms. Eteri Suladze,
Under the leadership of Dr. Patricia Blair

Tbilisi, 2007

Acknowledgments

The special recognition should be given to following individuals and organizations whose support was considered crucial during the planning, implementation and analysis phase of the KPC assessment: KPC Supervisors: Medea Gegnava, Mzia Klibadze, Tinatin Lomidze (ACTS Georgia), Interviewers: Nana Ebralidze, Dodo Iashvili, Irma Porchkhidze (ACTS Georgia), Nunu Latsabidze, Inga Babluani, Liudmila Chernoles (volunteers from Institute of Policy Studies), Project District coordinators: Dr. Tamar Lobzhanidze, Mr. Amiran Sultanishvili, Mr. Giorgi Dvali; Kvemo Kartli based NGO “Tanadgoma”; Data tabulation Ms. Natia Dadiani (ACTS Georgia). We would like to extend our gratitude to local community leaders and mobilizers as well as to medical professionals and representatives of local authorities for their assistance in informing population about the oncoming survey and encouraging them to cooperate with the survey interviewers.

We wish to thank our project driver Mr. Tengiz Nishnianidze for assisting in development most optimal logistic plan allowing interviewing maximal number of respondents per day and for his dedication in transporting various groups of interviewers and supervisors to interview sites.

Table of Contents

Report

Executive Summary	56
Background	57
Process and Partnership Building	59
Methods	60
Results	62
Discussion.....	66

Executive Summary

Lot Quality Assurance Sampling (LQAS) was used for KPC (knowledge, practice, coverage) survey, which was conducted in September 25 through October 3, 2007. Total of 171 respondents in nine supervision areas (SA) have been interviewed. Total of the 99 interview sites, urban and rural, in 6 SA of Kvemo Kartli and three more sites in Rustavi. All the respondents were females. Their age ranged from 16 to 49 years, mean age being 25.7, SD 5.8. Median is 25 years. 67.2% of respondents are younger than 25. The sampling frame for the LQAS was used to determine the interview sites in each SA. They were defined at random using Systematic Sampling approach and the households within the selected sites were chosen using random drawing of the street names for cities and the “spin the bottle” method for the villages. The questionnaire was adapted from baseline KPC survey and contained only modules related to major indicators and benchmarks of the Project as defined in DIP. Local partners and stakeholders were consulted to ensure maximal elimination of the possible obstacles in the process of interviewing. Six interviewers and three supervisors underwent a three-day training, with the last day devoted to field-testing. Teams consisting of 2 interviewers and one supervisor were formed and a logistic plan was developed. Average length of the interview was 15-20 minutes; duration of data collection was 7 days. Each team was assigned a schedule for the entire 7-day period. Supervisors were responsible for the accuracy and completeness of the questionnaires. The data were analyzed using hand-made tabulation. Summary Tabulation Tables were filled for 6 SA and City of Rustavi; Average Coverage Tables for each indicator and all SA have been compared

with DIP target ones to define the program priorities by indicator by SA. The results allowed mapping the SA where the value of Project indicator(s) proved to be below target average coverage and these findings have been used to update the Action Plan for the remaining two years of Project life. **Even though average coverage data for all indicators for all SA exceed or are equal to target values as envisaged by DIP Action Plan, average coverage values for individual indicators in various SA were below targeted values.** The Tables on the right demonstrated that Gardabani district has below target average coverage values for 4 out of 5 indicators. Marneuli district is next in number of below target average coverage indicators number – three out of five; Bolnisi district – two of five; and Dmanisi and Tetri Tskaro districts have one indicator, each which is below target average coverage.

Supervision Area	Baseline	Target	LQAS data	Difference
Marneuli	64.2%	75%	57.89%	- 17.10%
Gardabani			63.15%	-11.84%
Tsalka			68.42%	-6.57%

LQAS Findings Demonstrating the sites and indicators requiring additional LOF at Community Level

Indicator.
Percentage of Mothers who knew at least 2 signs of childhood illnesses that indicate the need of referral to health care services

Indicator
Percentage of infants who were exclusively breastfed

Supervision Area	Baseline	Target	LQAS data	Difference
Gardabani	16.2%	30%	26.31%	-3.68%

Indicator
Percentage of children aged 0-23 months who were breastfed within the first hour of birth

Supervision Area	Baseline	Target	LQAS data	Difference
Dmanisi	39.3%	60%	42.10%	-17.8%
Bolnisi			21.05%	- 38.94%
Tetri Tskaro			42.10%	-17.8%
Marneuli			36.84%	-23.15%
Gardabani			42.10%	-17.8%

Indicator
Percentage of infants aged 6-9 months who received breast milk and solid food within the last 24 hours

Supervision Area	Baseline	Target	LQAS data	Difference
Bolnisi	41.7%	60%	47.36%	- 12.63%
Marneuli			57.89%	-2.10%

Indicator
Percentage of infants aged 0-23 months with diarrhea in the last two weeks who were offered more fluids during illness.

Supervision Area	Baseline	Target	LQAS data	Difference
Bolnisi	56.3%	75%	63.15%	- 11.84%
Tetri Tskaro			68.42%	-6.5%
Gardabani			68.42%	-6.57%

Background

Georgia is situated in the central and western region of Caucasus. It's bordered north by Russia, east by Azerbaijan, south by Armenia, southwest by Turkey, in west there is Black Sea. The territory of Georgia is 69.5 thousands sq. km. Total length of the border is 1968.8 km, land –1,660.4 km, sea borders- 308.4 km. In geographic terms Georgia belongs to neither Europe nor Asia. In cultural terms it is neither West nor East. It has distinct language, customs and traditions. The 90ies were the most critical years in the latest history of Georgia since they marked the period of fundamental changes in political, economic and social life of the country.

The region of Kvemo Kartli consists of six *rayons* or districts: Gardabani, Marneuli, Tetri Tskaro, Bolnisi, Dmanisi and Tsalka. The administrative centre of Kvemo Kartli, Rustavi, is situated just 25 km from the Georgian capital, Tbilisi, and the towns of Marneuli and Gardabani are also close to the capital (at distances of 39 km and 42 km respectively). The western *rayons* of Kvemo Kartli (Dmanisi, Tetri Tsqaro and Tsalka) are not only more remote from Tbilisi geographically, but are also rather mountainous; the town of Tsalka is situated approximately 1,500 meters above sea level. The three principal national minorities concentrated in Kvemo Kartli are Azerbaijanians, Armenians and Greeks. Azerbaijani are by far the most numerous of the three sub-regions; according to the 2002 census, 284,761 Azerbaijanians live in Georgia (6.5% of the population) and 78.9% of these live in Kvemo Kartli. According to the same census, Azerbaijanians form an absolute majority of the population of Marneuli, Bolnisi and Dmanisi *rayons* and more than 40% of the population in Gardabani *rayon*.

Rayon	Georgians	Azerbaijanians	Armenians	Greeks	Russians
Gardabani	53.20%	43.72%	0.93%	0.21%	0.87%
Marneuli	8.04%	83.10%	7.89%	0.33%	0.44%
Bolnisi	26.82%	65.98%	5.81%	0.59%	0.56%
Tsalka	12.02%	9.54%	54.98%	21.97%	0.60%
Dmanisi	31.24%	66.76%	0.52%	0.78%	0.56%

Vegetable growing is the main economic activity and potatoes are the main crop. One source estimated that 126,000 tons of potatoes were produced in Kvemo Kartli in 2000, which made up 41.8% of all potatoes produced in Georgia. According to this source, in the same year, Kvemo Kartli produced 25.4% of all vegetables produced in Georgia.² Fruit and grain (mainly wheat and maize) production is also significant, particularly in the Gardabani and Marneuli *rayons*. Livestock breeding also plays an important role in the local economy, especially in the mountainous regions where hayfields make up a large proportion of agricultural land. As for poverty in Kvemo Kartli, 78 percent (3/4) of the population lives under the poverty line and 1/3 in extreme poverty¹ Adequate financing in the health sector of Georgia is a major challenge and stems in large measure from the collapse of Soviet-style health systems. Before the 1990s, central budgeting had dominated the policy and practice of provider reimbursement in the health care sector of Georgia. Under the old system, production capacity (e.g., hospital beds, staff) and utilization of services (e.g., number of inpatient days or outpatient visits) drove the financing of health care providers. The financing system did not contain incentives for higher workloads, better management, or clinical and technological innovation.

¹ Progress Report, Economic Development and Poverty Reduction Program (EDPRP), Tbilisi, January 2005

The supply of health care resources (physicians and hospital beds) continued to grow and reached an excessive level in the economy. Total health care system productivity has been on the decline since the mid-1960s and, to make matters worse, scarce budgetary resources have been diverted to redundant capital investment in defense programs. After the dissolution of the Soviet Union, the rapid disintegration of the old centrally controlled economy and a civil war left Georgia with a collapsed economy. The system underwent enormous upheaval and was no longer uniform or as highly regulated. In 1995, in response to this economic crisis that brought public expenditures on health to a level of less than US\$1 per capita, the GOG launched an ambitious health sector reform program. The vision of the future health system was a social insurance model, maintaining the principles of solidarity and equity. However, the reality was that scarcity of state financing shifted the financial burden to the population. Underdeveloped private insurance is not yet able to meet existing "needs", to pool available private resources and to increase the volume of prepaid funds for health care funding. That's why, seeking alternative solutions becomes of prime importance for Georgia. In the Georgian health sector, the problems posed by lack of adequate resources are compounded by lack of knowledge about the optimal pattern for reallocating existing resources or applying new resources. There have been significant, recent advances in the state of knowledge in this area. The GOG has shown its commitment to improving maternal and child health through legislation and policy documents such as "Law on Health Care which defines the rights of mothers and children; The Law on Patients' Rights, which grants pregnant and nursing women the right to information about possible effects of planned medical interventions on a fetus or infant; The Law on Promotion of Breastfeeding and Regulated Use of Artificial Food, which governs the state activities promoting breastfeeding and complements a law regulating the sale of infant formula. In addition the GOG has entered into several international agreements touching on perinatal care, such as the International Conference for Population and Development (ICPD) Plan of Action, the Convention on the Rights of a Child (CRC), the Convention on Elimination of All Forms of Discrimination against Women (CEDAW) and the Millennium Declaration. Currently GoG is implementing several reforms related to maternal and childcare ranging from developing a family doctors' institute to reorganizing hospitals and their financing and accreditation. Currently, the health care system of Georgia is divided into primary, secondary and tertiary levels of care. However, there is no policy that clearly delineates service by level of care. In terms of facilities, the maternal and child health care sector of Georgia's health care system consists of 685 ambulatories, 180 polyclinics, 19 antenatal clinics, 50 maternity houses and 47 maternity wards at hospitals. Of those in Kvemo Kartli are 7 maternity hospitals, 65 ambulatories, 8 polyclinics, 3 Ambulatory-Polyclinic Unions.

As a signatory to the Millennium Development Goals the GoG has pledged to decrease infant and under-five mortality by two-thirds and maternal mortality by three-fourths relative to its year 200 statistics by the year 2015. The GoG seeks to achieve these goals through several public policies including four free antenatal checkups for pregnant women, a vouchers system that offers subsidized delivery services at select maternity facilities, additional subsidized care for high-risk pregnant women and subsidized hospital care for children from birth to age three.²

Project Goals and Objectives

Project Goals is: Sustained reduction of under five mortality, infant and maternal mortality rate in Kvemo Kartli Region

² Curatio International Consulting, Assessment of Perinatal Care in Georgia, Georgia, 2006

Project Objectives are:

- Improved **Quality** of M/C survival services and increased quality of care on household level;
- Improved **Behavior** of community, health care professionals and health managers on maternal and child health;
- Increased **Accesses** to M/C health care services and increased accesses to adequate standard
- Case management

Intervention Activities

Areas of intervention of the project were defined as follows:

- Maternal & Newborn Care
- Breastfeeding
- Nutrition
- Pneumonia
- Diarrhea

Intervention activities related to intervention area include:

- Improving **Quality** of M/C survival services and quality of care at household level
- Improving **Behavior** of community, health care professionals and health managers on maternal and child health.
- Increasing **Accesses** to M/C health care services and accesses to adequate standard case management

Objectives of the KPC Survey

Measuring progress compared to benchmark data for maternal and child health indicators including:

- Collection of MTE data on the health and nutrition status of children under five and women of reproductive age;
- Identifying the impact of implemented interventions on health behavior patterns;
- Enhance the capacity of ACTS staff in planning, conducting, data collection and analysis of KPC surveys
- Revising DIP and developing Plan of Action based on the results obtained.

Process and Partnership Building

Successful conduction of any survey especially health related KPC requires cooperation at various levels such as governmental, local administration and community. Considering the above said from the very beginning of the Project Implementation ACTS team compiled a Project Description document in Georgian and distributed it to various departments of MoLHSA, Public Health Department of Georgia and Parliament Commission for Medical Issues, NGO Georgian Medical Association. This was followed by meetings and consultations with the Minister of Labor, Health and Social Affairs and his deputies and the heads of relevant Departments. As a result of these meetings and consultations ACTS concluded Agreement on Cooperation within the Framework of the Project with MoLHSA and Public Health Department of Georgia. This significantly helped in establishing close partnership relationships with Kvemo Kartli administration as well as with district administration and local medical professionals. As a result all administrative bodies at regional and

rayon levels as well as health facilities were involved into the process of community mobilization. A three year experience of project implementation demonstrated that a network of local volunteers including local nurses, physicians and representatives of local authorities are playing a crucial role in selection and recruitment of most active community representatives to serve as conveyors of CS major messages to the community members. The above stakeholders alongside with district coordinators actively assisted in recruitment of the representatives of target groups for focus group discussions, community meetings and development of logistic plan to conduct baseline cluster KPC and mid-term LQAS surveys. At the same time they served as bridges between the CS team and target population increasing trust and encouraging population participatory attitudes.

Methods

In September 2007, the LQAS survey was conducted in the Kvemo Kartli Region consisting of six districts: Dmanisi, Bolnisi, Tetri Tskaro, Marneuli, Gardabani and Tsalka. The sample size was 19 respondents/SA plus three additional SA for Rustavi city as described below in “Sampling Design” section.

✓ Questionnaire

The LQAS survey questionnaire was adapted from baseline cluster survey questionnaire. The baseline survey questionnaire was significantly shortened and contained only the modules, allowing to measure the efficiency of project implementation in relation to the major indicators identified in DIP. Local partners and stakeholders were consulted to ensure maximal elimination of the possible obstacles to the process of interviewing. The questionnaire consisted of 26, mostly closed questions.

✓ Sampling Design

The entire region of Kvemo Kartli was divided into 6 supervision areas (one per each district of the region) plus three supervision areas in the central city of the region – Rustavi. Such decision was made because Rustavi does not belong to any of the districts of Kvemo Kartli region being its administrative center. A simple random sample of 19 randomly selected individuals per SA was used to judge whether the major project indicators are below average or have reached a performance benchmark. To calculate a coverage proportion for the catchment area, the individual samples of 19 are added together and an average is calculated. In the household survey, lists of the catchment population within each village were obtained from data from the Georgian 2002 Census. A two-stage sampling plan: first randomly selected villages with total number of 19 interviews for each SA have been defined (Appendix 1). The second step randomly selected a household within the village (spin the bottle method).

LQAS Indicators

a) Prenatal care:

- ✓ Percent of mothers who could report 4 and more danger signs of pregnancy
- ✓ Percent of children aged 0-23 months exclusively breastfed for 6 months;
- ✓ Percent of children aged 0-23 months who were breastfed within the first hour after birth

b) Healthy nutrition

- ✓ Percent of infants aged 6-7 months who received solid foods with breast milk;
- ✓ Percent of mothers of children 0-23 months of age who were asked and explain proper breastfeeding and complementary feeding practices.

c) ARI/Pneumonia and Diarrhea

- ✓ Percent of mothers knowing that the must offer more fluids and food to sick children.
- ✓ Percentage of mothers who could report at least 2 danger signs of childhood illnesses
- ✓ Percentage of mothers who could report 4 and more neonatal danger signs

The following were supervision areas:

SA	District	SA	District
1	Dmanisi	6	Tsalka
2	Bolnisi	7	Rustavi Central part
3	Tetri Tskaro	8	Rustavi Right side of Mtkvari River
4	Marneuli	9	Left Side of Mtkvari River
5	Gardabani		

✓ *Training*

The interviewers and supervisors participating in baseline KPC survey have been selected for mid-term LQAS survey. Three day training of interviewers and supervisors has been conducted before starting LQAS survey. Six interviewers and three supervisors participated in the training. The Agenda of Training is provided in Appendix 2.

Data Collection:

- *Average length of interview*

Average length of interview varied between 15 – 20 minutes;

- *Number of days for data collection*

After identifying interview sites the logistic plan has been developed and interviewers have been assigned to relevant interview locations. With due regards to the geography of the region in question, accessibility and distances between the interview locations the optimal route for two cars with interviewers and supervisors has been developed and duration of the survey with 6 interviewers and 3 supervisors was determined as 7 days.

- *Major constraints/field problems*

The major field problem was accessibility of the respondents in Azeri villages. Considering the fact that LQAS survey was conducted in the beginning of the fall and it is Azeri women that are working in the fields, while their husbands are watching them, it proved rather time-consuming to find the household with a mother of a child aged 0-2 years. Considering this constraint the LQAS team tried to use rainy weather days to visit Azeri villages.

- *Quality-control procedures*

One supervisor was appointed to watch two interviewers each. Total of three supervisors were supervising the activities of six interviewers. By the end of day a supervisor and interviewer had to fill a special Daily Report Forms as well as tabulate the data obtained. Hand-made tabulations have been used and to control the quality of and accuracy of data tabulation a team of three participants - a caller, a recorder, and a verifier has been formed. A Tabulation Quality Checklist has been used to ensure correct estimation of average coverage for each indicator per SA and catchment area on the whole.

Data Analysis

- *Method of data analysis*

As has been mentioned above hand made data tabulation was used to analyze the data. The interviewers/supervisors training schedule involved special sessions on hand-tabulation technique. A Summary Tabulation Table (Appendix 3) was used to summarize the results of the analysis. The following team members participated in data management analysis: interviewers/supervisors, project manager and maternal and child health director. The data obtained were compared with the data collected in the course of Focus Group Discussions as well as with the data collected from the mothers visiting medical facilities. Confidence Intervals were calculated using the formula:

$$P=p\pm z * \text{SQRT}((p*q)/[n/\text{Deff}])$$

Where P = the actual rate/proportion in general population

p = the survey estimate

q = 1- p

z = 1.96 (with a confidence level of 95%)

n = sample size

Deff = 1

Results of LQAS Survey

INDICATOR	NUMERATOR	DENOMINATOR	PERCENT	CONFIDENCE LIMITS
✓ Percent of mothers who could report 4 and more danger signs of pregnancy	87	171	50.8%	43.16% to 58.84%
✓ Percent of children aged 0-23 months exclusively breastfed for 6 months;	18	45	48.5%	35% to 62%
✓ Percent of children aged 0-23 months who were breastfed within the first hour after birth	86	171	50.2%	37% to 64%
✓ Percent of infants aged 6-9 months who received solid foods with breast milk;	14	22	63.7%	51% to 77%
✓ Percent of mothers knowing that the must offer more fluids and food to sick children.	139	171	81.3%	71% to 92%
✓ Percentage of mothers who could report at least 2 danger signs of childhood illnesses	129	171	75%	63% to 86%
✓ Percentage of mothers who could report 4 and more neonatal danger signs	96	171	56.1%	43% to 69%

The LQAS survey documented certain changes in target indicator values. These changes correlated with the interventions their intensity being higher in the districts where interventions were more vigorous. There were two kinds of interventions – at medical personnel level and at

the community level. As a result of the first type of intervention total of 157 medical professionals (OB-Gyns, pediatricians, nurses) have been trained in IMCI, Breast Feeding, and BFHI. The second type of interventions was conducted on community level and included community meetings to train the community mobilizers, Health Fairs conducted jointly with US Navy Medical personnel acting within the framework of Georgian Sustainment & Stability Operations Program, MOLHSA Public Health Department within the framework of the Programs: "Active Detection of Morbidity and Medical Preventive Examination of Population", "Support of Healthy Life, Active Detection of Diseases and Prevention of Socially Dangerous Diseases". Three Health Fairs have been conducted in Kvemo Kartli Region in Gachiani and Koda villages (Gardabani district) and Irganchai village (Dmanisi district). In the course of screening all women of fertile age and particularly pregnant women and mothers of children 0-5 years of age have been counseled on safe motherhood and child care by the joint team of ACTS Georgia child survival staff, US Navy medical personnel and Georgian physicians. Total of 650 women of fertile age received Cs messages both in verbal and printed forms. Another kind of community level interventions was organizing Health Festivals in the region with active involvement of local population and support from local authorities and medical professionals. More than 2000 residents of Dmanisi district participated in the Festival "Healthy Moms for Healthy Kids" held in May 2007.

The Charts 1 and 2 (below) demonstrates the progress in average indices by the end of the 3rd year of project implementation in six districts (SA) of Kvemo Kartli (Chart 1) and three rayons (SA) of Rustavi city (Chart 2).

Chart 1. Baseline-Target-LQAS data for 6 SA of Kvemo Kartli

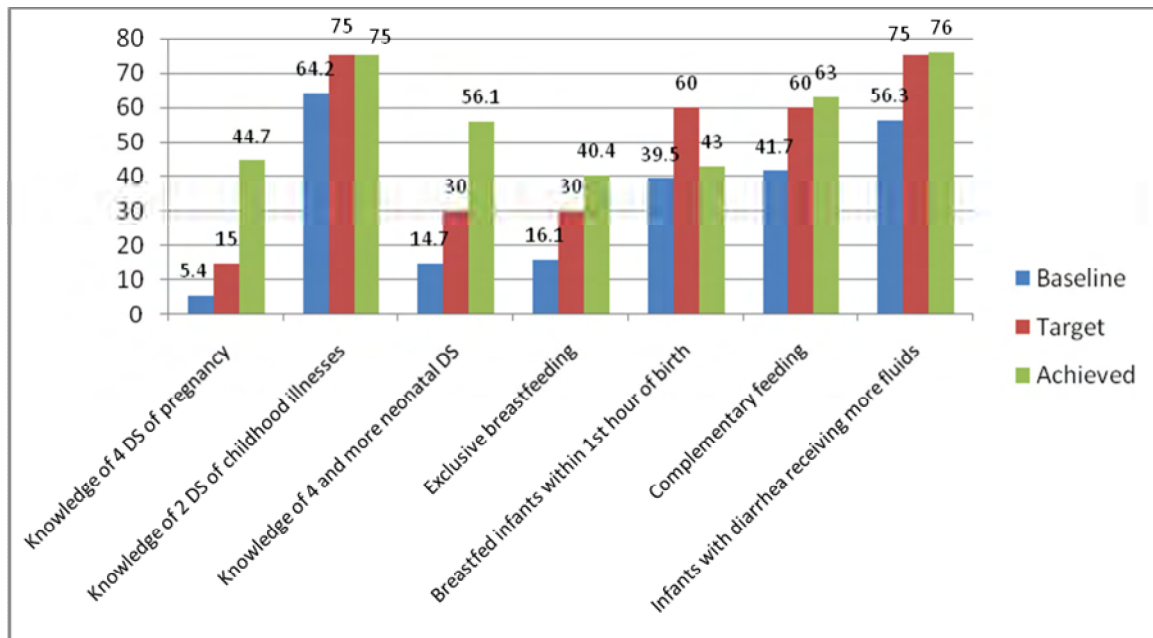
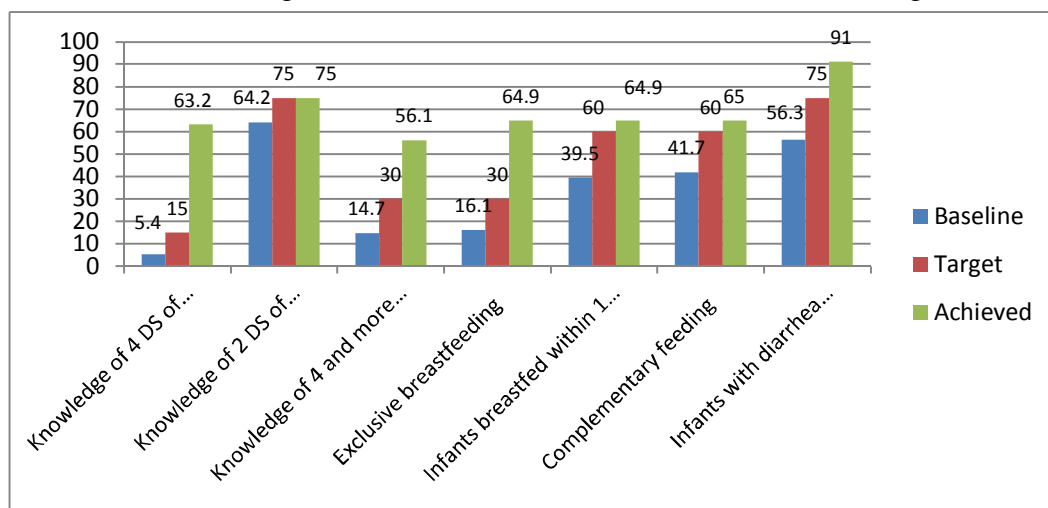


Chart 2. Baseline-Target-LQAS data for SA Rustavi, Kvemo Kartli Region



For six SA of Kvemo Kartli region one indicator has been found to be below target average coverage:

✓ Percent of children aged 0-23 months who were breastfed within the first hour after birth;
 At the same time, the same indicator for Rustavi city was even higher than target average coverage value. Considering the fact that ACTS conducted intensive medical personnel training in Rustavi city such dramatic increase from baseline 39.5% value to 64.9% (which is 4.9% higher than target 60% value) can be assumed to be the result of the training and indicative of behavior change among the maternity hospital personnel.

However analysis of each indicator separately by supervision areas demonstrated that several indicators were below target average coverage. Thus, *percentage of Mothers who knew at least 2 signs of childhood illnesses that indicate the need of referral to health care services* was below average coverage in Marneuli, Gardabani and Tsalka districts of Kvemo Kartli (Table 1)

Table 1. Percentage of Mothers who knew at least 2 signs of childhood illnesses that indicate the need of referral to health care services

Supervision Area	Baseline	Target	LQAS data	Difference
Dmanisi	64.2%	75%	84.21%	+ 9.21%
Bolnisi			84.21%	+ 9.21%
Tetri Tskaro			89.47%	+ 14.47%
Marneuli			57.89%	- 17.10%
Gardabani			63.15%	-11.84%
Tsalka			68.42%	-6.57%
Rustavi			75.0%	0%

In Marneuli and Gardabani districts it was even lower than baseline value for Kvemo Kartli region.

Percentage of infants who were exclusively breastfed was below target average coverage only in Gardabani district, though the value of this indicator is significantly higher than the baseline value.

Table 2. Percentage of infants who were exclusively breastfed

Supervision Area	Baseline	Target	LQAS data	Difference
Dmanisi	16.2%	30%	63.15%	+ 33.15%
Bolnisi			42.10%	+ 12.10%
Tetri Tskaro			31.57%	+ 1.57%
Marneuli			42.10%	+12.10%
Gardabani			26.31%	-3.68%
Tsalka			52.63%	+22.63%
Rustavi			64.9%	+34.9%

The most unfavorable situation is with the [percentage of children who were breastfed within the first hour after birth – this indicator proved to be below average coverage in 5 districts of Kvemo Kartli – Dmanisi, Bolnisi, Tetri Tskaro, Marneuli, and Bolnisi (Table 3). However in all these districts except Bolnisi and Marneuli districts there is a certain increase of average coverage compared to baseline value.

Table 3. Percentage of children aged 0-23 months who were breastfed within the first hour of birth

Supervision Area	Baseline	Target	LQAS data	Difference
Dmanisi	39.3%	60%	42.10%	-17.8%
Bolnisi			21.05%	- 38.94%
Tetri Tskaro			42.10%	-17.8%
Marneuli			36.84%	-23.15%
Gardabani			42.10%	-17.8%
Tsalka			73.68%	+13.68%
Rustavi			64.9%	+4.9%

Percentage of infants aged 6-9 months who received breast milk and solid food within the last 24 hours was below target average coverage in Bolnisi and Marneuli districts, though in both cases the LQAS survey values were higher than baseline ones (Table 4).

Table 4. Percentage of infants aged 6-9 months who received breast milk and solid food within the last 24 hours

Supervision Area	Baseline	Target	LQAS data	Difference
Dmanisi	41.7%	60%	63.15%	+3.15%
Bolnisi			47.36%	- 12.63%
Tetri Tskaro			78.94%	+18.94%
Marneuli			57.89%	-2.10%
Gardabani			78.94%	+18.94%
Tsalka			42.10%	+12.10%
Rustavi			65%	+5.0%

Among Diarrhea and ARI management indicators *Percentage of infants aged 0-23 months with diarrhea in the last two weeks who were offered more fluids during illness* was below target average coverage in SA 2, 3, 5 (Table 5).

Table 5. Percentage of infants aged 0-23 months with diarrhea in the last two weeks who were offered more fluids during illness.

Supervision Area	Baseline	Target	LQAS data	Difference
Dmanisi	56.3%	75%	89.47%	+14.47%
Bolnisi			63.15%	- 11.84%
Tetri Tskaro			68.42%	-6.5%
Marneuli			78.94%	+3.94%
Gardabani			68.42%	-6.57%
Tsalka			89.47%	+14.47%
Rustavi			91%	+16%

At the same time average coverage values for two indicators: *Percentage of Mothers who knew 4 signs of danger during pregnancy* and *Percentage of Mothers able to report 4 and more neonatal danger signs* are significantly higher than target average coverage in all SA (Table 6 and Table 7).

Table 6. Percentage of Mothers who knew 4 signs of danger during pregnancy

Supervision Area	Baseline	Target	LQAS data	Difference
Dmanisi	5.4%	15%	31.57%	+ 16.57%
Bolnisi			52.63%	+ 37.63%
Tetri Tskaro			31.57%	+ 16.57%
Marneuli			57.89%	+ 42.89
Gardabani			47.36%	+ 32.36%
Tsalka			47.36%	+ 32.36%
Rustavi			63.2%	+ 48.2%

Table 7. Percentage of Mothers able to report 4 and more neonatal danger signs

Supervision Area	Baseline	Target	LQAS data	Difference
Dmanisi	14.7%	30%	36.84%	+ 6.84%
Bolnisi			57.89%	+ 27.89%
Tetri Tskaro			47.36%	+ 17.36%
Marneuli			78.94%	+48.94%
Gardabani			63.15%	+33.15%
Tsalka			52.63%	+22.63%
Rustavi			56.1%	+26.1%

Discussion

Of all supervision areas SA 5 (Gardabani district) has most indicators, which proved to be below target average coverage (4 out of total of 5 indicators, which were below target average coverage in the Region). Hence it is necessary to focus ACTS CS on Supervision Area 5 to improve these indicators.

By the end of the project, 85% of mothers shall know at least 2 signs of childhood illnesses that indicate the need of referral to health care services. By year 3 of Project implementation this indicator should be 75%.

LQAS result for SA 4, 5, 6: 58%, 63%, 68% of mothers knew at least 2 signs of childhood illnesses that indicate the need of referral to health care services in each of SA respectively.

Conclusion: Special attention in the project's interventions in the above supervision areas will be paid to increasing mothers' knowledge of the above issue and practicing adequate behavior.

By the end of the project percentage of infants who were exclusively breastfed shall be 50%. By year 3 of the Project implementation this value shall achieve 30%.

LQAS results for SA 5: 26% of infants were exclusively breastfed.

Conclusion: Hence the messages advocating for exclusive breastfeeding shall be more pronounced in this supervision area and more effort shall be focused on this issue to improve this indicator.

By the end of the project 85% of children aged 0-23 months shall be breastfed within the first hour after birth. By the end of year, this indicator shall be 60%.

LQAS result for SA 1, 2, 3, 4, and 5: Only 42%, 21%, 42%, 37% and 42% of children aged 0-23 months were breastfed within the first hour after birth in these supervision areas, respectively. This can be explained by the fact that trainings of the medical personnel have been conducted only in Rustavi where this indicator was as high as 70%.

Conclusion: The data obtained indicate that the project did not achieve its objective in four supervision areas. It is necessary to train maternity hospitals personnel in remaining supervision areas, starting from SA 2 (average coverage = 21%), then SA4 (average coverage = 37%), SA 1, 3, 5 (average coverage = 42%). At the same time at the community level it seems reasonable to encourage future mothers to demand from maternity hospitals personnel to bring a newborn for breastfeeding within the first hour after birth. By the end of the Project 85% of infants aged 6-9 months shall receive breast milk and solid food within the last 24 hours. Year 3 benchmark is 60%.

LQAS result for SA 2 and 4: 47% and 58% of infants aged 6-9 months received breast milk and solid food within the last 24 hours.

Conclusion: In SA 2 and 4 the community meeting interventions shall specifically stress the benefits of correct complementary feeding for the children aged 6-9 months.

By the end of the Project 85% of children with diarrhea aged 0-23 month shall receive more fluids during the illness. By the end of Year 3 this indicator shall be as high as 75%.

LQAS result for SA 2, 3 and 5: Among the ARI/Pneumonia and Diarrhea indicators the percent of infants with diarrhea who received more fluids during illness was 63%, 68% and 68%, respectively.

Conclusion: Additional efforts shall be applied to educate mothers on the necessity of providing more fluids to the children with diarrhea. Special attention shall be paid to education of mothers-in-law in Azeri families.

Other studies

In addition to LQAS survey 11 focus group discussions have been conducted in Kvemo Kartli region. The FGD guide was the same as in 2006 so that it was possible to compare the results. The FGD of 2007 demonstrated that several behavioral problems evident in the course of 2006 FGD are not observed any more, that is certain attitudes towards various issues have been changed, which unequivocally is a positive phenomenon. However knowledge about the benefits of exclusive breastfeeding in the age of 0-6 months is still insufficient. Compared to previous year mothers are better informed about the benefits and necessity of exclusive breastfeeding. Their behavior changed with increase of the information quality – compared to the previous year the number of mothers who are exclusively breastfeeding their children increased though some of them still believe that the child below 6 months of age should be given water, and/or juice in addition to breast milk. Some of the respondents even insisted that breast milk was not enough and infants need some complementary semi-solid foods.

⇒ We can assume that mothers' behavior changes with the increase of information delivery level if such change does not require additional expenses. This observation testifies that with more aggressive advocacy of exclusive breastfeeding the results are likely to improve significantly.

Another problem that persisted was self-treatment of a child which is well reflected in LQAS survey average coverage for percent of mothers who knew at least 2 danger signs of childhood illnesses that indicate the need of referral to health facility.

⇒ Analysis of the FGD demonstrated that alongside with the fear for the health of a child the decision to refer to medical institution is also effected by the system of priorities established in mothers' perception of danger signs.

To a less extent was expressed the problem related to providing more fluids during diarrhea in children aged 0-23 months. However a few mothers stressed that they believed that a child should be restricted in fluids and food “not to irritate the bowels and stomach”. At the same time the majority of mothers disagreed with that statement and said that they had information that contrary was true. The proportion of those who spoke in favor of giving more fluids during diarrhea was significantly higher in 2007 FGD compared with the participants of 2006 FGD.

Exit interviews

In parallel with FGD and LQAS survey ACTS CS team developed a short questionnaire and interviewed the women after their visit to women's consultation or pediatric polyclinic. Total of 250 interviews were made in 5 districts of Kvemo Kartli region. The questions asked were: 1) Have you attended or heard of some meetings, workshops or trainings during last 12 months which have been

dedicated to the issues of safe motherhood? If yes, have they changed your attitude and/or behavior in relation to the issued discussed?

2) Have you attended or heard of some meetings, workshops or trainings during last 12 months, which have been dedicated to the issues of child health? If yes, have they changed your attitude and/or behavior in relation to the issued discussed?

Total of 84 (33.6%) respondents responded positively to both questions. Of interest is the frequency of positive answers by SA.

Marneuli – 2 respondents;

Gardabani – 16 respondents;

Bolnisi – 12 respondents;

Tetri Tskaro – 13 respondents;

Dmanisi – 41 respondents.

General Conclusions:

This survey determined that the overall average coverage level for Project Indicators at Household/Community level is consistent with and in some cases exceeds the target levels. However five supervision areas had coverage levels below the target level for 5 indicators, the number of indicators below average coverage varying from SA to SA. The information obtained from this survey combined with the data obtained from two other smaller studies (focus group discussions and exit interviews at the women consultations and pediatric policlinics (total of 250 interviews) was used to revise the Action Plan for remaining 2 year period and redistribute LOF at the community and household level to achieve improvement in behavior and develop appropriate strategies for achieving target benchmarks by the end of the Project.

C. Evaluation Team Members and their titles

David Newberry, MTEConsultant, Global Consultants, Inc, Associate - Department of International Health, Johns Hopkins University,

Patricia Blair, MD. PhD, President, ACTS International, CMO CSP

Dr. Giorgi Tsilosani, President of ACTS Georgia, Field CMO CSP

Dr. Revaz Tetaradze, CSP Program Director

Ms. Eteri Suladze, ACTS, CSPProject Manager

Tamara Lobgandze, CSP District Coordinator

Ms. Tiko Lomidze, ACTS, MCH Division Director Assistant

Dr. Randall C. Floyd, Associate Professor and Director, Division of Maternal-Fetal Medicine, University of Missouri, Columbia

Dr. Laura Hillman, Professor of Child Health, Division of Neonatology, University of Missouri

D. Evaluation Assessment Methodology

Technical Approach

The consultant, the ACTS Georgia and the ACTS HQ Team exchanged e-mails and participated in a site visit preliminary MTE planning action. Telephone conversations to delineate steps and actions required were documented and follow up assignments arranged. These steps included the following in regards to the MTE.

1. Review of DIP, two annual reports and other related documents.
2. Participatory roles and responsibilities were assigned
3. The close collaboration and implementation of this Child Survival project with the MoLHSA medical facilities in the project areas required numerous interviews with key ministry and facility-based professional staff
4. A List was completed of the key stakeholders that need to be interviewed and assessed
5. A List of possible invitees, stakeholders and Partners who would then possibly serve as evaluation team members
6. Discussion and agreement on the tools to be used for the MTE
7. A strategic meeting with USAID Mission was completed
8. A participatory approach was established as the most important tool for objectivity and increased ownership

MTE Overview

1. Extensive review of total project documentation and various reports
2. Field visits to MoLHSA facilities, focus groups and various implementations sites
3. Interviews with MoLHSA officials, government partners, political stakeholders, clinic personnel, mothers attending clinics during facility hours, OB GYN doctors who attend pregnant women for ANC services and polyclinic staff
4. Multiple interviews with mothers and Focus Group participants
5. Training data and analysis
6. LQAS survey was conducted with 170 women with a child less than two years of age were interviewed. A simple 10 question LQAS interview form was utilized.
7. Data were collected from various sources including agencies, facility sources and focus group qualitative assessments were conducted.
8. ACTS community groups were interviewed for participation and on content of their focus group topics.
9. Annual Reports were reviewed and other assessments reviewed to determine indicators related to either behavior change or evidence-based findings related to the DIP targets.

Description of Survey tools

Tool Name	Source of Data	Sample Size	Comments
1. Maternity Facility Assessment (MFA)	Structured interview and observation	6	1 regional maternity hospital 3 maternity wards 2 out patient centers
2. Obstetrician interview with obstetrician	Structured interview	9	
3. Neonatologist interview with Neonatologist	Structured interview	23	
4. Obstetrician / direct observation by MTE obstetrician	Direct observation	6	
5. Neonatologist direct observation by MTE	Direct observation	6	
6. Hospital Delivery records/log audit	Audit review	6	
7. Neonatal Transport Chart Audit	Chart audit	1	

E. List of Persons Interviewed and Contacted

Review of ACTS Georgia DIP Baseline Survey – 2005

Completed by Dr. Nana Sumbadze

DIP KPC

Three ethnic and religious groups were included:

- Christian – 314 respondents
- Muslim – 285 respondents
- Imereti

Methodology: 900 interviews were conducted in 8 districts according to the CORE survey methodology.

The Baseline Survey findings were established as the basis for ACTS Georgia Interventions. Among the most important facets of the ACTS Child Survival DIP is the close and nearly seamless coordination and collaboration between the Ministry of Labor, Health and Social Affairs with a community to an institutions-based service implementation and delivery system enabled.

MTE Plan of Action

- A Mid-Term Evaluation schedule was established
- A global review and interviews of the partners, stakeholders, community and legislative contributors will be undertaken.
- The impact of the current Georgian Health Sector Reform was analyzed and the positive and potential negative realities were carefully discussed with members within the reform group to improve communications during this critical period.

Visit to Rustavi (regional center of Kvemo Kartli Region)

Governor's Office

1. Mr. Zurab Melikishvili, Governor of Kvemo Kartli Region
2. Mr. Zakharia Darchiashvili, First Deputy Governor of Kvemo Kartli
3. Mr. Amiran Sultanishvili, district coordinator of ACTS CSP

Field Visit and Interviews

Rustavi Treatment and Diagnostic Center #2

Dr. Manana Kapanadze, Head of the Center

Dr. Rusudan Adamia, Head of the Pediatric Clinic

Rustavi Maternity Hospital

Dr. Zaza Shengelia – Deputy Director of the Hospital

Dr. Laura Mirashvili, Head of Obstetrical Department of the Hospital

Dr. Ketino Dugladze, Head of Pediatric Department

Dr. Eteri Tabatadze, Neonatologist of the Hospital

Findings:

- Rustavi serves a large patient load, with about 70,000 persons, of which, 40% are children 0-16 years of age, about 3,000 are less than 3 years of age while 5,000 fall into the less than 5 year old age group.
- Children present with ARI, pneumonia and diarrhea most frequently
- The “payment Voucher” system results in most women attending four or more ANC visits.
- There are about 200 staff total.
- Pay was late – usually delayed about a month or more.
- These administrators and staff interviewed are obviously highly dedicated and motivated. They state their approval and support for the ACTS partnership and linkages. The focus on training and working with pregnant women was viewed as directly supportive of their mission and they support a strong, continued collaboration. The ACTS CS ownership could be observed as one shared by regional MoLHSA and political partners at all levels, including the Georgia MoLHSA Minister at the national level.
- Supplies, equipment and pharmaceuticals were available with no outages reported.
- The Governor and his staff are fully supportive of the ACTS partners and the DIP implementation.
- The most impressive observation was the obvious dedication, commitment and proficiency of the service staff.

Rustavi Diagnostic Center - Pediatric Department

Indicator	2004	2005	2006
Morbidity – Total	4491	5218	6126
Morbidity – 0-12 months	1586	1677	1777
Morbidity – 1 year-3 years	1126	1475	1724
Mortality	0.5	0.3	0.2
Patient Visits	6838	7299	8418
Patient Visits – Total	8581	10818	13743
Home Visits	1178	707	1043
Immunization	5296	4064	3654
Specialist Referral	1449	2247	1832

Rustavi Maternity Hospital visit

This facility has about 1,600 births per year. Staff can recall one maternal death due to hemorrhage - during the last 3 years. ACTS request qualitative and quantitative data from all partner facilities regarding patient loads, collaboration resulting from the ACTS CSP. Issues raised by the maternity staff included:

- 1) Fiscal recovery processes for services
- 2) Human staff resources available in terms of patient load
- 3) Institutional resource in terms of their physical facility (POOR)
- 4) Protocols – are being modified as part of the Health Sector Reform and will require specific consideration during the start-up period
- 5) Low salaries, 24 hours of staff coverage and patient load
- 6) The physical plant is in disrepair and plans are underway to rebuild.
- 7) Training and in-service applications are a joint responsibility of MoLHSA and ACTS. Staff expressed great satisfaction with the ACTS CSP and staff.

Visit to Georgia USAID Mission

- Tamar Sirbiladze, MD, Health Program Management Specialist, Office of Health and Social Development
- Dr. Giorgi Khechinashvili, MD, MS, Health Program Management Specialist, Office of Health and Social Development

Dr. Tamar Sirbiladze reviewed the background, history and role of the Tbilisi USAID Office. The geographic areas of USAID projects are defined by the mission. Criteria are based on needs, and political importance. Measurement of Behavior Change through modification is challenging at best and costly. ACTS was praised for being both responsive and responsible. JSI has a reproductive Health project funded by USAID in a site, which slightly overlaps the CS project. The project provides ANC services, which are featured. There is good coordination between partners and USAID with national and local network partnerships including the MoLHSA through facility partners.

Dr. Giorgi Khechinashvili is the USAID Mission expert working with the GOG in collaboration of the current Health Sector Reform reconstruction process.

JSI has been awarded Reproductive Health grant and their focus is Family Planning (FP) and ANC and health care service

- ACTS continues to work as described in the DIP implementation process in collaboration with all partners
- USAID expressed confidence in the ACTS as an organization and as a CS project implementation partner.
- USAID provided a lucid description of the Georgia national Health Sector Reform. It is obviously a design in flux, changing from day-to-day.
- One of the key USAID concerns expressed is that of sustainability.
- The ACTS CS project has promise of empowerment because of its strong MoLHSA collaboration, BCC focus and community implementation strategy.
- The unique structure and function of implementation through a variety of partners with the strongest being the MoLHSA ministry was never quite raised.
- The project will continue to function and in the training of agents, collaboration partners, and basic health knowledge sessions in locations covered by the projects while keeping pace with the rapidly changing health sector reform modifications. At the present time there are structure adjustments taking place!

- USAID Mission has an overarching responsibility in monitoring multiple projects with a variety of “owners”, which must provide consistent components that meet USAID’s short and long term Georgia country outcomes.
- CDC has provided technical expertise in reproductive health and epidemiologist training.
- The continued USAID Mission participation with the ACTS Child Survival project was assured.

The MTE conducted a field visit to an ACTS Georgia project implementation site at Dmanisi in the Kvemo-Kartli Region of Georgia.

Field Visit to the Dmanisi Outpatient Clinic and Interviews with Dr. Nana Onanashvili, Head of Public Health Unit, and Madona Butskhrikidze, Administrative Nurse in Kyemo-Kartli Region

Representing ACTS CS Dmanisi Office:

1. Dr. Ramaz Urushadze, Head of Regional Management Department of National Center for Disease Control and Public Health
2. Dr. Tamar Lobjanidze, Chief District Coordinator
3. Spiridon Mosashvili, Head of Self-governance Unit (sakrebulo)

The ACTS Georgia implementation Team has a staffed office with a district Coordinator resident. This facility is arranged to accommodate focal group training. Approximately 20 expectant and new mothers were assembled for a group training session, which covered gestation, Five useful tips for Moms, and Nine useful tips for mothers with Children 0-5 years Old.

The participants were engaged in the materials and information being provided. They asked questions while collecting printed summaries of all materials presented. There may be cultural bias about signing in on the focus group roster but eight ladies signed while 20 participated. ACTS staff has since indicated that time was the key factor and generally all participants “sign in”. As a result, it might be worth considering adding a short education message on intestinal parasites in a community of ethnic diversity, with nutritional deficiencies and anemia.

In addition, a visit to the local Polyclinic staff was arranged. We found two excellent administrative professionals at work: Madona Butskhrikidze: Polyclinic Nurse and Nino Onanashvili, Physician Public Health Representative. They shared information freely and intelligently. They manage an operation that includes about 37 staff members that provide service to about 1200 patient visits per year. The overall population-base of Dmanisi is about 29,000. Services include public health following the normal mission of surveillance focused on preventing disease, disability and death through prevention means, e.g. full immunizations and BCC education. An estimated breakdown of the patient demographic revealed that adults presented with the normal variety of illness and symptoms. Women sought health care during pregnancy but often deliver at home with local birth attendants. The most common complaints for children were diarrhea, respiratory and fever of more than one day’s duration. Women completed four (4) or more ANC visits routinely. They also manage the patient

Voucher system for government reimbursement for delivery services. Men presented most commonly with hypertension. Low employment resulted in greater alcohol consumption but negative social impact of this component was not assessed.

Meeting with Facility Staff:

- Staff reported that 70% of pregnant participated in at least one ANC visit and unless some warning or danger sign noted these women did not return on a routine basis.
- No maternal deaths were reported in recent history.
- The staff does report an unusual incidence of cranial hypertension in infants from cause or causes unknown.
- They conduct careful disease surveillance and follow-up on any condition with a potential for spread.

ACTS CS community Focus Group Discussion

ACTS community focus group session

- Twenty attendees with 4 infants
- Slide show presentation
- Five tips for pregnant women
- Nine tips for moms with children
- Slide show on gestation from fertilization to term
- ANC prenatal care covered in detail with focus on the benefits.
- Consider adding de-worming?

Meeting of ACTS Child Survival Implementation Team

Review of Health Information System

- Various data available for 2004, 2005 were identified. It was noted that few data were available for 2006
- The abortion rate for Georgia is 90,000 because it is used as a form of birth control. The current birth rate is below population replacement
- C-Section percentage is about 30%
- Low birth weight births is about 6%
- Low birth rate appears to be related to economic factors
- Key birth issues continue to be focused on home delivery versus facility births
- Accurate IMR and MMR rates are difficult to establish because of poor denominators, low level of birth registration and other death reporting issues
- Immigrants and births registrations are issues that need to be explored during the
- ACTS interventions were reviewed carefully from the prospective of the staff and client. It was determined that measurements will be done through both quantitative and qualitative means.

A formal Linkage has been established and clarified with the following:

- MoLHSA at all levels
- Clarities, Partner PVO
- Community partners by location
- Medical facilities and service providers

- Primary health care and referral systems
- Supervision at all levels and community empowerment
- Careful linkage at the local, district, regional and national levels
- Communication linkages at all organizational levels with strong referral system
- UNICEF strong interest and partnership
- USAID, JSI, ACTS, MoLHSA, WHO, and others
- Project discussed the IMCI by program and by history
- Two major roles for ACTS involve professional and community participant training and supervision as required for implementation.

Issues

- The major challenge for the intervention measurement is to obtain and document evidence-based findings, which determines the current status – is the project on-course and can we make reasonable recommendations as needed.
- Determining accurate denominators will be a real challenge for valid findings. Behavior change through knowledge modification is very difficult to monitor or show cause and effect from program activities (interventions).
- There are significant diverse ethnic and religious clusters in the ACTS project geographic areas, which add to the challenge of project implementation.
- It was agreed to look carefully at the level of effort required to produce measurable change. How much effort does it take to produce a 15% or any measurable change?
- A question raised is that of a possibility for adding a de-worming component to the project. This could be important to consider where the nutritional status is so fragile and stunting prevalence is high.
- Iron deficiency has been a long-term concern of the MoLHSA and ACTS. Anemia is a very common finding. ACTS Georgia and ACTS International have undertaken a close collaboration with key MoLHSA officials and national legislators to initiate an iron, foliate enrichment of flour law. This was passed and signed into law during September 2007. ACTS staff will also assist the GOG develop random sampling procedure for iron in flour at key distribution locations.
- One issue briefly discussed was the role of males in decision making for health and treatment options. Should ACTS look into an educative focus group for men?

The USAID MTE requirements were reviewed:

- Baseline data and information are related to interventions
- Carefully select monitoring components for project implementation and for measuring progress of interventions
- Tools are needed for better modifying Intervention targets or amount of effort
- Selection of Health care and service institutions to be assessed:
 1. Capacity change
 2. National partners
 3. Local partners
 4. Community organizations and ownership

The major issue is how to best assess progress in implementing the interventions from the ACTS Georgia DIP:

- 1) Assess HIS data gathered
- 2) Describe community-based monitoring supported by the project
- 3) Main topic requirements are as follows:
 - Technical Approach
 - Problem Statement
 - Strategy
 - Surveys – KPC, Focus Group qualitative interviews and LQAS
 - Baseline findings
 - Identify Problems and provide implementation Interpretation
 - Interventions (Emphasis on how to best establish Behavior Change modification)
 - Partnerships and their achievements. How to retrieve and to obtain counts and frequencies related to CS

Rustavi Coordination Meeting

The Rustavi coordination meeting was organized by the government of the Kvemo Kartli Region and attended by representatives from the international organizations implementing projects in the region. Mr. Gulashvili, Deputy Representative of the President in Kvemo Kartli region introduced the aim of the meeting. The meeting began with an exchanging of information, analysis of the implemented, and introduction of relevant projects and recommendations for the Regional Administrator's principle direction to support the economical and social development of Kvemo Kartli.

Meeting with Dr. Ketevan Sharangia, IMCI National Coordinator, General Manger and WHO Consultant on IMCI

The excellent cooperation and coordination between the MoLHSA and the ACTS project was reconfirmed. We discussed training, Baby-Friendly hospital designation, data, strengths and weaknesses of the Georgia IMCI.

Meeting with Mr. Zaza Bokhua, Advisor of the Minister of Labor, Health and Social Affairs (Stakeholder from MoLHSA).

Reconfirmed support for the CSP through overlapping services and extended collaboration for as long as the project continues.

Meeting with Mr. Levan Baramidze, Deputy Director, National Center for Disease Control and Public Health

Attendees

1. Giorgi Tsilosani, MD, PhD, President, ACTS Georgia, CMO of CSP
2. Revaz Tataradze, MD, PhD, MCH Division Director of CSP
3. David Newberry ACTS, Consultant

The interview reconfirmed previous observations regarding the obvious fact that the ACTS/MoLHSA linkage is seamless in every respect. The National GOG is deeply

committed to the ACTS Child Survival Project and will provide high lever support to ACTS on a quid pro quo basis. The Ministry officials knew the project; they recognize the challenges; they agree on major implementation difficulties because these are their own as well. All partners are fully aware that behavior change modification (BCI) is difficult to measure and more difficult to monitor.

Capacity development and community development are two very reasonable expectations the GOG holds for this project. It is possible that the MoLHSA may use the new baby outreach home visitation activity as a means of conducting some form of community Focus Group Discussion for training.

The ministry is impressed with the intensity and thoroughness of the ACTS Child Survival project. The connection with health care service and treatment facilities was found to be given a very high priority by the government. The ministry is committed to provide services as needed to assure that the Child Survival Project is successful for reaching the DIP goals and project objectives. The individual participating facilities and their attendant staff are further committed to a longer-term assumption many of the outreach tasks presently being conducted through ACTS and implementation partners.

Meeting at the Ministry of Labor, Health and Social Affairs

Attendees:

1. Mr. Vladimer Chipashvili, Minister of Labor, Health and Social Affairs
2. Mr. Zaza Bokhua, Advisor of the Minister of Labor, Health and Social Affairs (Stakeholder from MoLHSA)
3. Mr. Otar Toidze, Member of Parliament, Member of Parliamentary Health Committee
4. Giorgi Tsilosani, MD, PhD, President, ACTS Georgia, CMO of CSP
5. Revaz Tataradze, MD, PhD, MCH Division Director of CSP
6. Ms. Eteri Suladze, Project Manager
7. David Newberry, Consultant

The ministry and legislative body of Georgia are committed to provide services as needed to assure that the Child Survival Project is successful for reaching the DIP goals and project objectives is the overall objective of the MTE.

Meeting with Mr. Nick Nutsbidze, Consultant, Reproductive Health Survey in Georgia.

A very cordial meeting was conducted modeled on previous meetings. Roles and responsibilities, as well as various input support required by all the partners was concluded by agreement.

Meeting (Informal) with Mr. Edwin T. Collins, Major, GaARNG Bilateral Affairs Officer, US Office of Defense Cooperation.

Major Edwin T. Collins expressed his personal and professional admiration for the ACTS Child Survival project, its officers, managers, and ability to produce results. He committed to support the project in every way possible.

Meeting with UNICEF PO Health Officer Tako Ugulava

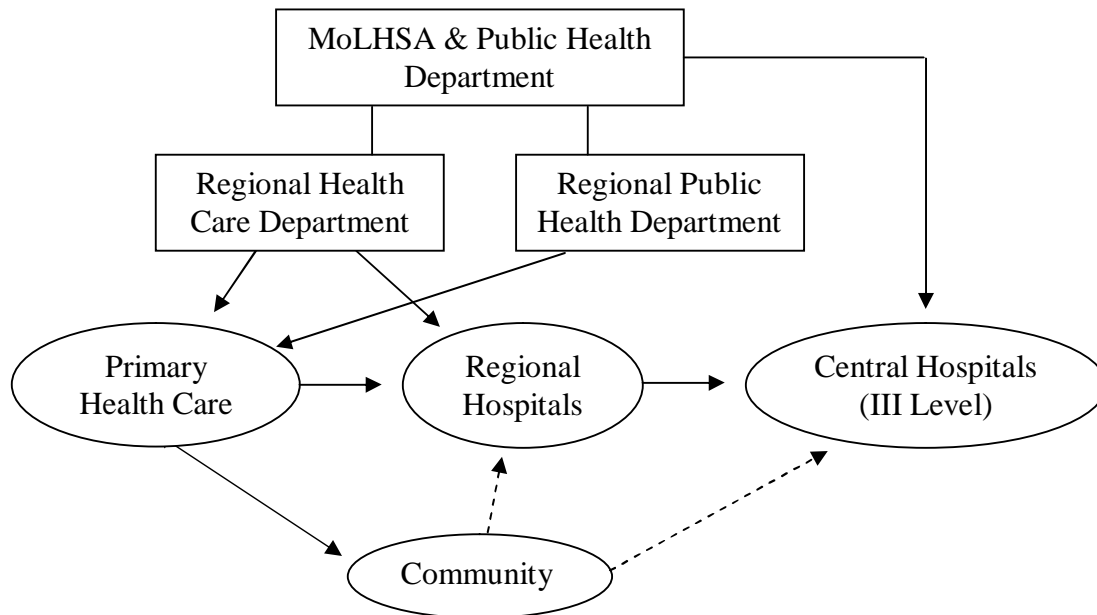
A meeting with the UNICEF PO Health Officer: Tako Ugulava. We discussed many issues related to medical doctors following and complying with the revised ministry of health protocols for treatment, births, quality and procedures for delivery and many related service requirements. These quality and protocol enhancements have begun to be used by the government to assure quality services and as a medical education (CME) requirement needed to be licensed in Georgia. In addition, we discussed data and various reports that UNICEF had taken the lead on in collaboration with the MoLHSA, and the Centers for Disease Control and Prevention. Tako Ugulava sent confirmation of her commitment to share information and continue collaboration with ACTS Georgia. ACTS will follow up on strengthening this collaboration and to revise targets in relation to the accreditation of “Baby-Friendly” hospitals or conducting the full training required.

Meeting with Honorable Lado Chipashvili, Minister of Health of Georgia.

The Honorable Minister provided a short history of the ACTS/MoLHSA Child Survival project. He and his ministry are committed and highly supportive of the project. The current Health Sector reform has made the normal function of his ministry a series of ups and down but they are making both progress and using mistakes to improve the revised Department.

The Honorable Minister will support the ACTS Georgia Child Survival project and continues to serve as an implementation partner through MoLHSA facilities and outreach programs.

Georgia Project MoLHSA Structure



F. CD with electronic copy of the report

A CD with all required documents is enclosed with this submission.

G. Special Reports

1. Hospital Assessment by Randall Floyd, M.D. and Laura Hillman, M.D.

Cesarean Delivery Observation

A repeat cesarean section in a patient noted to have had 2 previous cesarean sections is observed. The operating room is noted to be open with no airflow control. There is an open electrical circuit box on one side of the room near the infant resuscitation table. There is no infant warmer available. The suction for neonatal resuscitation is a portable unit in suspect repair. The basic sanitary condition of the room is unknown but the floor has open cracks and the plaster is cracking with peeling paint. During the course of preparation the instrument table was laid out by a surgical assistant who was not wearing gloves. The instruments were laid out from stainless containers which appeared to be sterilized. The medication cabinet appears to be relatively well stocked but the inability to read the labels hampers evaluation. No electrocautery is available. No suction is available on the operative field. Suture for the procedure is stored in a glass jar that is apparently reused from case to case. It is unknown whether this is sterilized between cases (this is doubtful as the jar of chromic suture would not tolerate steam sterilization). Reusable needles which are obviously not optimally sharp are used. The caliber of the suture utilized is larger than necessary. The anesthesia machine appeared to be in some disrepair but functioned adequately to all appearances. Oxygen was supplied from the single wall line which did not have a standard color-coded handle. No automatic ventilation was available and the patient was ventilated manually throughout the procedure. There was no scavenging apparatus available for anesthesia gases and the odor of halothane was obvious throughout the procedure. Gloves were used only by members of the actual operating team (surgeons, scrub nurse and anesthesia provider).

The patient was positioned and her abdomen prepped with an iodine solution. An indwelling urinary catheter was placed and drained (open) into a jar under the table through IV tubing, the catheter was previously used. The patient underwent induction of anesthesia with IV diazepam and ketamine, maintenance anesthesia was halothane/oxygen and fentanyl was administered following cord clamping. Ceftriaxone was administered following cord clamping. The procedure was performed through a midline incision through the previous incision scar. The uterine incision was low transverse. The amniotic fluid was noted to be stained with meconium at the time of delivery. The uterine incision was closed in three layers with chromic/vicryl/chromic. A hematoma was ligated with chromic. The peritoneal cavity was inspected but not irrigated. The fascia was closed with interrupted chromic suture stitches. The skin layer was closed with large gauge silk suture using interrupted mattress stitches.

Major concerns include: the facility and its condition, the lack of sterile technique during the preparatory stages, the condition of the anesthesia equipment, the lack of fetal resuscitation equipment. Other concerns include the use of an open system for drainage of the bladder and the use of reusable equipment which appears to be in suboptimal condition. The suture material used should be reevaluated.

Hospital Review Questions

Rustavi

1. Number of deliveries – 1600, 130/month,
 - a. Number operative vaginal –?
 - b. Is anesthesia available – yes, local only
 - c. Other intrapartum pain control modalities – none
2. Number of cesarean deliveries – 20% (20-30/month) general anesthesia is utilized. The OR is observed and is substandard secondary to sanitary issues.
3. Transfer to higher level of care – none
4. Criteria for transfer –N/A
 - a. Neonatal distress – N/A
 - b. Rh isoimmunization – yes, unclear to where. Rhesus negative patients are few at a rate of 3-4/month
 - c. Other
5. Receiving hospital notified – N/A
 - a. How
 - b. Who
6. What routine prenatal laboratory studies are done
 - a. Serology, hgb/hct, Rh, ABO, HIV, Hepatitis B; no glucose challenge is used to screen for gestational diabetes; a fasting blood sugar alone is measured. Rubella screening is not done
 - b. No blood bank or storage capabilities are available in any of the hospitals. The hospital laboratory is evaluated and appears to be rudimentary but is likely adequate for the services performed. Equipment needs to be reviewed and upgraded.
7. What routine admission laboratory studies are done – Hb/Hct, urine protein
8. What type of intrapartum monitoring is utilized – occasional auscultation
 - a. No monitoring was observed in the two laboring patients noted on the ward at the time of observation. Electronic fetal monitoring is not available.
9. What routine postpartum laboratory studies are done – urinalysis, Hb
10. What routine neonatal laboratory studies are done
11. Are neonatal Apgar scores and weight recorded - yes
 - a. Where
 - i. Apgar scores are recorded in the maternal and neonatal records
 - ii. Weight is recorded in the maternal/neonatal records and birth record
12. What are typical congenital malformations and at what rate – not reported. Alcohol use during pregnancy is not felt to be a problem but smoking is felt to be problematic
13. What equipment is available -
 - a. Ultrasound
 - i. Yes, available but possibly for those who can pay
 - b. Fetal monitor
 - i. None
 - c. BP cuff
 - i. Yes
 - d. Stethoscope
 - i. Yes
 - e. Scale

- i. Maternal
 - ii. Infant
 - f. Infant warmer
 - i. Yes, in the delivery room
 - g. Incubator - no
 - h. Heat and/or air conditioning for the hospital – unsure but none obvious
- 14. Birth registration/record in the hospital
 - a. Yes, patient’s name, date of admission, time of and type of delivery, neonatal gender/weight/length, doctor/hcp involved
- 15. Are stillborns recorded - yes
- 16. Definition of stillborn - WHO
- 17. Medications available
 - a. IV fluids – yes, patients do not routinely receive IV fluid for spontaneous deliveries. It is unclear how much IV fluid is administered at the time of cesarean section.
 - b. Oxytocin - yes
 - c. Magnesium sulfate – yes, dosage is nonstandard from western perspective and is administered only after delivery. It is unclear what the loading dose is but the maintenance dosage is standard
 - d. Antihypertensive – there is no hydralazine available. Nifedipine is available and is used for hypertension, as is methyldopa. It is again concerning as nifedipine is a CCB and if used in conjunction with Magnesium Sulfate may be synergistic with increased possibility of respiratory compromise
 - e. Antibiotics – Ceftriaxone appears to be the primary antibiotic. Ampicillin and gentamicin are available
 - f. Rh immune globulin – is available and utilized in the postpartum period if the patient purchases it. It is not administered for threatened abortions and at 28 weeks gestation.
 - g. Pain medication
 - i. Local anesthetics - Lidocaine is available, it is unclear what other medications are available.
 - ii. General anesthetics – Ketamine, Halothane and thiopental
 - iii. Postoperative pain medications (?)
- 18. What is method of diagnosing preeclampsia – blood pressure and proteinuria criteria are used. BP 160 systolic
- 19. Treatments for preeclampsia/hypertension – Magnesium sulfate and nifedipine, no hydralazine is available
- 20. What is method for diagnosing DVT – no answer is given; this is not felt to be a problem, as it does not happen at this hospital. Laboratory studies available include prothrombin time and thromboplastin time; it is unclear what standards are used for these tests.
- 21. Treatments for DVT – fraxiparin and heparin may be purchased for administration
- 22. Breastfeeding complications
 - a. Mastitis rate
 - b. Treatment for mastitis

A delivery was observed in this hospital. The delivery was spontaneous in the squatting position with no complications. Oxytocin was administered IM at delivery of the placenta. The infant was

placed upon the mother's chest with skin-to-skin contact. It was dried and assessed in that position. No recommendations are noted.

Hospital Review Questions

Father Adams (Maternity Hospital #3)

23. Number of deliveries - 1200
 - a. Number operative vaginal - 400
 - b. Is anesthesia available – yes, local
 - c. Other intrapartum pain control modalities – epidural, spinal
24. Number of cesarean deliveries – 20% (250?), general anesthesia is utilized in at least 50%
25. Transfer to higher level of care – Approximately 10 transfers are reported
 - a. Where transferred
 - i. Children's Hospital, Gudashuari
 - b. How transferred
 - i. Ambulance/emergency vehicle - ambulance
 - ii. Personal transportation
 - c. HCP accompanied (physician/nurse) - ?
 - d. Vehicle equipment - ?
 - i. Oxygen
 - ii. Pediatric life support
 - e. Length of transport
 - f. Success of transport
 - g. Infant/mother discharged alive
26. Criteria for transfer
 - a. Neonatal distress – neonatal complications
 - b. Rhisoimmunization – yes, unclear to where
 - c. Other
27. Receiving hospital notified
 - a. How
 - b. Who
28. What routine prenatal laboratory studies are done
 - a. Serology, hgb/hct, Rh, ABO, HIV, Hepatitis B; no glucose challenge is used to screen for gestational diabetes; a fasting blood sugar alone is measured.
 - b. No blood bank or storage capabilities are available in any of the hospitals
29. What routine admission laboratory studies are done
30. What type of intrapartum monitoring is utilized
 - a. No monitoring was observed in the two laboring patients noted on the ward at the time of observation. Electronic fetal monitoring is reported as available (one machine) but no paper is available to record the tracings.
31. What routine postpartum laboratory studies are done
32. What routine neonatal laboratory studies are done
33. Are neonatal Apgar scores and weight recorded
 - a. Where
 - i. Apgar scores are recorded in the maternal and neonatal records
 - ii. Weight is recorded in the maternal/neonatal records and birth record

34. What are typical congenital malformations and at what rate – not reported. Alcohol use during pregnancy is not felt to be a problem but smoking is felt to be problematic
35. What equipment is available
- a. Ultrasound
 - i. Yes, but it is in poor/nonworking condition
 - b. Fetal monitor
 - i. One is available but there is no recording paper
 - c. BP cuff
 - i. Yes
 - d. Stethoscope
 - i. Yes
 - e. Scale
 - i. Maternal
 - ii. Infant
 - f. Infant warmer
 - i. Yes, one is noted in the private wing of the hospital
 - g. Incubator -?
 - h. Heat and/or air conditioning for the hospital
36. Birth registration/record in the hospital
- a. Yes, patient's name, date of admission, time of and type of delivery, neonatal gender/weight/length, doctor/hcp involved
37. Are stillborns recorded - yes
38. Definition of stillborn - WHO
39. Medications available
- a. IV fluids - yes
 - b. Oxytocin - yes
 - c. Magnesium sulfate – yes, dosage is nonstandard from western perspective. Dosage is 4gm IV then 2gm IM q6h (vs. 5gm IM q6h)
 - d. Antihypertensive – there is no hydralazine available. Nifedipine is available and is used for hypertension. This is concerning as it is a CCB and if used in conjunction with Magnesium Sulfate may be synergistic with increased possibility of respiratory compromise
 - e. Antibiotics – Ceftriaxone appears to be the primary antibiotic. Unasyn is used for prophylaxis at the time of cesarean delivery and used continuously for 2-3 days. Augmentin, metronidazole and gentamicin (?) are available
 - f. Rh immune globulin – is available and utilized in the postpartum period. It is unclear if it is administered for threatened abortions and at 28 weeks gestation.
 - g. Pain medication
 - i. Local anesthetics - Lidocaine is available, it is unclear what other medications are available.
 - ii. General anesthetics – Halothane was utilized in the cesarean delivery observed
 - iii. Postoperative pain medications (?)
40. What is method of diagnosing preeclampsia – blood pressure and proteinuria criteria are used. BP 160 systolic

41. Treatments for preeclampsia/hypertension – Magnesium sulfate and nifedipine, no hydralazine is available
42. What is method for diagnosing DVT – no answer is given, this is not felt to be a problem as it does not happen at this hospital
43. Treatments for DVT
44. Breastfeeding complications
 - a. Mastitis rate
 - b. Treatment for mastitis

Hospital Review Questions

Bolnisi

45. Number of deliveries - 750
 - a. Number operative vaginal – not known, forceps deliveries are performed
 - b. Is anesthesia available – yes, local
 - c. Other intrapartum pain control modalities – epidural, spinal
46. Number of cesarean deliveries – 20% (75-80), general anesthesia is utilized in at least 50%
47. Transfer to higher level of care – Transfers are rare secondary to distance
 - a. Where transferred
 - i. Children’s Hospital, Gudashuari
 - b. How transferred
 - i. Ambulance/emergency vehicle - ambulance
 - ii. Personal transportation - no
 - c. HCP accompanied (physician/nurse) -?
 - d. Vehicle equipment -?
 - i. Oxygen
 - ii. Pediatric life support
 - e. Length of transport
 - f. Success of transport
 - g. Infant/mother discharged alive
48. Criteria for transfer
 - a. Neonatal distress – neonatal complications
 - b. Rh isoimmunization – yes, unclear to where
 - c. Other
49. Receiving hospital notified
 - a. How
 - b. Who
50. What routine prenatal laboratory studies are done
 - a. Serology, hgb/hct, Rh, ABO, HIV, Hepatitis B; no glucose challenge is used to screen for gestational diabetes; a fasting blood sugar alone is measured.
 - b. No blood bank or storage capabilities are available
51. What routine admission laboratory studies are done – hb, blood group, proteinuria
52. What type of intrapartum monitoring is utilized
 - a. No monitoring was observed as there were no laboring patients on the ward at the time of observation. Electronic fetal monitoring is not available.
53. What routine postpartum laboratory studies are done – hb, urinalysis

54. What routine neonatal laboratory studies are done
55. Are neonatal Apgar scores and weight recorded - yes
 - a. Where
 - i. Apgar scores are recorded in the maternal and neonatal records
 - ii. Weight is recorded in the maternal/neonatal records and birth record
56. What are typical congenital malformations and at what rate – not reported. Alcohol use during pregnancy is not felt to be a problem but smoking is felt to be problematic
57. What equipment is available
 - a. Ultrasound
 - i. Yes, in working condition
 - b. Fetal monitor
 - i. None is available
 - c. BP cuff
 - i. Yes
 - d. Stethoscope
 - i. Yes
 - e. Scale
 - i. Maternal
 - ii. Infant
 - f. Infant warmer
 - i. Yes, one is noted in the OR, one in the delivery room
 - g. Incubator – yes, there are two in the nursery, there is no bilirubin light in the hospital
 - h. Heat and/or air conditioning for the hospital, yes, new central heat is noted
58. Birth registration/record in the hospital
 - a. Yes, patient's name, date of admission, time of and type of delivery, neonatal gender/weight/length, doctor/hcp involved
59. Are stillborns recorded - yes
60. Definition of stillborn - WHO
61. Medications available
 - a. IV fluids - yes
 - b. Oxytocin - yes
 - c. Magnesium sulfate – yes, dosage is standard from western perspective. Dosage is 4gm IV then 2gm IV/hr
 - d. Antihypertensive – there is no hydralazine available. Nifedipine is available and is used for hypertension. This is concerning as it is a CCB and if used in conjunction with Magnesium Sulfate may be synergistic with increased possibility of respiratory compromise
 - e. Antibiotics – Ceftriaxone appears to be the primary antibiotic. Ampicillin and gentamicin are available
 - f. Rh immune globulin – is available and utilized in the postpartum period. It is not administered for threatened abortions and at 28 weeks gestation.
 - g. Pain medication
 - i. Local anesthetics - Lidocaine is available, it is unclear what other medications are available.
 - ii. General anesthetics – Halothane

- iii. Postoperative pain medications
 - iv. Atropine, diphenhydramine, thiamine, pyridoxine and multiple other medications were noted in the medicine cabinets.
62. What is method of diagnosing preeclampsia – blood pressure and proteinuria criteria are used. BP 160 systolic
 63. Treatments for preeclampsia/hypertension – Magnesium sulfate and nifedipine, no hydralazine is available
 64. What is method for diagnosing DVT – no answer is given, this is not felt to be a problem as it does not happen at this hospital
 65. Treatments for DVT
 66. Breastfeeding complications
 - a. Mastitis rate
 - b. Treatment for mastitis

The overall impression of the hospital is favorable. The obstetric floor is very clean and well organized. The patients (7 postpartum) appear well and comfortable. The infants are well and do not appear jaundiced or otherwise unwell.

2. Georgia Diary by Laura Hillman, MD

Date: 9/20/07

Initially met with Father Adams, head obstetrician, Dr. Floyd, DR. Blair, and Nelly interpreted. Mainly discussed obstetrical care.

Main points: Rh incompatibility no longer goes to a separate hospital. Rogam has been used since soviet times and sensitization is low. Mothers are typed and screened. If infants need exchange go to the children's hospital. Mothers have fasting glucose checked and if abnormal have GTT. No screening GTT. Did not acknowledge significant number of Gestational Diabetes in non-obese.

Met in room with about 8 "neonatologists" After medical school they spent one year at one of two hospitals who trained "neonatologists". Then they came to this hospital. Everyone there was working on this day shift. There were more on at night. There was a head neonatologist (Locli Drlidzie) and an older woman who was in charge today (Marina Gelashrili) and carried the resuscitation bag to deliveries I attended, CS and vaginal. One, who said she had been working here for 10 years, became the group informally appointed English speaker (Rino Aleksishrili). Another similarly experienced woman who I think understood English but spoke less was Zhuzhuna Otarashviei. Two probably newly trained and very interested younger woman who I think understood but didn't speak English were Inga Gogishviei and Sopo Tashvier.

They wanted to know our resuscitation protocol. Luckily the one I gave matched their training that was on the wall in this office. We were then called to go to a C-section. The infant had been out for 2 minutes and was still without respirations and being suctioned. They had suctioned for meconium but found none. They said they used an ET tube with suction but I never saw as they quickly took infant into delivery room where there was a warmer (none in C-section room). Infant then swaddled and taken to nursery where put on a second very old and inefficient warmed. I then got to look in the plastic bag which contained a laryngoscope, a box with ampoules of epinephrine and other

meds, the ambu bag (small but stiff with pop off-? O² connection), ET tubes in drawer, suction attachments for meconium.

In nursery was isolet not servo with piped in O² from wall. Also rigid hood on table (wood) with O² blender and humidifier. Need O² analyzer. One old suction machine in delivery room (? CS room). One very old white light biliruben light (in second on floor below)

Discussed their use of Glucose for IDM, LGA, SGA asphyxia (no glucometer) No Ca or electrolytes but CBC. Want lab and blood gas analyzer.

Use amp + gent no cefataxime. Need IV phenobarbital (only have PO), use Valium for seizures. Have everything for IV but need infant IV pumps. Need sterile VAC/UVC kits.

Wish list:

- IV pumps for low flows
- New warmers-servo, if possible
- Servo isolet
- O₂ monitors
- Pulse oximeters
- Suction machine (s)
- Ambu bags with O² regulators
- Laryngoscopes ^ small blades + ET tubes
- More masks
- Blue biliruben lights x2
- Glucometer
- Lab to do Ca + electrolytes?
- Blood gas analyzer
- VAC kits
- Blanket warmers
- IV Phenobarbital
- “Nebulizer”?

Date: 9/21/07

We went to Maternity Hospital in Restavi south of Tbilisi, a city built by the soviets to be an industrial city however none of these industries have been able to function out of the Soviet Union larger system. City is large number of multi floor, multi apartment cement buildings in poor shape.

We first visited the delivery hospital where one woman had been admitted for delivery. She was laboring bouncing on a large rubber ball and looked quite comfortable. She was only 3cm so we went into the doctor’s office and Randy Floyd questioned the head obstetrician about obstetrical care practices. We were then told that the woman was ready to deliver and went to the room. She was sitting on a birthing stool pushing very hard. She quickly delivered and the infant immediately cried and was placed on the abdomen and suctioned. The cord was eventually tied with a gauge tie. Infant was exceedingly alert. Mother was lifted up to the table where a vaginal repair was done.

Infant was placed closer and closer to the breast and eventually began to nurse. Mother and infant were covered by a blanket. Warmer was present but was not set up for resuscitation. I asked the “neonatologist” where equipment was and again there was only one ambu bag not connected to O² that came from another plastic bag with “everything”. I asked where there was O² and was taken down a very long hall to a place where they said O² was in a large canister below and a tube came out of the floor up wall and down hall to nursery where it went to one isolet, relatively new without servo, and one warmer old but working. There was a very old non-working ventilator but they seemed to want a CPAP system, bag or prongs, to stabilize the infants while they waited for the transport team to arrive from Tblisi. She wanted a new pulseoximeter. They had one very old set of blue (?) biliruben lights which sat on top of a reasonable non-servo isolet which they wheeled around the hospital as needed and she wished for another biliruben light. Had a very old infusion pump that did work but needs another.

We then went to the wards where there were 4 to 6 woman in a room with mothers’ beds and a few babies in cribs and most in mothers’ beds. All were tightly swaddled and were placed on back but propped to side. I gave the pediatrician with us and the “neonatologist” a brief lecture on the importance of placing the infants on their backs, not sides. They all know not to place on stomachs because of SIDS but did not know that sided had twice the risk of back. Some women were being discharged with tightly swaddled infants. Need to find out if mothers really do the swaddling and if so for how long. Swaddled in side position, probably very dangerous.

Went to see laboratories that did Hematology, clotting studies biliruben, glucose, but not electrolytes. There was no bacteriology laboratory. We saw a relatively new ultrasound which was privately owned but could do scans for non-private patients and get government reimbursement. They also did “head ultrasounds” of the newborns if the neonatologists” felt there could be pathology/bleeds.

We then left and went to a newly constructed beautiful outpatient clinic for both Pediatrics and adults. It was the only one built in country as a result of a competition and opened last month. There were 20 Pediatricians in 7 rooms. Each Pediatrician saw patients in the clinic for 3 hours then they left and did home visits for patients for 3 hours and second did a clinic for 3 hours then a third for 3 hours: 9-12, 12-3, 3-6. All of the records for these three doctors’ patients were kept in the room organized by year of birth.

Records were paper books about 6 x 8 with hand written entries. Doctors and a nurse would go to see newborn for three days after discharge in infants home and provide training. They would also make home visits to their patients if they were too sick to come to clinic and decide whether to send to hospital. Another example of overabundance of doctors, especially pediatric doctors in this country. However this may change quickly because fewer students are applying to medical school largely due to very low pay of physicians. Medical school is also about to be taught by a single faculty, not just a pediatric faculty and “family practice” will be encouraged. Pediatric and “neonatal” residencies will become longer. Practicing pediatricians are being asked to begin care for adults.

Neonatal Essential Equipment for Neonatal Resuscitation in Delivery room

Ambu bags
CPAP bags
? NCPAP set up
Pulseoximeter
O² monitor
O² blender
Humidifier
Laryngoscope ĉ small blade
ET tubes
HR/apnea Monitor
Biliruben lights x2
Way to get O² into rooms?
Infusion pumps
Warmer
Suction

Date: 9/22/07

Went to Bolini to visit a private maternity hospital that had just been rehabilitated. 7 obstetricians had put their own money together along with a “Moscow investor” for a total of \$100,000 to fix the plumbing, electricity, heat, floor, walls, and furniture. They deliver about 700 infants a year. There were about 12-15 beds in rooms from doubles to quads. The operating room was new with a newer table but the anesthesia equipment was poor. The delivery room had good delivery tables and a marginal infant warmer. Ambu bag and laryngoscope was in a box in the nursery as were medications. It would be helpful to have another set in the delivery room. There was only one neonatologist in the hospital; she was older and very experienced and exceedingly well known in the community. There were two isolets in the nursery, one that never was servo and the other a servo for which they never had a prob. There would like newer ones; however their main request was for a biliruben light for which they did not have. (Need to look into cost of biliruben lights and explore billblankets) The nursery had wall O₂ into the isolets but no blenders, humidifiers, oxygen analyzers, or Pulseoximeter.

We visited with several mothers’ who had their infants not swaddled. The doctors and nurses were trying to convince the mothers not to swaddle the infants however at least two mere unwilling and swaddled the infants themselves. We do not know how long the swaddled the infants so tightly and what if any the consequences are. Dr. Blair says that they often have to take the babies to therapists who massage the arms. The infants are not taken out of the house for 60 days. The infants were all on their backs.

The director of the hospital was well aware of the ACTS Child Survival Program and credited it and other education with the marked improvement innobstetrical care that they were able to give. She said that more women were getting prenatal care and that they were seeing far less complications. Her staff had been trained by ACTS several years ago and had just been retrained by the John Snow Institute. I did not explore the nature of that training.

We went to a 5th century church where Scott was able to take pictures inside. The head Ob, the neonatologist and other women all went to the church and after they held a large supper for us at a local restaurant. Both the head obstetrician and the neonatologist would be excellent candidates to come to the U.S. except neither seems to understand any English. Neonatologist Manana Abuladze.

Wish List:

Biliruben light or biliblankets
Better infant warmer for DR
Better isolets
Second set of Laryngoscope, tubes the right size
Better Ambu ?
Pulse oximeters

Date: 9/26/07

We went to Dmanisi that is past Bolini very close to the Armenian border. We met with the mayor of the town then toured the museum of prehistoric artifacts. We then went to the hospital to deliver supplies, and entire van full for all areas of the hospital. We briefly went to the maternity ward. The entire hospital was in very poor shape and we were told that they were making no repairs because they would have a new hospital in 2 years and that this hospital would be destroyed.

We were not able to see the original delivery room because the ceiling was falling down and it was not safe so that they had moved the deliveries into a room that had an old but functional classical delivery table. A table was set up for the infant with an operating room light focused on it to provide heat. Under a cart for the mother there was an Ambu bag with an adult mask which they said was also for infants. They said they didn't have a laryngoscope or ET tubes. There was no O² evident but they said they had small tanks somewhere in the hospital. No suction was evident.

There was a sink, but it was unclear whether or not there was running water as during a later delivery the obstetrician washed her hands with water provided from a basin. We then saw the nursery where there was an old isolet without cuffs to keep in the warmth or O². When I asked how they gave O² they said through the Ambu bag. The staff said they had triplets born at home at 1430, 1350, and 1050 gms who needed O². I assumed that they were transported to another hospital however, the translator says they went home after a few days. There was no biliruben light. In the medicine cabinet there was nothing I could recognize except KCl. The neonatologist we were talking to then was called to delivery and we went along without a translator. The delivery was not progressing and we had the mayor waiting, so we left. We had lunch and then we headed for the archaeological dig.

3. Child Rights Protection Association “Claritas XXI” Report

Child Rights Protection Association “Claritas XXI” in April and May, 2006 began the training activities within the framework of the project “Improvement and Expansion of Child Survival Strategies in Kvemo Kartli Region: Pilot Project” implemented by ACTS

International and ACTS Georgia funded by the Child Survival and Health Grant program to the office of Health, Infectious Diseases and Nutrition, Bureau of Global Health, USAID Washington D.C.

The training courses "Integrated Management of Childhood Illnesses"(3 courses), "Baby Friendly Hospital Initiative" (3 courses) and "Breastfeeding" (2 courses) were carried out in Rustavi.

Integrated Management of Childhood Illnesses (IMCI)

The IMCI training courses, three courses, were carried out on the basis of Rustavi Treatment at the Prophylactic Center #2.

- a. First training course for medical staff of Rustavi region was held from April 5 through April 15. The seminar was attended by 20 representatives of the Rustavi Treatment – Prophylactic Center #1 and #2. The seminar was held by the trainers: K. Nemsadze, M. Khochava, I. Shalamberidze, T. Bakhtadze, and N. Gumbaridze.
- b. Second training course for medical staff of Rustavi region was held from April 25 to May 5. The seminar was attended by 20 representatives of the Rustavi Treatment – Prophylactic Center #1 and #2. The seminar was held by the trainers: N. Nucubidze, T. Bakhtadze, N. Kiknadze, T. Obgaidze, and N. Nareklishvili.
- c. Third training course for medical staff of Rustavi region was held from May 8 to May 18. The seminar was attended by 20 representatives of the Rustavi Treatment – Prophylactic Center #1 and #2. The seminar was held by the trainers: M. Khochava, I. Shalamberidze, N. Nucubidze, N. Gumbaridze, and T. Obgaidze.

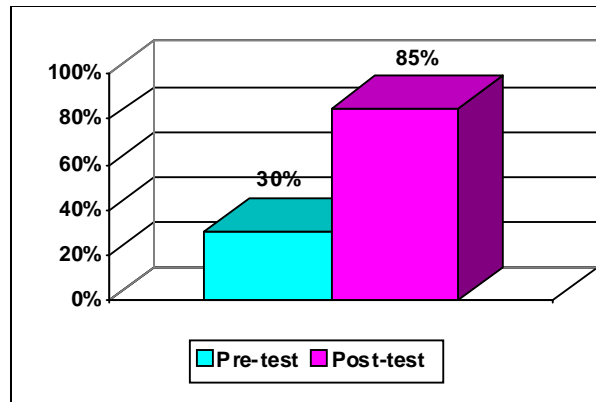
The seminars were opened by the program coordinator with an introductory lecture in which she recognized the necessity of program elaboration. Seminar participants were divided into four groups and pre-tested. The average pre-test score was 30%.

In the process of seminars the attendants discussed the signs of danger, the evaluation signs of five basic diseases, the new national calendar of injections, and the main aspects of treatment. Many of the attendants did not previously know the signs of chest retraction, skin flexibility, or sense of thirst. Also the majority of attendants didn't know O.R.S. composition, the principles of the correct preparation of the solution or signs of administration of medicine. During the seminar, special attention was paid to the mistakes made in the testing. Seminars were held daily from 10:00am until 6:00pm. The training course induced great interest of the attendants. Each symptom and criterion was an issue of discussion and evaluation. The clinical course was carried out with special interest and held daily, from 10:00am until 2:00pm in the borders of which 46 patients of outpatient clinics and 58 stationary patients were given classification and evaluation. The attendants evaluated: danger signs, such as vomiting after taking any food or drink; convulsion; frequency of breath; chest retraction; wheezing; skin flexibility; pale palms; and correspondence of age and weight. The attendants classified: hard pneumonia or very severe diseases; pneumonia; possible bacterial infection; sustained fever; no low weight and no anemia is revealed. The scheme booklet was approved by the participants that contain the all he necessary information for patient evaluation.

Technical seminars were held to cover acute respiratory infection, diarrhea diseases, neonatal diseases, fever conditions, feeding, and anemia. At the end of the seminars discussions were held on issues that the attendants were interested in.

At the end of the seminars post-testing was carried out. The results equaled mainly 85% though there were the cases of 100% results. Trainers were invaluable in the increased knowledge of the participants.

Pre- and Post-test Results



Photographs from the Training Sessions





Baby Friendly Hospital Initiative (BFHI) Report

The training seminars on the BFHI were held in the delivery house of Rustavi during April 5th through 9th, 10th through 14th, and 25th through 29th, 2006. The purpose of the seminars was to help the medical staff improve their knowledge and practices on breastfeeding management issues, which are necessary for implementing the 10 steps of BFHI principles and breastfeeding in the delivery house.

The seminars were held according to the preliminarily worked out day timetable. Each seminar was held by 4 trainers. The seminars were led by the master-trainers certified on BFHI issues:

1. Medea Beleshadze
2. Luda Lomia
3. Maya Kherkheulidze
4. Tamar Bakhtadze
5. Nino Kiknadze
6. Nani Kavlashvili
7. Neli Khurtsilava
8. Nana Sapanadze

By means of preliminary estimation of the participants' knowledge through pretests and brainstorming method results it was revealed that the one part of the delivery house staff was acquainted with lactation management methods, BFHI requirements, and partly used them in practice; however, many serious gaps were found in their knowledge and in their position toward the BFHI principles. The participants also were not informed about the *International CODE of Breast milk Substitutes* and that the Georgian law worked out on Code base and adopted by the Georgian Parliament. It was found that there is confirmed usage of prelactation food and artificial feeding products, as well as pacifiers and teats. The preliminary estimation confirmed the necessity of conducting of the seminars.

The first day of the seminar was dedicated to the pre-history, achievements in BFHI implementation, and the future plans. Requirement of BFHI were discussed, mainly the importance of continuous education of medical staff, antenatal management, and the methodology of pregnant women's preparation, the benefits of breastfeeding and its early initiation. In the process of the mentioned issues presentation the trainers were revealing the knowledge level of the participant and supplying them with proper information. A majority of the participants recognized the benefits and priorities of breastfeeding, they could understand the importance of educating pregnant women, and the importance of early start of breastfeeding, although in practice they didn't often initiate breastfeeding immediately following birth, skin-to-skin contact, and they used the artificial feeding. The conversation with mothers was limited to the necessity and importance of breastfeeding. They were less informed about the BFHI principles. The trainers underlined the importance and necessity of improving the mentioned deficiencies, explained the role of medical staff in starting breastfeeding early and correctly and the importance of perfect preparation of the pregnant women in promoting the BFHI implementation process.

On the second day the intranatal management exclusive breastfeeding, rooming-in, and the importance of on-demand feeding was discussed. A majority of the participants were acquainted with the mentioned issues and more-or-less tried to implement them, although as they noted they have problems about rooming-in because of mother being tired. The participants were told to try and solve this problem. The preparation of mothers and conversation with them about the importance of being together and also the necessity of assisting them were underlined. The special attention was paid to the issue of correct attachment to the breast, which assists in avoiding many problems.

As for the on-demand feeding principle, the majority of the participants shared and implemented it in practice, though they paid less attention to the night feeding, which were explained properly by the trainers. Together with supplying theoretical information the practical exercises took place by means of demonstrating right attachment signs and baby's right positions toward the mother's body.

On the third day the participants were educated on frequent and rare problems of breastfeeding (mastitis, nipple sore, milk insufficiency, cleft palate, cleft lip, etc.) and how to manage them. As the participants noted, concerning the breastfeeding program implementation in the maternity house, there are no mastitis cases although there are cases of nipple soreness that, as they thought, were caused by the poor attachment to the breast and about what they got ensured at the seminar. As for the milk insufficiency syndrome, to the participants mind they couldn't correctly estimate its existence or non-existence, because they didn't know the criterion necessary for its revelation. Trainers explained that the majority of the problems weren't contradiction of breastfeeding and supplying the baby with expressed milk. The trainers represented the medical negative contradiction of breastfeeding. They underlined the fact, that every such case must be confirmed and explained in the newborn's history. At the end of the day, role-plays about the mentioned issues were held.

The fourth and fifth day were dedicated to the condition of BFHI implementation in Georgia and the issue of awarding the title. The international code of marketing of breast milk substitutes and Georgian Law was discussed in depth. Exercises and role-plays also occurred.

By estimating the results of the seminars the important increase of the participant's knowledge level (60%-70%) was revealed and their motivation towards BFHI principles and for gaining the title was sharpened.

Baby Friendly Hospital Initiative (BFHI) Schedule

First Day

10⁰⁰-10³⁰ - Registration, pre-testing

10³⁰-11³⁰ – BFHI (pre-history, achievements, future perspectives)

11³⁰-11⁴⁵ – Coffee

11⁴⁵-12³⁰ – BFHI Policy and the methods of its implementation (I step)

12³⁰-13⁰⁰ – methodology of the continuous education of the maternity house staff and its importance (II step)

13⁰⁰-13⁴⁵ – Pregnant women education, antenatal management (III step)

13⁴⁵-14⁴⁵ – Lunch

14⁴⁵-15⁴⁵ – BFHI and health of the baby (benefits and priorities of breastfeeding)

15⁴⁵-16⁰⁰ – Coffee

16⁰⁰-17⁰⁰ – Early start of breastfeeding (importance, implementation methods (IV-V) steps)

Second Day

10⁰⁰-10³⁰ – Intranatal management

10³⁰-11⁴⁵ – Coffee

11⁴⁵-12¹⁵ – video-films (“first attachment”, “Assist mothers to start breastfeeding”)

12¹⁵-13⁰⁰ – “Exclusive breastfeeding” explanation, its importance, mechanisms (IV step)

13⁰⁰-13⁴⁵ – Importance of rooming-in after delivery (VII step)

13⁴⁵-14⁴⁵ – Lunch

14⁴⁵-15⁴⁵ – “On demand breastfeeding” (importance, mechanisms VIII step)

15⁴⁵-16⁰⁰ – Coffee

16⁰⁰-17⁰⁰ – Mother support group (X step)

Third Day

10⁰⁰-10³⁰ – Breastfeeding frequent problems

11³⁰-11⁴⁵ – Coffee

11⁴⁵-12⁴⁵ – Video-film (“Mother is the best”)

12³⁰-13⁴⁵ – Breastfeeding rare problems

13⁴⁵-14⁴⁵ – Lunch

14⁴⁵-15⁴⁵ – Video-films (“Birth defects”, “Mother Kangaroo”)

15⁴⁵-16⁰⁰ – Coffee

16⁰⁰-17⁰⁰ – Role-plays

Forth Day

- 10⁰⁰-10³⁰ – Situation about BFHI implementation in Georgia
- 11³⁰-11⁴⁵ – Coffee
- 11⁴⁵-12⁴⁵ – Main activities necessary for gaining the BFHI title
- 12⁴⁵-13⁴⁵ – International Code Marketing of breast milk substitutes
- 13⁴⁵-14⁴⁵ – Lunch
- 14⁴⁵-15⁴⁵ – Discussion about the exercises of the Code implementation revealed as a result of monitoring
- 15⁴⁵-16⁰⁰ – Coffee
- 16⁰⁰-17⁰⁰ – Exercises (individual and group work)

Fifth Day

- 10³⁰-11³⁰ – Explanation of the main provisions of Georgian Law “On Protection and Promotion of Breastfeeding and Regulated Use of Artificial Food”.
- 11³⁰-11⁴⁵ – Coffee
- 11⁴⁵-12⁴⁵ – Mechanisms of working of the law of Georgia
- 12⁴⁵-13⁴⁵ – Responsibility of medical staff toward the law
- 13⁴⁵-14⁴⁵ – Lunch
- 14⁴⁵-15⁴⁵ – Role-play by means of demonstrating the examples of the violation of law
- 15⁴⁵-16⁰⁰ – Coffee
- 16⁰⁰-17⁰⁰ – Pre-tests, estimation of the results



Child Healthy Nutrition Report

Training seminars on Child Health and Nutrition were held in Rustavi during May 8th and 12th, 13th and 17th, 2006. Each seminar was led by 4 trainers. The seminars were held by certified master-trainers:

1. Medea Beleshadze
2. Luda Lomia
3. Maya Kherkheulidze
4. Tamar Bakhtadze
5. Nino Kiknadze
6. Nani Kavlashvili
7. Neli Khurtsilava
8. Nana Sapanadze

The trainings started with preliminary pre-testing of the participants' knowledge. Each participant represented the information about breastfeeding and preventing factors in their area. The frequency of breastfeeding has increased in Rustavi over the past few years. The feeding percent is about 50-70%. Though means of giving additional questions to the participants it was found out that exclusive breastfeeding is implemented until six months; however not in every case. The causes of that include: the low level of mothers' knowledge, traditions, and mothers' work/their study at the highest universities. Several delivery houses were indicated, among which there was Tbilisi delivery house where there were problems with newborns breastfeeding, unprepared mothers, and the usage of artificial feeding products, which to their mind was the cause of the arisen problem on the clinic level.

The first day of the seminar covered the issue of breastfeeding benefits; mechanisms of breastfeeding, anatomy/physiology of the nipples, and correct attachment signs were discussed. All the participants learned about the benefits of breastfeeding for baby as well as for mother. They learned a few signs of inadequate breastfeeding, right attachment signs, and its importance. They greeted the demonstration of the consultation methods.

On the second day the participants were represented antenatal and intranatal management issues, optimal breastfeeding principles, exclusive breastfeeding and on-demand breastfeeding, peculiarities of preliminary breastfeeding, sudden infant death syndrome (SIDS) and SIDS prevention. The participant indicated the fact, that in the last years they haven't participated in antenatal management according to existing standards or spoke with pregnant women. They were given this information by the trainers that as the results of recently carried our reforms of healthcare; the doctors would interfere in this process which was more beneficiary for pregnant women and promote their motivation toward breastfeeding. The participant confirmed that breastfeeding on-demand is mostly implemented and almost no mother uses the hourly regime. The participants discussed the particulars of complementary feeding and the variety of foods to use, the necessity of providing complementary feeding to infants.

On the third day the lactation amenorrhea method (LAM), milk expression technique, several breastfeeding problems (milk sufficiency, refusal to the breast), and nipple conditions were discussed. The majority of the participants knew that breastfeeding could decrease the possibility of becoming pregnant following delivery; however, they didn't know that this is possible only in exclusive breastfeeding conditions (LAM) and by means of protecting the optimal breastfeeding principles. Topics discussed were when it is possible to use additional (and what kind) contraceptives to protect themselves from pregnancy; milk expression technique and its importance for managing the various problems were described by the trainers; milk sufficiency syndrome and the criteria by which usage it is possible to reveal real milk sufficiency. The fact was underlined that in many cases milk adequacy is the mother's subjective feeling and very frequently it is confirmed by the medical person by mistake. The negative results of pacifiers and teats usage were highlighted, which can cause the baby to refuse the breast. It was noted that while estimating the nipples it is necessary to persuade mothers that in almost all cases it is possible to implement breastfeeding in spite of its size and shape. It was noted that the only problem may be an inverted nipples, although this is rare. At the end of the day role-plays were held by using the consultation methods.

On the fourth day, trainers discussed the frequent and rare breastfeeding problems, relactation methods and the particulars of the physical development of breastfeeding baby. A participant indicated that after implementing frequent and on-demand breastfeeding it is rare to have mastitis and abscess cases. As it was revealed by talking with them most used various ointments to cure by using this method and oiling the expressed milk on the nipples and drying them on the air gives high effected result. The trainers were educated on physical development and placing the estimation methods of weighed baby every month on the map. The proper exercises were done.

The fifth day was dedicated to the particulars of mother and child feeding, BFHI main principles, artificial feeding issues, and the international marketing code of breast milk substitutes and the discussion of the main provisions of Georgian proper law. Special attention was paid to the role of medical staff by means of working and keeping the law and the sanctions foreseen by the law were underlined in case of its breaking.

At the end of the seminar the post-testing results were quite high (70-80%). The trainers noted the importance of the seminars in implementing their activities effectively and indicated that in spite of being informed and having enough experience about the breastfeeding management issues, they've increased their knowledge by means of the seminars and estimated the existing knowledge defaults and would use the new information in practice by all means.

Child Health and Nutrition Training Schedule

First Day

10⁰⁰-10³⁰ - Registration, pre-testing

10³⁰-11³⁰ – Importance of breastfeeding

11³⁰-11⁴⁵ – Coffee

11⁴⁵-12³⁰ – Existing practice of breastfeeding

- 12³⁰-13⁰⁰ – Breastfeeding mechanisms
- 13⁰⁰-13⁴⁵ – Breastfeeding estimation methods (attachment, position)
- 13⁴⁵-14⁴⁵ – Lunch
- 14⁴⁵-15⁴⁵ – video-film - <First attachment, assist mother to start breastfeeding>
- 15⁴⁵-16⁰⁰ – Coffee
- 16⁰⁰-17⁰⁰ – Practical exercises
- 17⁰⁰-17³⁰ – Consultation methods, exercises, role-plays

Second Day

- 10⁰⁰-10³⁰ – Antenatal management
- 10³⁰-11⁴⁵ – Coffee
- 11⁴⁵-12¹⁵ – Intranatal management
- 12¹⁵-13⁰⁰ – “Exclusive breastfeeding” (explanation, its importance, mechanisms)
- 13⁰⁰-13⁴⁵ – Management after delivery
- 13⁴⁵-14⁴⁵ – Lunch
- 14⁴⁵-15⁴⁵ – “On demand breastfeeding” (importance, mechanisms)
- 15⁴⁵-16⁰⁰ – Coffee
- 16⁰⁰-17⁰⁰ – Peculiarities of complementary breastfeeding.
- 17⁰⁰-17³⁰ – Causes and prevention of sudden infant death syndrome.

Third Day

- 10⁰⁰-10³⁰ – Lactation amenorrhea method
- 11³⁰-11⁴⁵ – Coffee
- 11⁴⁵-12⁴⁵ – Milk expression technique
- 12³⁰-13⁴⁵ – Refusal to breast
- 13⁴⁵-14⁴⁵ – Lunch
- 14⁴⁵-15⁴⁵ – Milk sufficiency syndrome (causes, signs, management methods)
- 15⁴⁵-16⁰⁰ – Coffee
- 16⁰⁰-17⁰⁰ – Estimation of nipple condition (revelation of the problems, management);
- 17⁰⁰-17³⁰ – Role-play by using consultation methods

Forth Day

- 10⁰⁰-10³⁰ – Frequent breastfeeding problems
- 11³⁰-11⁴⁵ – Coffee
- 11⁴⁵-12⁴⁵ – rare breastfeeding problems
- 12⁴⁵-13⁴⁵ – Practical exercises, discussion of situational history
- 13⁴⁵-14⁴⁵ – Lunch
- 14⁴⁵-15⁴⁵ – Relactation methods
- 15⁴⁵-16⁰⁰ – Coffee
- 16⁰⁰-17⁰⁰ – Breastfeeding and physical development map
- 17⁰⁰-17³⁰ – Exercises, video-film <mother is better>

Fifth Day

- 10³⁰-11³⁰ –Medical demonstrations of artificial feeding and management
- 11³⁰-11⁴⁵ – Coffee
- 11⁴⁵-12⁴⁵ – Pregnant and breastfeeding mothers

- 12⁴⁵-13⁴⁵ – BFHI principles
- 13⁴⁵-14⁴⁵ – Lunch
- 14⁴⁵-15⁴⁵ – International code marketing of breast milk substitutes
- 15⁴⁵-16⁰⁰ – Coffee
- 16⁰⁰-17⁰⁰–Georgian law “On Protection and Promotion of Breastfeeding and Regulated Use of Artificial Food”.
- 15⁴⁵-16⁰⁰–Discussion, answering to the participants’ questions and post-testing.



4. Follow-up Observations on the Integrated Management of Childhood Illness Report

According to the project component of IMCI, the follow-up observation activities were held later than scheduled. Originally, observation activities were scheduled four-to-six weeks following the trainings. Follow-up observations were carried out after five months. It was incorrect procedure according to the program’s request. These activities were held between November 6th and November 15th in treatment prophylactic center #2 of Rustavi by the curators: I. Shalamberidze, M. Khochava, T. Obgaidze N. Nucubidze and T. Bakhtadze.

The goals of the observation were:

1. Reaffirm recommended clinical habits among medical staff;
2. Reveal the problems that prevent the utilization of the IMCI program; and
3. Find the ways to solve the problems.

The forms used by supervisors during the post-training observation included:

1. Records of sick child between two and five years and sick infants between one week to two months;
2. Form of observation on medical staff members;
3. Interviews of mothers;
4. Record assessments;
5. Form on the quality of patient management;
6. Assessments of outpatient clinics and polyclinics; and
7. Form on the basic indicators of the IMCI program.

The training course in Integrated Management of Childhood Illnesses for the medical staff of outpatient clinics of Rustavi region was held in April-May, 2006. Forty doctors work in treatment-prophylactic center #2 and participated in the training course. All passed the training course. The doctors were situated in conference hall because of the renewal activities of the building.



The center also has the registration and vaccination book, *Scales*. The clinic hours are 10:00am to 4:00pm daily. It is 15-20 minute walk away from the stationary. Owing to the state of emergency, the assessment of the center's equipment was not carried out.



There is a corner for vaccinations in the conference hall. Vaccinations are held everyday. Vaccines are stored on the principle of "cold chain" in special boxes. The following medicines are available at the clinic: Amoxicillin, Paracetamol, Oral Rehydration Solution packages. Medicine is kept in a closed and dry place. During the post-training

observation the supervisors had a chance to immediately observe 25 patients and the record forms were examined.



The following was revealed from the record examinations: every patient is estimated on the signs of danger, 90% of patients are seen for main symptoms, and none of the patients are examined on feeding problems or their immunization status. Supervisors pay special attention to the latter, as well as to the provision of medicine for the outpatient clinic. During discussions with the supervisors, the medical staff of the clinic gave positive descriptions of the program, especially on the completeness of the record forms.

Post-training observations revealed that the medical staff prepared by the program works according IMCI, which means that patient estimation and management is carried out using the scheme booklets, forms of records are filled in, and mothers' consultations are held using remembrances.

According to the first regional summarizing schedule, which contained the relevant information about the quality of patient management, the following have been revealed:

1. General signs of danger have been estimated for 50 patients up from 40;
2. Basic signs (cough, diarrhea, fever, ear, and throat problems) were diagnosed in 50 patients from 30;
3. Forty-five patients were examined for cough, fever, and diarrhea;
4. Patient weight was estimated with 18 from 50;
5. None of the statuses were fixed with 14 patients from 50;
6. No critical patients were received;
7. Anti-bacterial medicine was administrated correctly in 6 cases from 10;
8. The complete course of anti-bacterial medicine was taken by all 6 patients with pneumonia;
9. Bronchodilatator was not administered;
10. Patients with dysentery were not received; and
11. Patients with moderate dehydration were not received.

According to the second regional summarizing schedule, which concerns the problems about supporting the program at medical facilities, the following was revealed:

1. Medical facilities possess: scales, timers, IMCI booklets, IMCI record forms, mothers' remembrances, patients' individual cards, individual immunization cards, registers;
2. Immunization is carried out everyday according to plan;
3. Outpatient clinic works according to schedule from 10:00am until 4:00pm;
4. Records in individual cards are not complete; and
5. 100% of doctors are prepared according to the program in the facilities where the post-training observations have been held.

Doctors were given relevant instructions about the errors revealed while filling in the record forms. They were assured on the necessity of correcting mistakes made in the process of management by providing them information using scheme booklets. With active participation of doctors the basic issues of past material was carried out. To support and encourage recommended medical habits situational skills, role-playing was used. At the same time during the post-training observation period the positive parts of the program were revealed by supervisors. These positive parts are mentioned by the doctors, namely:

- The program is easy to understand and use;
- Provides precise diagnoses;
- Details are foreseen by the program;
- The program refers patients to hospitals when necessary;
- Reduces the necessity of therapy with antibiotics that aren't approved;
- Reduces the frequency of complications and hospitalization;
- Important for children survival;
- It's economical both for population and state.

5. Summary of Five Hospitals Delivery Log

	Rustavi Maternity Hospital	Bolnisi	Dmanisi	Marneuli	Gardabani	Tetritskaro
1. total # births 2006 Jan- Dec 2007 Jan - Sept	1370 1261	690 544	177 129	915 824	404 378	99 82
2. still born births 2006 Jan- Dec 2007 Jan - Sept	28 11	17 14	3 0	10 5	6 4	0 0
3. # of newborn transferred to Tbilisi 2006 Jan- Dec 2007 Jan - Sept	12 10	14 14	3 1	0 0	0 0	2 3
4. # maternal deaths 2006 Jan- Dec 2007 Jan - Sept	0 1	0 0	3 1	1 4	0 1	0 0
5. # early neo natal death <7 days 2006 Jan- Dec 2007 Jan - Sept	2 8	0 0	0 1	2 3	1 1	0 1
6. # of newborn transferred to Tbilisi 2006 Jan- Dec 2007 Jan - Sept 2007 Death post transport* (national transport program data from chart review)	74 58 12 17	0 0 0	3 2 2	0 0 0	9 8 1	2 2 2
7. Rh complications 2006 Jan- Dec 2007 Jan - Sept	0 1	0 0	0 0	0 1	0 0	0 0

H. Project Data Sheet Form

Project Information:

Description:

The goal of this CS project in Georgia is to create sustainable interventions to reduce maternal, neonatal, infant and child morbidity and mortality in Kvemo Kartli region and the cities of Chiatura and Zestaphoni in the Imereti region.

The project goal will be achieved through three principal objectives:

- 1.Improved QUALITY of M/C survival services.
- 2.Improved BEHAVIOR regarding maternal and child health practices within households and among the community, health care professionals and health managers.
- 3.Increased AVAILABILITY of M/C health care services and increased ACCESS to adequate standard case management

The project will use three crosscutting strategies to facilitate implementation of the program objectives: (1) Behavioral Communication Change (BCC) Approaches; (2) Institutional Capacity Building; and (3) Partnership Development for Social Mobilization. Integrated Management of Childhood Illness (IMCI) will be applied in the delivery of child care services.

The project will include the following technical intervention areas: Maternal and newborn care (MNC) 25%, Breastfeeding Promotion (20%), Nutrition (15%), Case Management of diarrhea (25%) and Case Management of Pneumonia (15%).

The program proposed by ACTS-I is based on a behavioral communication change (BCC) strategy and training for Ministry of Health leadership and health care professionals in evidence-based practices for maternal and child care, as well as community-based practice.

Location:

Kvemo Kartli Region and mountainous mining region of Imereti, with a total population of 742,000 of which 35,600 are children U5 and 52,000 are women of reproductive age.

Project Partners	Partner Type	Subgrant Amount
Claritas XXI, Child Rights Protection Association	Subgrantee	\$25,000.00
Tanadgoma, Local NGO	Subgrantee	\$10,000.00
HERA, Women Wellness Care Alliance	Collaborating Partner	
Vishnevskaja-Rostropovich Foundation, VRF	Collaborating Partner	
Subgrant Total		\$35,000.00

Project Sub Areas:

Kvemo Kartli total
Kvemo Kartli (2)
Chiatura and Zestaphoni
Total

General Strategies Planned:

Social Marketing
Private Sector Involvement
Advocacy on Health Policy
Strengthen Decentralized Health System

M&E Assessment Strategies:

- KPC Survey
- Health Facility Assessment
- Organizational Capacity Assessment with Local Partners
- Organizational Capacity Assessment for your own PVO
- Participatory Learning in Action
- Lot Quality Assurance Sampling
- Appreciative Inquiry-based Strategy
- Community-based Monitoring Techniques
- Participatory Evaluation Techniques (for mid-term or final evaluation)

Behavior Change & Communication (BCC) Strategies:

- Social Marketing
- Mass Media
- Interpersonal Communication
- Peer Communication
- Support Groups

Groups targeted for Capacity Building:

PVO	Non-Govt Partners	Other Private Sector	Govt	Community
US HQ (General) US HQ (CS unit) Field Office HQ CS Project Team	PVOs/NGOs (Int'l./US) Local NGO Networked Group	Private Providers	National MOH Dist. Health System Health Facility Staff Other National Ministry	Health CBOs Other CBOs CHWs

Interventions/Program Components:

Nutrition (15 %)

(IMCI Integration)

(CHW Training)

(HF Training)

- ENA
- Comp. Feed. from 6 mos.
- Cont. BF up to 24 mos.
- Growth Monitoring
- Maternal Nutrition

Pneumonia Case Management (15 %)

(IMCI Integration)

(CHW Training)

(HF Training)

- Pneum. Case Mngmnt.
- Case Mngmnt. Counseling
- Access to Providers Antibiotics
- Recognition of Pneumonia Danger Signs

Control of Diarrheal Diseases (25 %)

(IMCI Integration)

(CHW Training)

(HF Training)

- Water/Sanitation
- Hand Washing
- ORS/Home Fluids
- Feeding/Breastfeeding
- Care Seeking
- Case Mngmnt./Counseling

Maternal & Newborn Care (25 %)

(IMCI Integration)

(CHW Training)

(HF Training)

- Emerg. Obstet. Care
- Neonatal Tetanus
- Recog. of Danger signs
- Newborn Care
- Post partum Care
- Normal Delivery Care
- STI Treat. with Antenat. Visit
- Control of post-partum bleeding

Breastfeeding (20 %)

(IMCI Integration)

(CHW Training)

(HF Training)

- Promote Excl. BF to 6 Months
- Support baby friendly hospital

Target Beneficiaries:

	Kvemo Kartli total	Kvemo Kartli (2)	Chiatura and Zestaphoni	Total	Total Beneficiaries
Infants < 12 months:	2,993	2,987	785	6,065	12,830
Children 12-23 months:	3,020	2,836	946	6,082	12,884
Children 0-23 months:	6,013	5,823	1,731		13,567
Children 24-59 months:	10,507	9,730	4,191		24,428
Children 0-59 months:	16,520	15,553	5,922	12,147	50,142
Women 15-49 years:	76,084	59,342	9,223		144,649
Population of Target Area:	276,990	220,556	38,000		535,546

Rapid Catch Indicators:

□ LQAS sampling methodology was used for this survey				
UNDERWEIGHT CHILDREN				
Description -- Percentage of children age 0-23 months who are underweight (-2 SD from the median weight-for-age, according to the WHO/NCHS reference population)				
Numerator: No. of children age 0-23 months whose weight (Rapid CATCH Question 7) is -2 SD from the median weight of the WHO/NCHS reference population for their age				
Denominator: Number of children age 0-23 months in the survey who were weighed (response=1 for Rapid CATCH Question 6)				
Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Kvemo Kartli total	11	263	4.2%	3.5
Kvemo Kartli (2)	16	211	7.6%	5.2
Chiatura and Zestaphoni	4	295	1.4%	1.9
Total	0	0	0.0%	0.0
BIRTH SPACING				
Description -- Percentage of children age 0-23 months who were born at least 24 months after the previous surviving child				
Numerator: No. of children age 0-23 months whose date of birth is at least 24 months after the previous sibling's date of birth (Rapid CATCH Question				
Denominator: Number of children age 0-23 months in the survey who have an older sibling				
Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Kvemo Kartli total	55	89	61.8%	19.2
Kvemo Kartli (2)	44	144	30.6%	11.8
Chiatura and Zestaphoni	41	83	49.4%	18.6
Total	0	0	0.0%	0.0
DELIVERY ASSISTANCE				
Description -- Percentage of children age 0-23 months whose births were attended by skilled health personnel				
Numerator: No. of children age 0-23 months with responses =A ('doctor'), B ('nurse/midwife'), or C ('auxiliary midwife') for Rapid CATCH Question 10D				
Denominator: Number of children age 0-23 months in the survey				
Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Kvemo Kartli total	313	314	99.7%	11.1
Kvemo Kartli (2)	268	285	94.0%	11.6
Chiatura and Zestaphoni	300	301	99.7%	11.3
Total	0	0	0.0%	0.0

MATERNAL TT				
Description -- Percentage of mothers of children age 0-23 months who received at least two tetanus toxoid injections before the birth of their youngest child				
Numerator: Number of mothers of children age 0-23 months with responses=2 ('twice') or 3 ('more than two times') for Rapid CATCH Question 9				
Denominator: Number of mothers of children age 0-23 months in the survey Number of mothers of children age 0-23 months with responses=2 ('twice') or 3 ('more than two times') for Rapid CATCH Question 9 Denominator Numerator: Number of mothers of children age 0-23 months in the survey				
Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Kvemo Kartli total	0	314	0.0%	0.0
Kvemo Kartli (2)	0	285	0.0%	0.0
Chiatura and Zestaphoni	0	301	0.0%	0.0
Total	0	0	0.0%	0.0
EXCLUSIVE BREASTFEEDING				
Description -- Percentage of infants age 0-5 months who were exclusively breastfed in the last 24 hours				
Numerator: Number of infants age 0-5 months with only response=A ('breastmilk') for Rapid CATCH Question 13				
Denominator: Number of infants age 0-5 months in the survey				
Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Kvemo Kartli total	14	82	17.1%	12.1
Kvemo Kartli (2)	10	55	18.2%	15.2
Chiatura and Zestaphoni	12	86	14.0%	10.8
Total	0	0	0.0%	0.0
COMPLEMENTARY FEEDING				
Description -- Percentage of infants age 6-9 months receiving breastmilk and complementary foods				
Numerator: Number of infants age 6-9 months with responses= A ('breastmilk') and D ('mashed, pureed, solid, or semi-solid foods') for Rapid CATCH Question 13				
Denominator: Number of infants age 6-9 months in the survey				
Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Kvemo Kartli total	14	82	17.1%	12.1
Kvemo Kartli (2)	10	55	18.2%	15.2
Chiatura and Zestaphoni	12	86	14.0%	10.8
Total	0	0	0.0%	0.0
FULL VACCINATION				
Description -- Percentage of children age 12-23 months who are fully vaccinated (against the five vaccine-preventable diseases) before the first birthday				
Numerator: Number of children age 12-23 months who received Polio3 (OPV3), DPT3, and measles vaccines before the first birthday, according to the child's vaccination card (as documented in Rapid CATCH Question 15)				
Denominator: Number of children age 12-23 months in the survey who have a vaccination card that was seen by the interviewer (response=1 'yes, seen by interviewer' for Rapid CATCH Question 14)				
Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Kvemo Kartli total	85	144	59.0%	14.9

Kvemo Kartli (2)	61	125	48.8%	15.1
Chiatura and Zestaphoni	92	128	71.9%	16.6
Total	0	0	0.0%	0.0

MEASLES

Description -- Percentage of children age 12-23 months who received a measles vaccine

Numerator: Number of children age 12-23 months with response=1 ('yes') for Rapid CATCH Question 16

Denominator: Number of children age 12-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Kvemo Kartli total	85	144	59.0%	14.9
Kvemo Kartli (2)	61	125	48.8%	15.1
Chiatura and Zestaphoni	92	128	71.9%	16.6
Total	0	0	0.0%	0.0

BEDNETS

Description -- Percentage of children age 0-23 months who slept under an insecticide-treated bednet the previous night (in malaria-risk areas only)

Numerator: Number of children age 0-23 months with 'child' (response=A) mentioned among responses to Rapid CATCH Question 18 AND response=1 ('yes') for Rapid CATCH Question 19

Denominator: Number of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Kvemo Kartli total	0	314	0.0%	0.0
Kvemo Kartli (2)	0	285	0.0%	0.0
Chiatura and Zestaphoni	0	301	0.0%	0.0
Total	0	0	0.0%	0.0

DANGER SIGNS

Description -- Percentage of mothers who know at least two signs of childhood illness that indicate the need for treatment

Numerator: Number of mothers of children age 0-23 months who report at least two of the signs listed in B through H of Rapid CATCH Question 20

Denominator: Number of mothers of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Kvemo Kartli total	244	314	77.7%	10.8
Kvemo Kartli (2)	144	285	50.5%	10.1
Chiatura and Zestaphoni	190	301	63.1%	10.5
Total	0	0	0.0%	0.0

SICK CHILD

Description -- Percentage of sick children age 0-23 months who received increased fluids and continued feeding during an illness in the past two weeks

Numerator: Number of children age 0-23 months with response=3 ('more than usual') for Rapid CATCH Question 22 AND response=2 ('same amount') or 3 ('more than usual') for Rapid CATCH Question 23

Denominator: Number of children surveyed who were reportedly sick in the past two weeks (children with any responses A-H for Rapid CATCH Question 21)

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
---------------	-----------	-------------	--------------------	-------------------

Kvemo Kartli total	23	37	62.2%	29.8
Kvemo Kartli (2)	12	20	60.0%	40.2
Chiatura and Zestaphoni	14	30	46.7%	30.3
Total	0	0	0.0%	0.0

HIV/AIDS

Description -- Percentage of mothers of children age 0-23 months who cite at least two known ways of reducing the risk of HIV infection

Numerator: Number of mothers of children age 0-23 months who mention at least two of the responses that relate to safer sex or practices involving blood (letters B through I & O) for Rapid CATCH Question 25

Denominator: Number of mothers of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Kvemo Kartli total	142	314	45.2%	9.3
Kvemo Kartli (2)	13	285	4.6%	3.5
Chiatura and Zestaphoni	60	301	19.9%	6.8
Total	0	0	0.0%	0.0

HANDWASHING

Description -- Percentage of mothers of children age 0-23 months who wash their hands with soap/ash before food preparation, before feeding children, after defecation, and after attending to a child who has defecated

Numerator: Number of mothers of children age 0-23 months who mention responses B through E for Rapid CATCH Question 26

Denominator: Number of mothers of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Kvemo Kartli total	194	314	61.8%	10.2
Kvemo Kartli (2)	137	285	48.1%	9.9
Chiatura and Zestaphoni	43	301	14.3%	5.8
Total	0	0	0.0%	0.0

Comments for Rapid Catch Indicators

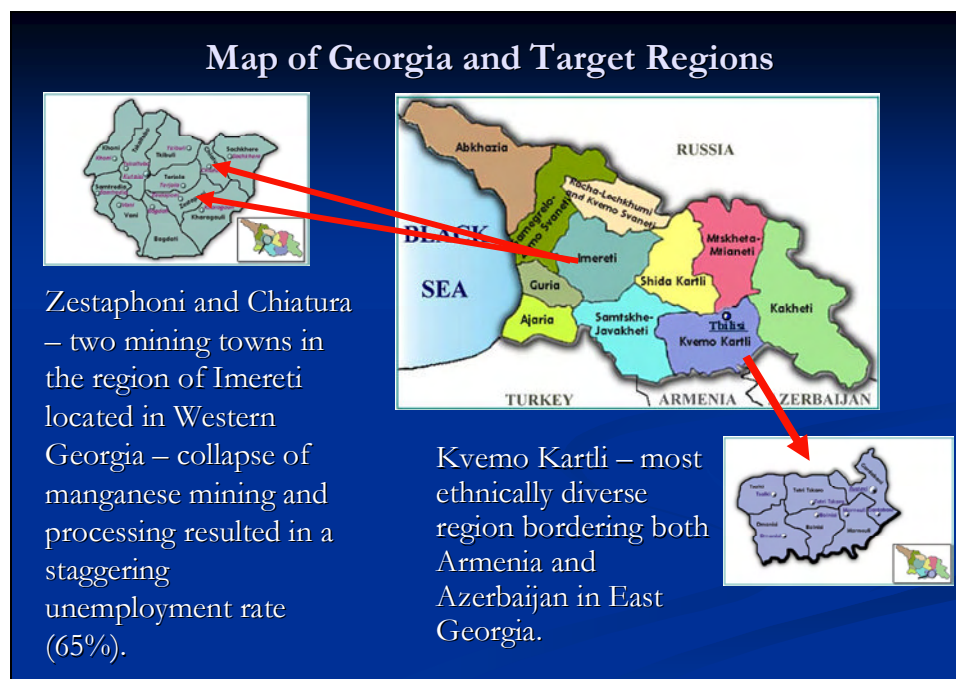
There are four questions on
Rapid Catch for which we have comments:
1) TB Treatment Success Rate: This was not part of our interventions.
2) Bednets: The target regions are not endemic for malaria.
3) Tetanus: Georgia follows WHO guidelines for developed countries and does not give tetanus to pregnant women.
4) Full Immunization: Georgia follows WHO guidelines for developed countries (US, Western Europe, etc.) and provides full immunization (with the last vaccination being measles)at or after the first birthday. This question cannot accurately be answered.

I. References and Resources

1. References

1. National Medical Center Neonatal Transport DataBase (unpublished personal Communication) Kakhaber Chikhradze, M.D.
2. Asatiani, Tenginz, MD, PhD, et al. (2006).UNICEF Assessment of Perinatal Care in Georgia
3. Healthy Women in Georgia Scaling Up for Success 2006 USAID
4. UNICEF MICS conducted in 2005 has not been released October 2007.
5. Building a World Fit for Children UNICEF 2003
6. Millennium Development Goals -The Earth Institute at Columbia University

2. Map of Georgia and Intervention Target Regions



3. Maternity Facility Assessment (MFA)

QUESTIONS	Regional Maternity Hospital (1)	Maternity Ward (3)	Outpatient Center (2)
1. Which of the following items are available and in working condition at the maternity facility			
1.1 general condition of building	fair	1 excellent 1 good 1 poor	1 excellent 1 fair
1.2 General Cleanliness	good	1 excellent 1 good 1 poor	2 good
1.3 Hot running water in delivery room	present	present in 2	present in 2
1.4 Cold running water in delivery room	present	present in 2 absent in 1	present in 2
1.5 Soap/ Antiseptic (unsatisfactory if bar soap; satisfactory if liquid soap or antiseptic)	satisfactory	satisfactory in 2 absent in 1	n/a
1.6 Wall clock with Second timer	present	present in 2	n/a
1.7 Air thermometer	absent	absent in 3	n/a
1.8 Oxygen (central of tank)	present	present in 2	n/a
1.9 Central Sewage	present	present in 3	present in 2
1.10 Heating (satisfactory if central heating; unsatisfactory is electrical heating)	unsatisfactory	satisfactory in 1 unsatisfactory in 2	satisfactory in 1 unsatisfactory in 1
1.11 Toilet	present	present in 3	present in 2
1.12 Refrigerator	present	present in 3	present in 2
1.13 Generator	absent	present in 1	present in 1
1.14 Sterilization room	present	present in 3	n/a
QUESTIONS	Regional Maternity Hospital (1)	Maternity Ward (3)	Outpatient Center (2)
2. Which of the following items are available and in satisfactory condition			
<i>Registers/ documentation</i>			
2.1 Clinical Care Management Guidelines for Maternal/Child Health CARE MOLHSA 2002 (satisfactory if available to the physicians)	present	present in 3	present in 2
2.2 Ministerial decree on maternal and newborn referral	present	present in 3	present in 2

QUESTIONS	Regional Maternity Hospital (1)	Maternity Ward (3)	Outpatient Center (2)
<i>Basic Equipment</i>			
2.3 Blood pressure apparatus	present	present in 3	present in 2
2.4 Stethoscope - adult	present	present in 3	present in 2
2.5 Stethoscope - peds	absent	present in 1 absent in 2	absent in 2
2.6 Infant weighing scale	present	present in 3	present in 2
2.7 Adult weighing scale	present	present in 3	present in 2
2.8 Protective Clothing	present	present in 3	present in 2
2.9 Speculum - various sizes	speculum - one size	speculum in all 3 - one size	speculum - various sizes
2.10 Obstetric forceps (absolute minimum equipment for delivery)	present	present in 3	n/a
2.11 Scissors	present	present in 3	n/a
2.12 Suture needles and suture material	present	present in 3	n/a
2.13 Needle holder – long (absolute minimum for C section)	present	present in 3	n/a
2.15 Adult ventilator	present - old soviet model	present 3 2 new Japanese 2 old soviet	n/a
2.16 Operating table with light	present	present 3	n/a
2.17 Laryngoscope -adult	present	present 3	n/a
2.18 Laryngoscope -peds	absent	absent 3	n/a
2.19 Endotracheal tubes(different sizes)			n/a
2.19 Where is equipment stored (locked or unlocked)	unlocked	unlocked 3	n/a
<i>Education materials</i>			
2.20 On postpartum care, newborn care or breast feeding	yes	yes in 3	Yes in 2
2.21 Leaflets/ poster/ promoting artificial feeding	no	no in 3	no
2.22 Leaflets/ poster on family planning	no	no in 3	no
2.23 Leaflets/ poster on sexually transmitted diseases/HIV/ AIDS	yes		no

QUESTIONS	Regional Maternity Hospital (1)	Maternity Ward (3)	Outpatient Center (2)
3. Postpartum/neonatal room/neonatal ICU			
3.1 Cold running water	yes	yes in 2	yes
3.2 Hot running water	yes	yes in 2	yes
3.3 Soap/ Antiseptic (unsatisfactory if bar soap; satisfactory if liquid soap or antiseptic)	satisfactory	satisfactory in 2 unsatisfactory in 1	n/a
3.4 Air thermometer	absent	present in 1 absent in 2	n/a
3.5 Newborn exam table	present	present in 3	n/a
3.6 Neonatal intensive care	Not at any of these hospitals. There is national referral center in Tbilisi and an ambulance transport. 50% of the newborn transport deaths are from remote Kvemo Kartli.		
QUESTIONS	Regional Maternity Hospital (1)	Maternity Ward (3)	Outpatient Center (2)
4. Neonatal resuscitation area in the delivery room			
4.1 Neonatal exam table with radiant warmers	yes, but warmer not producing adequate temperature	yes in 1 no in 2	n/a
4.2 Cloth towel to dry baby	yes	yes in 3	n/a
4.3 Clinical thermometer	yes	yes in 3	n/a
4.4 Soft anesthesia bag for resuscitation	no	no in 3	n/a
4.5 Mask for infant various size	no	no in 3	n/a
4.6 Laryngoscope for infant with size appropriate blades	no	yes in 1 no in 2	n/a
4.7 Endotracheal tubes various small size uncuffed	yes	yes in 1 no in 2	n/a
4.8 Wall oxygen immediate available dedicated for baby close to exam table	no	yes in 1 no in 2	n/a
4.9 Incubator	no	yes in 2, but not complete and not able to retain in and oxygen properly no in 1	n/a

QUESTIONS	Regional Maternity Hospital (1)	Maternity Ward (3)	Outpatient Center (2)
4.10 Suction immediately available in close proximity to the neonatal resuscitation are	no	yes in 1	n/a
4.11 Bulb for suction	yes	yes in 3	n/a
4.12 Oral catheter	yes	yes in 3	n/a

4. Comparison of LQAS MTE Results in RURAL and URBAN AREAS of FOCUS

INDICATOR	BASELINE (KPC) 2005	MTE TARGET 2007	MID-TERM 2007 (LQAS)		
			FOCUS VILLAGES rural	FOCUS CITIES URBAN	2009 End of Program Target
Maternal and Newborn Care (25%)					
Behavior Process Indicator					
1. Percent of mothers who could report 4 and more danger signs of pregnancy	5.4%	15%	59.9%	63.0%	30%
Behavior Process Indicator					
2. Percentage of mothers who could report 4 and more neonatal danger signs	14.7%	30%	66.2	69.6%	55%
Breastfeeding (20%)					
Results Indicator					
1. Percent of children aged 0-23 months who were breastfed within the first hour after birth	39.5%	45%	59.2	62.3%	60%
Results Indicator					
2. Percent of children 0-23months, who were exclusively breastfeed for 6 months	16.5	30%	57.2%	60.1%	60%
Nutrition (15%)					
Results Indicator					
1. Percent of infants aged 6-9 months who received solid foods with breast milk;	41.7%	60%	75.8%	78.9%	85%
Pneumonia/Diarrhea (40%)					
Behavior Process Indicator					
1. Percentage of mothers who could report at least 2 danger signs of childhood illnesses	64.2%	75%	95.9%	93%	85%
Results Indicator					
2. Percent of Children aged 0-23 months with diarrhea in the last two weeks who were offered more fluids	56.3%	75%	81.3%	91%	85%

5. Structured interview with Obstetrician

Structured interview documented that the Obstetricians understood:

- how to identify a high risk pregnancy
- How to treat Rh incompatibility most had Rhogam available
- When needed
- How to treat post partum hemorrhage
- How to treat post partum retain placenta
- Indication of C – section
- How to identify preclampsia and eclampsia
- Know that Magnesium was drug of choice
- For treatment but none of the obstetrician knew the correct dose of Magnesium , universally they thought 50% of the dose was adequate (it should be noted that this lower inadequate dose was the dosage used during the Soviet times)
- All obstetrician interviewed had received IMCI training and the last 2 years
- And 50% had received training either Advance Life Support for Obstetrics (ALSO) or WHO BFH Training
- Partographs were rarely used
- They identified lack of working modern equipment as the number one barrier to Providing care to their patients.
- Lack of sterile gloves often prevent all team member from wearing gloves
- Blood for transfusion was not available in any of the Kvemo Kartli hospital
- But all had access to a blood bank in an emergency
- Signs of danger for the neonatal that would necessitate transfer to Tbilisi
- Were known The transport time are long
- C section rate of 20-25% is common in all facilities
- Skin to Skin contact was understood and practiced.
- The concepts of exclusive breastfeeding and breast feeding within first hour were know and supported
- Salaries remain low and often are delayed in arriving.

The Georgian Obstetrics and Gynecologists Association is the main professional organization that is working to set practice standards. Interview conducted with Dr. Tengiz Asatiani, M.D, PhD Georgian Obstetrics and Gynecologist Association.

The Importance of continuous quality assurance standard, ideas and implementation was recognized but no active regular chart and case review or morbidity and mortality conference were taking place in any of the Kvemo Kartli hospitals.

In Soviet time maternal death case review was a required practice that was done by an active board of experts including representatives of the Ministry of Health.

Direct observation of deliveries documented that

- Proper care of the patient and standard acceptable deliver principles were followed in all facilities
- Anesthesia for vaginal deliveries is limited

- Hand washing (scrubbing) was done with liquid soap and running water
- Just outside the delivery room in all but one case; in this case there was no running water in or near the delivery room and hot water from a pitcher was poured over the OB's hand after lathering with bar soap
- Use of Epidural is rare due to lack of syringes/anesthetic

Understanding

- While neonatologists are present all most/all deliveries suction, oxygen were not immediately available for the infant in the all delivery rooms. Oxygen was available on the same floor as the delivery room.

6. Structured interview by a Neonatologist

Of the Neonatologists interviewed:

- All had received training with the last 12 month on neonatal resuscitation and could each describe the steps for resuscitation, what equipment was needed and the indication for resuscitation.
- Less than 50% has actually preformed a resuscitation within the last 6 months or had been presented at a resuscitation.
- All knew that the babies should sleep on their back to avoid Sudden Infant Death Syndrome (SIDS).
- There are a large number of neonatologists on each of the staff of the maternity hospital and working in the ward of the maternity hospital.

Review of the delivery room and direct observation of the care of routine deliveries noted that:

- While bulb suction was available, wall suction was not
- Oxygen was not immediately available
- Radiant Warmers were present in one hospital and those warmer did not provide adequate heat levels
- Wall thermometers were missing
- Incubators were present in 2 hospitals, but neither of them had proper set up for allowing the infant to receive supplemental
- Oxygen while in the incubator

Also noted was that:

- One hospital had bili lights to treat neonatal jaundice by the apparatus and it was difficult to correctly position in relation to the baby
- Only one hospital had blankets loosely over the baby; The other had the baby tightly wrapped papoose style. The baby could not move in this tight wrap.
- In the one hospital where the loose blankets were in use, the physician reported that the mother frequently requested to wrap the baby tightly or they themselves would wrap the baby.
- 12 months ago, the physician reported wrapping the baby in a clear plastic saran wrap light material and placing that under the blanket to maintain body heat in the unheated maternity hospital and wards. FDG with physicians and mother were conducted by 7. ACTS to change this behavior. Health Statistics for Infant and Maternal Mortality in Georgia 1999-2004

7. Neonatal Transport Death Chart Audit

Year	Maternal Mortality per 10,000		Infant Mortality <28days per 10,000		Early Neonatal Mortality <7days per 10,000		Perinatal Mortality per 10,000		# Live births	
	<i>ncdc</i>	<i>sds</i>	<i>ncdc</i>	<i>sds</i>	<i>ncdc</i>	<i>sds</i>	<i>ncdc</i>	<i>sds</i>	<i>ncdc</i>	<i>sds</i>
1999	51.3	22.7	23.4	n/a*	13	n/a*	32.1	n/a*	48,695	46,827
2000	49.2	22.5	21.1	n/a*	12.2	26.0	29.1	n/a*	48,800	46,765
2001	58.2	23.1	20.0	17.7	11.2	n/a	26.4	n/a*	47,459	46,006
2002	46.6	23.6	20.1	18.3	13.6	16.6	28.8	n/a*	46,605	45,033
2003	52.5	24.8	18.5	20.5	12.3	18.4	28.1	n/a*	46,194	44,093
2004	45.3	23.8	18.0	19.3	12.1	16.5	27.1	n/a*	46,512	47,022

Sources:

National Georgia Center for Disease Control (*ncdc*)

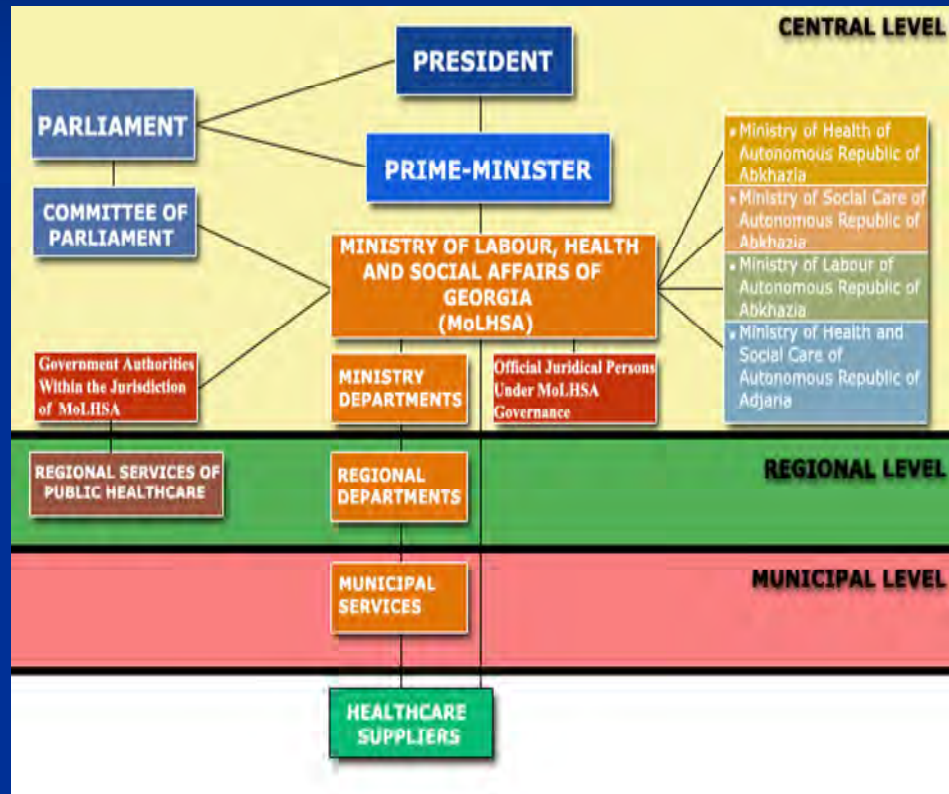
State Department of Statistics (*sds*)

*n/a = data not available

J. Political Structure in Georgia

Home

Structure of Labor Health and Social Affairs System



K. CSP Relevance to Millennium Development Goals

- 1. The Government of Georgia is a signer to the UN Millennium 8 Development Goals.** Goal four is to reduce child mortality and goal 5 is to improve maternal health significantly by 2015. The ACTS Child Survival Program is assisting Government of Georgia to measure and meet these key goals.
- 2. CSP Relevance to USAID Georgia Mission Strategic Priorities.** ACTS CSP goals, program indicators and results are aligned with USAID Georgia Mission plans which are identified as the following strategic objectives (S.O.) and intermediate results (I.R.):

SO 3.4 Increased use of social and health services and changed behavior;
IR 3.4.2 Increased knowledge of health promoting practices;
IR 3.4.3 Improved quality of health services; and
IR 3.4.4 More effective health support system.