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HOPE THROUGH HEALTH

Providing Child Survival Services to Rural and Peri-Urban Populations in Bolivia

MIDTERM EVALUATION REPORT

District 8 of El Alto, Department of La Paz, Bolivia
Montero, Department of Santa Cruz, Bolivia

Submitted to:
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Cooperative Agreement No. HFP-A-00-02-00035-00
Starting Date: October 1, 2002 Completion Date: September 30, 2007

AKNOWLDEGMENTS

The Midterm Evaluation Team Leader would like to thank all members of the CS-18 Project staff for their participation and hard work during the community interviews and assessment phases. Special thanks to the Municipal Health Directorate and DILOS Authorities of El Alto and Montero. Team members made important contributions to this report and their observations and comments were critical to the success of this evaluation.

The MTE team would like to sincerely thank all of the families, neighborhood organizations and volunteer workers that welcomed us and shared their hospitality and ideas. It is hoped that the results of this evaluation will be useful not only in El Alto and Montero but also in other parts of the country and region to develop and improve community-based health programs.

The greater challenge is to learn from the lessons of the past and focus on a clearer vision of a way forward into the future. The CSRA teams are fully up to this challenge. They were enthusiastic, capable, and as ready to learn as they were to share. It was a privilege to be part of this team for a brief time, and I thank them for their hospitality, openness, and insights. The CSRA staff in La Paz, Montero and their local counterparts, form an impressive partnership that is improving the quality and sustainability of health services in an area of great need, and they should be commended for this effort.

LIST OF ACRONYMS

ARU	Hope in Aymara (Esperanza)
BCC	Behavior Change Communication
CAI	Information Analysis Committee
CARE	Cooperative for Assistance and Relief Everywhere, Inc.
CB-IMCI	Community Based Integrated Management of Childhood Illness
CIES	Center for Research, Education and Services (Centro de Investigacion, Educacion y Servicios)
CSRA	Consejo de Salud Rural Andino (Andean Rural Health Care Council)
CBIO	Census-Based Impact Oriented Methodology
CISTEM	Center for Social Research and Work with Multidisciplinary Groups
COTALMA	Breastfeeding Technical Committee (Comité Tecnico de Lactancia Materna)
CPC	Center for Training Programs (Centro de Programas de Capacitacion)
CS	Child Survival
CSRA	Consejo de Salud Rural Andino
CSTS	Child Survival Technical Support Project
CRINN	Integrated Child Rehabilitation Center (Centro de Rehabilitacion Integral Nutritional de Ninos)
DIP	Detailed Implementation Plan
DILOS	Distrito Local de Salud (Local Health District)
DIMUSA	Dirección Municipal de Salud (Municipal Health Directorate)
DDPC	Democratic Development of Citizen's Participation
EPI	Expanded Program for Immunizations
HV	Health Volunteer
IEC	Information, Education and Communication
IMCI	Integrated Management of Childhood Illnesses
KPC	Knowledge, Practices and Coverage
MCH	Municipal Health Council
MOH	Ministry of Health
MSD	Ministry of Health and Sports
NGO	Non-governmental Organization
QAP	Quality Assurance Project
ORPA	Observation, Reflection, Personalization, Adoption
ORS	Oral Rehydration Salts
OTB	Montero's Community-Based Organizations (Organizacion Territorial de Base)
PAHO	Pan American Health Organization
PROPAN	Process for the Promotion of Child Feeding
SNIS	National Health Information and Statistics System
SERES	Servicios Regional de Salud (Regional Health Services)
STI	Sexually Transmitted Infection
SUMI	Seguro Materno Infantil (Maternal Child Health Insurance)
TARI	Talleres Abiertos sobre Reciprocidad e Inter-culturalidad (Open Workshops on Reciprocity and Inter-culturally)
TIPS	Trials of Improved Practices
TT	Tetanus Toxoid
USAID	U.S. Agency for International Development
WHO	World Health Organization

CONTENTS

Providing Child Survival Services to Rural and Peri-Urban Populations in Bolivia

A. SUMMARY

The Curamericas' new entry child survival project provides child survival services to rural and peri-urban populations in Bolivia through Consejo de Salud Rural Andino-CSRA (Andean Rural Health Care Council), its local counterpart. Project activities began on October 1, 2002 and will continue through September 30, 2007. The project's goal is to reduce child and maternal deaths and morbidity by improving maternal, neonatal, and infant health care services in the proposed project areas.

The target areas for the project are two peri-urban sites; District Eight in the municipality of El Alto in the Department of La Paz, and in three neighborhoods of the town of Montero in the Department of Santa Cruz.

The project goals included strengthening the capacity of health volunteers (HVs) through training; increase access to child survival (CS) services through home visit and clinical consultations; increase the demand for health prevention and treatment services through health education; expand the IMCI approach in the district; introduce community maternal and neonatal health care strategies; and increase the capacity of project personnel, municipal governments and the MOH to successfully plan, budget, implement and evaluate sustainable community child survival services.

These interventions are implemented through the Census-Based, Impact-Oriented (CBIO) methodology of primary health care within the communities that are served. The CBIO methodology involves working with communities to establish a census and vital events registry of all community members, analyze the causes of the most common, preventable and treatable illness, as well as design a system for maintaining regular contact with each household. Using this model, the project developed relationships with community leaders and organizations in Montero and El Alto (community groups called OTBs, Neighborhood Boards, educational institutions, and municipal authorities). Community health volunteers conduct preventive health education sessions and gather health data and information about births, deaths and migration.

CSRA Montero carried out the same activities as in El Alto, with some variations that will be pointed out when discussing project interventions and cross cutting issues.

CSRA has strengthened the expanded program of immunizations (EPI) at the service delivery level through the IMCI approach. It has carried out promotional and community mobilization activities. Due to the successful implementation of a wide variety of activities, the full immunization rate has shown a considerable increase in the El Alto project area while the percentage of children with a card has also increased.

Even though the project has made sufficient progress with the immunization objectives at the time of this evaluation, it will require some further changes in strategy or an increase in effort for the immunization intervention for the project to meet optimal immunizations coverage. Specific problems identified during the evaluation are that the MOH (through SERES) is not distributing the necessary amounts of measles and BCG vaccines, and health personnel are penalized when they open a vaccine vial and don't use the full 10 doses for measles and 20 doses for BCG vaccine.

CSRA needs to re-evaluate the manner in which it coordinates EPI with the MOH (through the SEDES and SERES authorities). A joint evaluation of the EPI program will be needed to define next steps, particularly in the case of the immunization campaigns.

It is recommended that the project health centers provide the full immunization schedule, including BCG and measles vaccines, every day at the Senkata health center and at least twice a week at the other health centers which have less patient flow.

The CSRA has strengthened the nutrition and micronutrients component principally through the implementation of the IMCI and CB-IMCI strategies. The MOH's IMCI protocols for both health facility-based and the community were successfully adopted and applied on a regular basis.

All health centers in the project area carry out regular anthropometric measurements and screening of undernourished and high risk children. At the community level, nutrition education is carried out by means of the CB-IMCI strategy. Community based health workers and nursing students apply CB-IMCI and refer underweight or growth faltering children.

Undernourished or growth faltering children enter into a specific program for close monitoring and in some cases are referred to a specialized hospital in El Alto.

Vitamin A and iron folate are administered during regular health center visits to children, lactating mothers and pregnant women. Key messages promoting the use of iodized salt have been provided during home visits and at health facilities.

The percentage of mothers of children who had rapid or difficult breathing and who were taken to a trained health worked has increased in both areas, and the percentage of mothers who recognize danger signs in the newborn has also increased in both areas.

CSRA has successfully implemented diarrhea case management through the implementation of IMCI and CB-IMCI, health promotion through home visits and health education through various means. One particular aspect that needs to be commended is a large health fair organized by CSRA and the Regional Management Unit. During the fair, the health team massively distributed ORS packages and delivered dehydration prevention messages.

All indicators for diarrhea management and use of ORS have surpassed the stated targets at the DIP. The reasons are, as in the case of pneumonia management, a combination of promotional and integrated activities at the health service and community levels. For the hand washing indicator, there was improvement seen in Montero; El Alto did not collect midterm data on this indicator. The Montero team has taken an interesting and practical approach to increase hand-washing with soap. In close coordination with school students, parents, teachers and neighborhood authorities, an aggressive campaign was launched during which more than 200 students per year distributed leaflets and soap in all households. The soap was wrapped in a small net to be hung, so it would be exclusively used for hand washing. In Montero, the hand-washing indicator has gone from 3.5% to 40.9%.

The levels of coverage for the maternal care objectives are moving in a positive direction, toward the stated goal, as the percentage of deliveries attended by trained personnel have increased.

However, there is a very large confidence interval, meaning that the changes observed could be due to chance or the design effect. There is great deal of attention on prenatal care services and not enough on the delivery and management of obstetrical complications.

Health staff and volunteers reported that in El Alto there have been problems with referring pregnant women to deliver in one of the referral hospitals. El Alto has three referral hospitals, the Holandés Hospital, Los Andes Hospital and the Korea Hospital, which serve the entire area of El Alto which has an approximate population of 800,000 inhabitants. The hospitals are overcrowded and often women deliver in the hallways or on stretchers.

The project has been promoting institutional delivery, but District 8 does not have the capacity to meet the increasing demand for obstetrical services.

B. ASSESSMENT OF THE PROGRESS MADE TOWARD ACHIEVEMENT OF PROGRAM OBJECTIVES

1. Technical Approach

a. Brief Overview of the Project

The Curamericas' new entry Child Survival Project is *Providing Child Survival Services to Rural and Peri-Urban Populations in Bolivia*. Project activities began on October 1, 2002 and will continue through September 30, 2007. The project's goal is to reduce child and maternal morbidity and death by improving maternal, neonatal, and infant health care services in the proposed project areas. Curamericas works with the local Bolivian NGO, Consejo de Salud Rural Andino (CSRA). CSRA originally was the local arm of Andean Rural Health Care (now known as Curamericas), supervised directly by the US headquarters office in North Carolina. In 1995, CSRA was incorporated legally in Bolivia with its own board of directors and nonprofit statutes. Although both organizations remain close, the organizations are legally separate and CSRA is accountable directly to its board of directors. CSRA has a central office in La Paz, the Bolivian legislative capital.

The target areas for the project are peri-urban sites in the municipality of Montero (Obispo Santistevan Province, Santa Cruz department) and El Alto's District Eight (Murillo Province, La Paz department), which include the neighborhood of Senkata. Currently, Montero's three active health centers, Villa Cochabamba, Cruz Roja and CLEM serve 4,044 households in adjacent communities and each offers a variety of health services that include basic maternal and child health, laboratory facilities and a pharmacy.

The primary causes of death and morbidity among preschool children include pneumonia, diarrhea, malnutrition, asphyxia, and sepsis. Pre-eclampsia, hemorrhage, and infections are primary causes of death among women of reproductive age. Bolivia is second only to Haiti in the Western Hemisphere in terms of mortality of children under five years of age. The national under-five mortality rate for Bolivia is 80 per 1,000 live births and the infant mortality rate is 67 per 1,000 live births. The national maternal mortality rate is 390 per 100,000 live births.

Program Site Population by Target Groups (2002)

Target Group	Montero	El Alto (District #8)	Total
Infants 0 – 11 months	619	890	1,509
Children 12 – 23 months	723	926	1,649
Children 24 – 59 months	2,244	2,979	5,223
Women of Reproductive age (15-49 years)	6,989	9,592	16,581
Total Direct Beneficiaries	10,575	14,387	24,962
Other Indirect Beneficiaries	16,261	21,187	37,448
Total Population	26,836	35,574	62,410

Sources: *National Institute of Statistics* 2002 for El Alto
Actual Census Data 2001 and 2002 for Montero (Villa Cochabamba and Cruz Roja year 2001; and Clem year 2002).

The project goals include strengthening the capacity of community health volunteers (HVs) through training, and increasing access to child survival (CS) services through home visits and clinical consultations; increasing demand for health prevention and treatment services through health education, the Integrated Management of Childhood Illnesses (IMCI) approach, and community maternal and neonatal health care strategies; and increasing the capacity of project personnel, municipal governments and the MOH to successfully plan, budget, implement and evaluate sustainable community child survival services.

These interventions are implemented through the census-based, impact-oriented (CBIO) methodology of primary health care within the communities that will be served. The CBIO methodology ensures that all beneficiaries are contacted on a routine basis. Community health volunteers conduct preventive health education sessions and gather health data and information about births, deaths and migration. This process ensures that health care is available to even the most remote homes and information is available to prevent and treat the most common causes of sickness and death.

The second project strategy is to implement IMCI and community-based IMCI (CB-IMCI) within the program areas. CB-IMCI complements the CBIO methodology and strengthens the capacities of communities to recognize, treat and prevent common childhood illnesses including malnutrition, pneumonia, and diarrhea. The IMCI strategy will be bolstered with the introduction of an intercultural program that improves the attitudes, practices and relationships of health personnel, traditional healers and local authorities.

The project is improving neonatal and maternal health outcomes by strengthening HVs, communities, and mothers to prepare and plan for pregnancies. Strategies include increasing access to maternal health and safe delivery services, improving community identification of obstetric emergencies, increasing the maternal and neonatal health skills of HVs, and providing postnatal and newborn care in the household and in the clinic.

Curamericas and CSRA have implemented primary health care activities since 1983 and currently are working in two municipalities in Bolivia. In the project sites (El Alto and Montero), CSRA personnel include the project site directors, nurses, auxiliary nurses and administrative and financial support staff. Curamericas and CSRA work with the local municipalities and MOH health districts to co-administer the local primary health care system whose staff includes physicians, nurses, auxiliary nurses and HVs.

Progress Towards Achievement of Program Objectives:

INDICATORS	REGIONS	% KPC Baseline	% KPC MTE	% Change*
Percentage of infants who showed his/her immunization card	Project	67.50%	86.67%	**19.17**
	El Alto	55.13%	70.18%	**15.04**
	Montero	79.82%	97.66%	**17.84**
Percent of children 0 - 12 months of age who were breastfed one hour alter delivery	Project	46.02%	58.55%	**12.53**
	El Alto	38.60%	52.68%	**14.08**
	Montero	53.57%	62.58%	**9.01**
Percent of children 12 - 23 months of age with BCG	Project	91.23%	97.98%	**6.75**
	El Alto	81.91%	95.00%	**13.09**
	Montero	97.76%	99.40%	**1.64**
Percent of children 12 - 23 months of age with OPV3	Project	78.07%	93.52%	**15.45**
	El Alto	59.57%	86.25%	**26.68**
	Montero	91.04%	97.01%	**5.96**
Percent of children 12 - 23 months of age with Pentavalente 1	Project	94.30%	93.52%	**-0.78**
	El Alto	89.36%	100.00%	**10.64**
	Montero	97.76%	99.40%	**1.64**
Percentage of children age 12-23 months who received a measles vaccine	Project	58.77%	83.00%	**24.22**
	El Alto	38.30%	70.00%	**31.70**
	Montero	73.13%	89.22%	**16.09**
Percentage of children age 12-23 months who are fully vaccinated (against the five vaccine-preventable diseases) before the 13 month birthday	Project	33.33%	48.18%	**14.84**
	El Alto	18.09%	20.00%	**1.91**
	Montero	44.03%	61.68%	**17.65**
Percent of children 12-23 month of age with full immunization coverage	Project	51.75%	78.54%	**26.79**
	El Alto	29.79%	63.75%	**33.96**
	Montero	67.16%	85.63%	**18.46**
Percent of children 0 - 23 months of age who had diarrhea and received ORS and/or other recommended liquids	Project	42.69%	90.22%	**47.53**
	El Alto	36.54%	89.58%	**53.04**
	Montero	46.79%	90.56%	**43.76**
Percent of children 0-23 months of age with diarrhea who received the same of more liquids	Project	45.38%	87.68%	**42.30**
	El Alto	40.38%	73.96%	**33.57**
	Montero	48.72%	95.00%	**46.28**
Percent of children 0 - 23 months of age who had fast and difficult breathing who were attended by a trained health worker	Project	37.61%	85.78%	**48.17**
	El Alto	41.03%	87.93%	**46.91**
	Montero	29.03%	84.97%	**55.94**
Percentage of children age 0-23 months who were born at least 24 months after the previous surviving child	Project	32.92%	73.32%	**40.40**
	El Alto	35.15%	79.29%	**44.14**
	Montero	30.52%	69.23%	**38.71**
Percent of mother of children 0 - 23 months of age who received at least one prenatal check up on last pregnancy	Project	79.21%	90.35%	**11.14**
	El Alto	66.86%	80.26%	**13.40**
	Montero	91.52%	97.08%	**5.56**
Percent of mothers of children 0 - 23 months of age who received orientation during last pregnancy	Project	62.11%	77.72%	**15.61**
	El Alto	62.72%	75.88%	**13.16**
	Montero	61.66%	78.95%	**17.29**
Percentage of mothers of children age 0-23 months who received at least two tetanus toxoid injections before the birth of their youngest child	Project	69.40%	60.96%	**-8.43**
	El Alto	56.60%	60.96%	**4.37**
	Montero	82.16%	S/D	
Percentage of children age 0-23 months whose	Project	67.50%	77.02%	**9.52**

births were attended by skilled health personnel	El Alto	46.63%	51.75%	**5.13**
	Montero	88.30%	93.86%	**5.56**
Percent of mothers of children 0 - 23 months of age who received Vitamin A in the post-partum period in last pregnancy	Project	21.38%	60.23%	**38.86**
	El Alto	17.60%	S/D	
	Montero	25.15%	60.23%	**35.09**
Percent of mothers of children 0 - 23 months of age who recognize at least two signs of danger of the newborn	Project	7.17%	25.96%	**18.79**
	El Alto	7.62%	26.32%	**18.69**
	Montero	6.73%	25.73%	**19.01**
Percent of mothers of children 0 - 23 months of age who mentioned at least two signs of danger during post-partum period	Project	4.25%	28.07%	**23.82**
	El Alto	3.23%	21.93%	**18.70**
	Montero	5.26%	32.16%	**26.90**
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	Project	4.39%	40.94%	**36.54**
	El Alto	5.28%	S/D	
	Montero	3.51%	40.94%	**37.43**
*** The change is calculated relative to the baseline value and then the movement towards or away (-) from the objective**				
S/D This indicator was not measured on MTE by request of the Health Region Management Unit. The reasons are because the indicator showed an acceptable percentage and because the HRMU did not carry out specific activities for this indicators				

b. Progress Report by Intervention Area.

CSRA has successfully worked with the El Alto Municipal Health Directorate (DIMUSA), the Sub-Municipality of District 8, the El Alto Regional Health Directorate (SERES), the Health Network Management Unit (HRMU) for District 8, and the Neighborhood Boards ("Juntas Vecinales"). CSRA has initiated and implemented a co-participatory management scheme between municipal authorities and CSRA, which also included contracting CSRA's services to expand the health system in District 8 of El Alto (see more under the Sustainability Strategies heading). CSRA has successfully implemented its Census-Based, Impact-Oriented (CBIO) methodology, although not in all neighborhoods of District 8. It has constructed, equipped and staffed the Senkata health center with volunteer construction teams provided by Curamericas and funds from the El Alto Municipality. CSRA's administration of health services have been expanded into the health centers of Ünificada Potosi" and "31 de Octubre." CSRA has successfully coordinated with CARE, the Nursing Schools of the Catholic University of Pucarani, The Public University of El Alto, University XX Century and the Berlin Institute.

CSRA has implemented IMCI and CB-IMCI by means of integrating and expanding child health services at health facilities and the community, and has provided a basic package of reproductive health services. It carried out a Health Facility Assessment (HFA) prior to IMCI implementation.

In Montero, CSRA has expanded child and health services into the Villa Cochabamba and CLEM Health Centers and signed an agreement with the Santa Cruz Red Cross to assume full responsibility of their health center, covering in total three neighborhoods of Montero.

CSRA Montero carried out the same activities as in El Alto, with some variations that will be pointed out when discussing project interventions and cross cutting issues.

(i) Immunizations

Objectives: Increase the number of children age 12 to 23 months with complete vaccination coverage; Indicator #1 – Percent of children 12 to 23 months of age who are fully immunized ***before 13 months of age***

Percent effort: 10%

Strategies/Activities:

- *Household*: Reach isolated children by mobile team serviced by doctor, nurse and technician. Use child health register to systematically and routinely follow-up children who have not received all doses. Educate mothers and fathers about the importance of vaccinations.
- *Community*: Community education and promotion of immunization services. Plan and promote EPI in neighborhoods.
- *Health Facility*: EPI activities promoted in the facilities.
- *District*: Coordinate with Neighborhood Boards to conduct promotional activities in the neighborhoods, promotion at schools and youth centers.

Evaluation/observations:

CSRA has strengthened the Expanded Program of Immunizations (EPI) at the service delivery level through the IMCI approach. It has carried out promotional and community mobilization activities. The project has strengthened the EPI cold chain; it has institutionalized daily immunizations of children and pregnant women with the exception of BCG and measles vaccines (given weekly). It has also assisted the immunization campaigns organized by the SERES (Regional Health Services Directorate) in both areas (El Alto and Montero) by means of promotion and logistic support.

The project has widely trained and disseminated the IMCI approach at the health service and community levels. Nursing students and HVs use the Community IMCI protocol in Montero during home visits, review the children's immunization cards, provide education on the immunization schedule, and refer children who are due for vaccines.

The baseline health facility assessment took place in the three health centers in Montero and at the Senkata Health Center in District 8 (March 2003). The results showed that only 10% of the health centers and health facilities had the basic materials and equipment to carry out EPI, except in Villa Cochabamba in Montero, basically because CLEM and Senkata were recently implemented. Some of the health centers did not have enough ice packages and refrigerators were not working properly. Furthermore, some of the refrigerators did not have a temperature control form at the fridge door. The assessment also found that there were insufficient vaccination forms and immunization cards. Although the health facilities appear to have improved infrastructure and procedures, there has not been a follow-up health facility assessment to confirm this. However, in both regions, the project is monitoring the supplies for the cold chain every three months at each health center. In Montero, the project has implemented a process of shared supervision, by which each health center conducts periodic supervision of another health center within the same health network. This supervision assures the availability and quality of all cold chain supplies (such as cotton,

alcohol, etc.) and equipment (refrigerators, thermos, etc.), as well as temperature monitoring.

Given the successful implementation of a wide variety of activities, the full immunization rate has showed a considerable increase in the El Alto project area from 29.8% to 63.8% (statistically significant), while the percentage of children with a card has increased from 55.1% to 70.2% (statistically significant).

The full immunization coverage before children reached 13 months month of age (modified indicators to adjust to the national norms) has increased from 33.3% to 48.2%. It should be pointed out, however, that the national EPI norms provides measles vaccine to children 12-23 months of age, therefore, when calculating who received measles vaccine before 13 months of age, it only captures a one month period for completing the EPI schedule. Thus, when considering measles coverage alone from 12 to 23 months of age, the indicator increases from 51.8% to 78.5% in both areas.

The immunization indicators are presented in the following table:

Nº	Indicators	Regions	Target	Baseline (Jan, 2003)			MTE (Oct, 2004)		
				%	Confidence Intervals		%	Confidence Intervals	
1	Percentage of infants who showed his/her immunization card *	Both Areas	S/M	**67.5%**	64.0%	71.0%	**86.7%**	82.7%	90.6%
		El Alto	S/M	**55.1%**	49.9%	60.4%	**70.2%**	61.8%	78.6%
		Montero	S/M	**79.8%**	75.6%	84.1%	**97.7%**	95.4%	99.9%
7	Percent of children 12 - 23 months of age with BCG	Both Areas	S/M	**91.2%**	87.6%	94.9%	**98.0%**	96.2%	99.7%
		El Alto	S/M	**81.9%**	74.1%	89.7%	**95.0%**	90.2%	99.8%
		Montero	S/M	**97.8%**	95.3%	100.3%	**99.4%**	98.2%	100.6%
8	Percent of children 12 - 23 months of age with OPV3	Both Areas	S/M	**78.1%**	72.7%	83.4%	**93.5%**	90.5%	96.6%
		El Alto	S/M	**59.6%**	49.7%	69.5%	**86.3%**	78.7%	93.8%
		Montero	S/M	**91.0%**	86.2%	95.9%	**97.0%**	94.4%	99.6%
9	Percent of children 12 - 23 months of age with Pentavalente 1	Both Areas	S/M	**94.3%**	91.3%	97.3%	**93.5%**	90.5%	96.6%
		El Alto	S/M	**89.4%**	83.1%	95.6%	**100.0%**	100.0%	100.0%
		Montero	S/M	**97.8%**	95.3%	100.3%	**99.4%**	98.2%	100.6%
10	Percentage of children age 12-23 months who received a measles vaccine	Both Areas	S/M	**58.8%**	52.4%	65.2%	**83.0%**	78.3%	87.7%
		El Alto	S/M	**38.3%**	28.5%	48.1%	**70.0%**	60.0%	80.0%
		Montero	S/M	**73.1%**	65.6%	80.6%	**89.2%**	84.5%	93.9%
11	Percentage of children age 12-23 months who are fully vaccinated (against the five vaccine-preventable diseases) before the 13 month birthday	Both Areas	55.0%	**33.3%**	27.2%	39.5%	**48.2%**	41.9%	54.4%
		El Alto	40.0%	**18.1%**	10.3%	25.9%	**20.0%**	11.2%	28.8%
		Montero	70.0%	**44.0%**	35.6%	52.4%	**61.7%**	54.3%	69.1%
12	Percent of children 12-23 month of age with full immunization coverage	Both Areas	S/M	**51.8%**	45.3%	58.2%	**78.5%**	73.4%	83.7%
		El Alto	S/M	**29.8%**	20.5%	39.0%	**63.8%**	53.2%	74.3%
		Montero	S/M	**67.2%**	59.2%	75.1%	**85.6%**	80.3%	90.9%

Grid areas represent indicators modified by the Project to capture the national norms

The baseline sample was children 0-23 months, while the midterm KPC sample was children 12-23 months.

S/D This indicator was not measured on MTE by request of the Health Region Management Unit. The reasons are because the indicator showed an acceptable percentage and because the HRMU did not carry out specific activities for this indicator

S/M Target was not established because the data was only to report the CS program on key indicators

Even though the project has made sufficient progress with the immunization objectives at the time of this evaluation, it will require further changes in strategy or an increase in effort for the immunization intervention for the project to meet optimal immunizations coverage.

Specific problems identified during the evaluation are presented below:

1. The MOH (through SERES) is distributing limited amounts of measles and BCG vaccines. Health centers are penalized when they open a vaccine vial and don't use the 10 doses for measles and 20 doses for BCG vaccine. Thus, health centers provide BCG and measles vaccines only one day a week, which is causing an increase in the number of missed opportunities. Also, the MOH does not adjust the number of vaccine vials per health center according to the increasing demand.
2. The one day schedule for BCG and measles vaccine is not the same at all health centers within the project area, causing confusion and misinformation among the population.
3. A gap is observed when comparing the indicators of immunization access and full immunization coverage, meaning that access to immunization is good, but there is a problem completing the immunization schedule. Approximately 30% of the population is not reaching the immunization sites. In addition, completing the immunization schedule is hindered by the lack of daily access to two important vaccines, measles and BCG.
4. Most neighborhoods within District 8 are still without the CBIO methodology, so home visits and intensive immunization promotion has not reached the entire target population in District 8.
5. The immunization campaigns carried out directly by SERES and SEDES (Regional and Departmental Health Authorities) have produced a negative reaction among the population. During the MTE interviews, community leaders (Neighborhood Boards and HVs) reported that community members observed that after campaigns children presented abscesses at the site of injection, excess pain on the upper leg or leg numbness. The evaluators do not know whether those are isolated cases and rumors or if it is a real problem. Moreover, almost all of the time, campaigns are carried out without informing and involving local authorities, and often times local health staff are not informed either.
6. A formal evaluation of the vaccination process has never taken place during the life of the project. Without an examination of the cold chain, the quality of this intervention at the health service and the immunization campaigns will remain in question.
7. The SEDES and SERES are placing a great deal of emphasis on immunization campaigns while losing focus on maintaining or improving coverage rate at service delivery points. The resources put into IMCI and CB-IMCI have the potential to improve this intervention in the long run if there is a good monitoring of EPI.
8. In Montero, immunization coverage is much higher for all vaccines. One strategy that has contributed to those results is "rapid monitoring," which involves health personnel surveying areas that have not received regular home visits or where there is a lot of migration, to verify real vaccine coverage. Due to these results, vaccine campaigns are conducted in areas that have less than 95% vaccination coverage. However, shortages in BCG, measles and yellow fever vaccines are the same as in El Alto. Health teams have been "borrowing" vials from other health centers to diminish the loss, but the quality of the vaccine after so many transfers remains in question.

Next Steps/Recommendations:

1. The promotional activities and barrier analysis proposed in the DIP were not carried out, principally because the project needs to assure EPI access to all vaccines before increasing promotional activities and the identification of barriers among the target population.
2. CSRA needs to re-evaluate the manner in which it coordinates EPI with the MOH (through the SEDES and SERES authorities). A joint evaluation of the EPI program will be needed to define next steps, particularly in the case of the immunization campaigns.
3. It is recommended that the project health centers provide the full immunization schedule, including BCG and measles vaccines, every day at the Senkata health center and at least twice a week at the other health centers which have less patient flow. On immunization days visible signs must be displayed at the entrance of the HCs. Vaccination days should be programmed for the same days in all health facilities in District 8, or even in the entire city of El Alto, so families would know in a consistent manner when the vaccines are available. The El Alto SERES has a coordinating mechanism among district level authorities and NGOs working in the city, so it would be a matter of informing and agreeing among interested parties.
4. The SEDES and SERES need to provide the necessary amount of vaccine vials, and accept a reasonable amount of vaccine dose losses if not enough children come for vaccines. This procedure is mandatory according to the national EPI guidelines, but is not currently fulfilled by the SERES
5. Community leaders and communities need to be fully informed about SEDES and SERES activities and learn about evaluation results. In the case of bad injection application rumors or facts, a full explanation needs to be delivered to minimize the negative effect that has already been caused among communities.
6. The quality of data used in decision making and the manner in which coverage rates are examined is key to assisting the SERES and Regional Management Unit personnel. The CBIO methodology has proven to work in some of the neighborhoods, so the projects needs to scale up to cover the entire district or devise alternative strategies for the remaining time of the project.
9. A revision of their original agreement among SERES, DIMUSA and CSRA would be appropriate based on this mid-term evaluation. It is further recommended that any new agreement demand outcomes that are tied to project objectives in order to maintain progress and monitor impact from the assistance provided. It should be possible to adapt the relationship to be more stringent in the examination of outcomes, while continuing to maintain the excellent relationship that CSRA has developed with its counterparts.

(ii) Nutrition and Micronutrients

Objectives:

- Objective #1: Improve the nutritional status of young children. Indicator #1 – Percent of children 0 to 23 months of age who are below two standard deviations from the median weight for age.
- Objective #2: Increase the proportion of children 0 to 12 months who are immediately breastfed (during the first hour of birth). Indicator #2 – Percent of children 0 to 12 months of age who were breastfed with the first hour after birth.
- Objective #3: Increase the proportion of children 6 to 23 months of age who receive vitamin A supplements. Indicator #3 – Percent of children 6 to 23 months of age who received vitamin A supplements in the last 6 months.

Percent effort: 25%

Strategies/Activities:

- *Household*: Trainings in community IMCI. Training of health volunteers. Growth monitoring and nutritional counseling during home visits. Surveillance activities during collection of vital event data during home visits. Follow-up activities on severe cases of malnutrition using individualized plans conducted every 15 days; Nutritional counseling during home visits. Implement Birth Plans with technical assistance from CARE;
- *Community:* Use of Positive Deviance and TIPS methodology for complementary feeding practices. Coordinate health education activities with CRECER (NGO associated with Freedom from Hunger) during village banking meetings. Establish a mobile team of 2 to 3 persons to conduct home visits and attend community events. Establish a referral system including an information system with agreements for referring severe cases to local reference hospitals. Education of mothers and other family members during women's meetings and educational activities in schools and colleges. Promotional campaigns via mass media (community broadcasts, radio spots and health fairs). Standardize a nutritional counseling protocol for health team and develop individual counseling plans. Participate in MOH vaccination campaigns.
- *Health Facility*: Standardize a nutritional counseling protocol for health team and develop individual plans. Regular vitamin A dosing during clinic visits.
- *District*: Coordinate with second level hospitals to organize training activities for health personnel. Coordinate with the MOH to assure the timely supply of vitamin A supplements for all centers and home visits.

Evaluation/observations:

CSRA has strengthened the nutrition and micronutrients component principally through the implementation of the IMCI and CB-IMCI strategies. The MOH's IMCI protocols for both health facility-based and the community were successfully adopted and applied on a regular basis.

All health centers in the project area carry out regular anthropometric measurements and screening of undernourished and high risk children. At the community level, nutrition education is carried out by means of the CB-IMCI strategy. Community based health

workers and nurse students apply CB-IMCI and refer underweight or growth faltering children.

Undernourished or growth faltering children enter into a specific program for close monitoring and in some cases are referred to a specialized hospital in El Alto.

Vitamin A and iron folate are administered during regular visits to health centers to children, lactating mothers and pregnant women.

The nutrition indicator measured during the MTE is presented in the following table:

Nº	Indicators	Regions	Target	Baseline (Jan, 2003)			MTE (Oct, 2004)		
				%	Confidence Intervals		%	Confidence Intervals	
5	Percent of children 0 - 12 months of age who were breastfed one tour alter delivery	All Project	5%	**46%**	40.7%	51.3%	**58.5%**	52.7%	54.4 %
		El Alto	67.5%	**38.6%**	31.3%	45.9%	**52.7%**	43.4%	61.9 %
		Montero	67.5%	**53.6%**	46.0%	61.1%	**62.6%**	55.1%	70.0 %
	Grid areas represent indicators modified by the Project to capture the national norms								
****** This indicators was not collected for the MTE survey due to lack of time, and because it is not a requirement for this evaluation.									
S/D This indicator was not measured on MTE by request of the Health Region Management Unit. The reasons are because the indicator showed an acceptable percentage and because the HRMU did not carry out specific activities for this indicators									
S/M Target was not established because the data was only to report the CS program on key indicators.									

Specific problems identified during the evaluation are presented below:

1. The Positive Deviance approach has not been implemented by the project, mainly because the method has been excluded from the DIP based on recommendations from Juan Carlos Alegre, DIP reviewer, since PD/Hearth is not recommended in sites that have less than a 30% rate of malnutrition.
2. When the external evaluator observed how anthropometric measurements were taken at the Senkata health center, (although only few observations were made) he noticed a number of errors and biases: (1) Children were weighed with almost all clothes on, only few items were removed, i.e., shoes and jackets; (2) Calibration of the anthropometric tools was not done in a regular basis; (3) The scale had a cloth to avoid the scale's cold surface, but this was not factored into the results; and (4) The room was cold and overcrowded, and nurses and nurse auxiliaries performed a variety of activities there, including the application of the IMCI protocol.
3. During the same observations, the orientation given to mothers was limited to few messages like "give him/her more foods" or "he/she is doing okay."
4. Despite those errors, health staff screened and classified children by their nutritional status as "severe under-nutrition, moderate under-nutrition or normal," which served to establish whether they received follow-up visits at the families' homes.
5. The entire nutrition approach (i.e., home visits, referrals and counseling) is based on the anthropometric measurements. The filing systems at the health centers of both El Alto and Montero are based on colors given by the nutritional status of children. The

orientation given to the "normal" children is limited to a brief message about whether he/she is doing okay.

6. During interviews with HVs in Montero, they mentioned that weights were taken at the home and entered into the children's growth monitoring card, but when asked about what specific counseling were given to the mother, it only involved delivering some standard messages.
7. The survey indicator for early breastfeeding (within one hour after delivery) has increased from 38.6% to 52.7% in El Alto. The other nutrition indicators were not measured for the MTE.

Next Steps/Recommendations:

1. Review and, if necessary, revise the nutrition approach. The main focus of the nutrition intervention should be based on promoting the key nutritional practices according to the child's age; looking at the current practices of the mother or caretaker, and focusing the counseling on what is feasible for the family to provide to the child based on the availability of food items affordable for the home. Probably a full counseling session is not possible given the patient flow at the health centers, so other strategies will have to be devised to appropriately deliver nutrition messages based on malnutrition prevention, as opposed to only following up those classified as undernourished.
2. The current weighing sessions at the health centers are taking great deal of time for the health provider and the mother, and the anthropometric measurements are apparently biased, hence they are not good for follow up or for screening children for home-visits and referral. The team needs to reassess whether the weighing sessions need to be adjusted to provide the required information, or the team can go directly to counseling based on the mothers and/or caretakers nutritional practices without taking anthropometric measurements.
3. Weighing and counseling at the household level, mainly in the case of Montero, could provide enough time for quality counseling, if HVs are trained properly and have a specific protocol to follow.
4. In the case of El Alto, other instances must be found to provide quality counseling. Maybe at the end of the medical consultation, groups of 3-5 mothers can go to a separate room to receive proper nutrition counseling, also based on a specific protocol and based on nutritional practices and available food items in the home.
5. The strategy for addressing micronutrients needs further development and evaluation. Plans in the DIP concentrate on the provision of iron supplements but there is no discussion of how the cause of the anemia will be identified (different causes require different interventions) nor is there discussion of how compliance will be ensured. Compliance issues surrounding iron supplements are not trivial and without good compliance blood iron levels will not be improved. It is recommended that the project consider outside support to properly develop this intervention.

(iii) Acute Respiratory Infection/Pneumonia Control

Objective: Improve care seeking practices of mothers of young children with signs of pneumonia. Indicator: Percent of children 0 to 23 months of age who received treatment from trained health personnel when they had cough and rapid/difficult breathing.

Percent effort: 20%

Strategies/Activities:

- *Household*: Trainings in community IMCI for HVs and nursing students. Prioritize key educational messages for home visits. Surveillance activities during collection of vital events data.
- *Community:* Coordinate health education activities with CRECER during village banking meetings. Promotional activities using radio spots.
- *Health Facility*: Training in clinical IMCI. Ensure that essential drugs and supplies are available at the center. Implement the IMCI supervision system.
- *District*: Design a referral system with the reference hospital and obtain a formal agreement.

Evaluation/observations:
As with the rest of the other interventions, IMCI and CB-IMCI were crucial for the implementation of this intervention at the health facility and community levels.

The percentage of mothers of children who had rapid or difficult breathing and who were taken to a trained health worked increased from 37.6% to 85.8% (both areas), and the percentage of mothers who recognize danger signs in the newborn increased from 7.2% to 26% (both areas). The clinical level of IMCI served to improve and standardize services provided by the health providers at health centers and to strengthen counseling.

The HVs and nursing students played an important role by visiting families and providing key messages during home visits (see more on training and capacity building efforts). CB-IMCI also served to train community volunteers and mothers to recognize the signs of a child in need of antibiotic treatment for pneumonia. CSRA had a cadre of at least 100 nursing students from the Catholic University and others, who were trained and expanded the work at the community level; they carried out home visits and educated mothers and families on an approach called ORPA (Observation, Examination, Personalization and Action). ORPA was also used at health facilities during counseling to mothers and families.

Health facilities pharmacies improved access of families to the needed treatment.

CSRA staff, HVs and nursing students carried out effective follow-up visits to patients that were diagnosed with pneumonia. A treatment was considered successful if, in the reassessment visit, the child did not display a danger sign. In addition, community workers reinforced education of mothers and families.

The pneumonia control indicators are presented in the following table:

Nº	Indicators	Regions	Target	Baseline (Jan, 2003)			MTE (Oct, 2004)		
				%	Confidence Intervals		%	Confidence Intervals	
13	% of mothers of children 0 - 23 months of age who recognize at least 2 signs of danger that indicate treatment	All Project	40.5%	**29.1%**	25.7%	32.5%	**S/D**		
		El Alto	36.0%	**24.0%**	19.5%	28.6%	**S/D**		
		Montero	45.0%	**34.2%**	29.2%	39.2%	**S/D**		
18	% of children 0 - 23 months of age who had rapid or difficult breathing who were assisted by a trained health personnel	All Project	49.0%	**37.6%**	28.5%	46.7%	**85.8%**	81.1%	90.5%
		El Alto	55.0%	**41.0%**	30.1%	51.9%	**87.9%**	79.5%	96.3%
		Montero	43.0%	**29.0%**	13.1%	45.0%	**85.0%**	79.3%	90.6%
25	% of mothers 0 - 23 months of age who know at least 2 signs of danger of the newborn	All Project	37.5%	**7.2%**	5.2%	9.1%	**26.0%**	22.4%	29.6%
		El Alto	30.0%	**7.6%**	4.8%	10.4%	**26.3%**	20.6%	32.0%
		Montero	45.0%	**6.7%**	4.1%	9.4%	**25.7%**	21.1%	30.4%
	Grid areas represent indicators modified by the Project to capture the national norms								

S/D This indicator was not measured on MTE by request of the Health Region Management Unit. The reasons are because the indicator showed an acceptable percentage and because the HRMU did not carry out specific activities for this indicators

The target established for this intervention has been surpassed. The reason is probably a combination of the health facility and community activities.

Next Steps/Recommendations:

1. The project should maintain and expand the IMCI and CB-IMCI strategies. In close collaboration with the nursing schools, CSRA needs to develop a comprehensive training curricula and work plan to integrate the increasing number of nursing students who will continue to work under the CSRA project. The students are an extremely useful resource, but careful planning will be crucial for the successful implementation of the project interventions. On the other hand, the schools of nursing also need to strengthen their training curricula to include key elements of the project, so the students' rotations through the project would not only be beneficial for the project, but for their own formation as public health nurses.
2. Nursing students are good for community work, and less useful at the service delivery level, since they are not ready to undertake clinical work. Clinical level IMCI is designed for fully-trained health personnel, who can assess and manage a child with pneumonia.
3. The Health Volunteers have played a role in the CB-IMCI implementation, but turn over of volunteer personnel is high in El Alto. During interviews with HVs in District 8, it was found that the average length of stay is only 18 months. The number of households they visit is limited, and because it is a part-time job and they do not receive any payment, they leave when offered a paid job. Thus, the project needs to calculate the cost of forming HVs and the benefits of dealing with such workers.

(iv) Control of Diarrheal Diseases

Objectives:

- Objective #1: Improve diarrhea case management in young children; Indicator #1 – Percent of children 0 to 23 months of age who were offered equal or greater quantities of solid foods during an episode of diarrhea in the past two weeks;
- Objective #2: Improve diarrhea case management in young children; Indicator #2 – Percent of children 0 to 23 months of age with diarrhea in the last two weeks who received ORS and/or recommended home fluids;
- Objective #3: Improved hygiene practices in mothers of young children in order to decrease diarrheal prevalence; Indicator #3 – Percent of mothers who usually wash their hands with soap and water before food preparation, before feeding children, after defecation and after attending to a child who has defecated;

Percent effort: 20%

Strategies/Activities:

- *Household*: Trainings in community IMCI for HVs and nursing students. Educate and train caretakers about danger signs and key messages during home visits. Prioritize key educational messages during home visits that focus on the newborn.
- *Community*: Hands-on learning methods to teach preparation of complementary foods will be demonstrated at community meetings and mother's club meetings. Coordinate activities with CRECER during village banking meetings. ORS preparation practices will be demonstrated at community meetings and mother's club meetings. Training in clinical IMCI. Have traditional health services at the center in El Alto participate in community IMCI training. Use of practical hands-on learning methods to illustrate proper hand washing practices will be demonstrated at community meetings and mother's club meeting. Promotional activities using mass media such as broadcasts, local health fairs and announcements in the health center.
- *Health Facility*: Training in clinical IMCI.
- *District*: Formalize institutional coordination so that health personnel can incorporate key messages in community meetings held by local government authorities; Coordinate with teachers to include key educational messages in school activities.

Evaluation/observations:

CSRA has successfully implemented diarrhea case management through the implementation of IMCI and CB-IMCI, health promotion through home visits and health education through various means. One particular aspect that needs to be commended is a large health fair organized by CSRA and the Regional Management Unit in El Alto. During the fair, the health team massively distributed ORS packages and delivered dehydration prevention messages.

The diarrhea control indicators are presented in the following table

Nº	Indicators	Regions	Target	Baseline (Jan, 2003)			MTE (Oct, 2004)		
				%	Confidence Intervals		%	Confidence Intervals	
14	% of children 0 - 23 months of age with diarrhea who received ORS and/or other recommended home liquids	All Project	65.0%	**42.7%**	36.7%	48.7%	**90.2%**	86.7%	93.7%
		El Alto	60.0%	**36.5%**	27.3%	45.8%	**89.6%**	83.5%	95.7%
		Montero	70.0%	**46.8%**	39.0%	54.6%	**90.6%**	86.3%	94.8%
15	% of children 0 - 23 months of age with diarrhea who received more liquids and continue feeding during diarrhea episode.	All Project	65.0%	**47.5%**	35.0%	60.1%	**S/D**		
		El Alto	60.0%	**52.2%**	31.8%	72.6%	**S/D**		
		Montero	70.0%	**44.7%**	28.9%	60.5%	**S/D**		
16	% of children 0 - 23 months of age with diarrhea who received equal or more liquids during the diarrhea episode.	All Project	S/M	**45.4%**	39.3%	51.4%	**87.7%**	83.8%	91.6%
		El Alto	S/M	**40.4%**	31.0%	49.8%	**74.0%**	65.2%	82.7%
		Montero	S/M	**48.7%**	40.9%	56.6%	**95.0%**	91.8%	98.2%
17	% of children 0 - 23 months of age with diarrhea who received equal or more solid food during the diarrhea episode.	All Project	60.0%	**45.4%**	39.3%	51.4%	**S/D**		
		El Alto	60.0%	**40.4%**	31.0%	49.8%	**S/D**		
		Montero	60.0%	**48.7%**	40.9%	56.6%	**S/D**		
28	% of mother of children 0 - 23 months of age who reported washing their hands with soap before food preparation, before feeding children and after attending a child who had defecated.	All Project	30.0%	**4.4%**	2.9%	5.9%	**40.9%**	35.7%	46.1%
		El Alto	30.0%	**5.3%**	2.9%	7.7%	**S/D**		
		Montero	30.0%	**3.5%**	1.6%	5.5%	**40.9%**	35.7%	46.1%
	Grid areas represent indicators modified by the Project to capture the national norms								

S/D This indicator was not measured on MTE by request of the Health Region Management Unit. The reasons are because the indicator showed an acceptable percentage and because the HRMU did not carry out specific activities for this indicators

All indicators for diarrhea management and use of ORS have surpassed the stated targets at the DIP. The reasons are likely to be, as in the case of pneumonia management, a combination of promotional and integrated activities at the health service and community levels. For the hand-washing indicator, El Alto did not obtain the information and in Montero the indicator showed impressive improvement.

The Montero team has taken an interesting and practical approach to increase hand-washing with soap. In close coordination with school students, parents, teachers and neighborhood authorities, an aggressive campaign was launched, where more than 200 students per year distributed leaflets and soap in all households. The soap was wrapped in a small net to be hung, so it would be exclusively used for hand-washing. In Montero, the hand-washing indicator has gone from 3.5% to 40.9%.

Next Steps/Recommendations:

1. The main recommendation is to continue ORS promotion and to continue IMCI and CB-IMCI implementation and expansion to all areas and health centers.
2. CSRA needs to better understand why hand-washing reached such an impressive increase in Montero and what the local customs are with regard to personal hygiene, so

that the hand-washing intervention can be more focused and could serve as an example for other programs working in the same area.

(v) Maternal & Newborn Care

Objectives:

- Objective #1: Increase the proportion of women who receive prenatal care services from a trained healthcare professional. Indicator #1 – Percent of mothers (children 0 to 23 months) who have received at least one prenatal care visit in their last pregnancy.
- Objective #2: Increase the proportion of women who seek delivery care services from a trained healthcare professional. Indicator #2 – Percent of mothers of children 0 to 23 months whose last pregnancy was attended by a trained health worker.
- Objective #3: Increase the proportion of women who are immunized against tetanus. Indicator #3 – Percent of mothers of children 0 to 23 months who obtained at least 2 doses of tetanus toxoid during their last pregnancy.
- Objective #4: Increase the proportion of women 20 to 24 years who receive the full series of tetanus toxoid. Indicator #4 – Percent of mothers 20 to 24 years of age who are fully vaccinated – 5 doses— of tetanus toxoid.
- Objective #5: Increase the proportion of women who are able to recognize danger signs in their newborn child. Indicator #5 – Percent of mothers of children 0-23 months who can cite at least 2 danger signs in newborn children.
- Objective #6: Increase the proportion of women who are able to recognize maternal danger signs during the postpartum period. Indicator #6 – Percent of mothers of children 0 to 23 months who can cite at least two maternal danger signs during the postpartum period
- Objective #7: Increase the proportion of women who receive vitamin A supplementation in the postpartum period. Indicator #7 – Percent of mothers of children 0 to 23 months who received postpartum vitamin A after their last pregnancy.

Percent effort: 25%

Strategies/Activities:

- *Household*: Training of Health Volunteers. Home visits to identify pregnant women and encourage them to seek services. Surveillance activities during collection of vital event data during home visits. Implement Birth Plans with technical assistance from CARE
- *Community*: Education of mothers and other family members at community meetings, women's meetings and educational activities in schools and colleges about the importance of prenatal care. Promotional campaigns via mass media (community broadcasts and health fairs). Coordinate with other organizations such as CRECER and PRO MUJER
- *Health Facility*: Regular prenatal care services during clinic visits
- *District*: Coordinate with Health Boards and MOH to promote prenatal care services

Evaluation/observations:

The levels of coverage for the objectives are moving in a positive direction, toward the stated goal, as the percentage of deliveries attended by trained personnel increased from 67.5% to 77% in El Alto and from 88.3% to 93.9% in Montero. However, there is a very

large confidence interval, meaning that the changes observed could be due to chance or the design effect. There is great deal of attention placed on prenatal care services, and not enough on the delivery and hence, management of obstetrical complications.
The maternal and newborn indicators are presented in the following table:

Nº	Indicators	Regions	Target	Baseline (Jan, 2003)			MTE (Oct, 2004)		
				%	Lower Limit	Upper Limit	%	Lower Limit	Upper Limit
19	% of mothers 0 - 23 months of age who received at least one prenatal control in last pregnancy	All Project	90.0%	**79.2%**	76.2%	82.3%	**90.4%**	87.9%	92.8%
		El Alto	85.0%	**66.9%**	61.9%	71.9%	**80.3%**	75.1%	85.4%
		Montero	95.0%	**91.5%**	88.6%	94.5%	**97.1%**	95.3%	98.9%
20	% of mothers of children 0 - 23 months of age who received counseling on prenatal control on last pregnancy	All Project	S/M	**62.1%**	58.0%	66.2%	**77.7%**	74.3%	81.1%
		El Alto	S/M	**62.7%**	56.4%	69.0%	**75.9%**	70.3%	81.4%
		Montero	S/M	**61.7%**	56.3%	67.0%	**78.9%**	74.6%	83.3%
21	% of mothers of children 0 - 23 months of age who received at least two TT during last pregnancy ***	All Project	78.5%	**69.4%**	65.9%	72.9%	**61.0%**	54.6%	67.3%
		El Alto	70.0%	**56.6%**	51.3%	61.9%	**61.0%**	54.6%	67.3%
		Montero	87.0%	**82.2%**	78.1%	86.2%	**S/D**		
22	% of mothers of 20 a 24 years of age who have the complete TT Schedule (5 doses)	All Project	S/M				**S/D**		
		El Alto	S/M				**S/D**		
		Montero	S/M				**S/D**		
23	% of children 0 - 23 months of age whose delivery was attended by a trained health worker	All Project	85.0%	**67.5%**	64.0%	71.0%	**77.0%**	73.6%	80.5%
		El Alto	80.0%	**46.6%**	41.3%	51.9%	**51.8%**	45.3%	58.2%
		Montero	90.0%	**88.3%**	84.9%	91.7%	**93.9%**	91.3%	96.4%
24	% of mothers of children 0 - 23 months of age who received Vitamin A during last post-partum control of last pregnancy	All Project	80.0%	**21.4%**	18.3%	24.5%	**60.2%**	55.0%	65.4%
		El Alto	80.0%	**17.6%**	13.6%	21.6%	**S/D**		
		Montero	80.0%	**25.1%**	20.5%	29.7%	**60.2%**	55.0%	65.4%
25	% of mothers of children 0-23 months of age who know at least two danger signs of the newborn	All Project	37.5%	**7.2%**	5.2%	9.1%	**26.0%**	22.4%	29.6%
		El Alto	30.0%	**7.6%**	4.8%	10.4%	**26.3%**	20.6%	32.0%
		Montero	45.0%	**6.7%**	4.1%	9.4%	**25.7%**	21.1%	30.4%
26	% of mothers of children 0-23 months of age who mentioned at least 2 danger signs for the mother during the post-partum period	All Project	37.5%	**4.2%**	2.7%	5.8%	**28.1%**	24.4%	31.8%
		El Alto	30.0%	**3.2%**	1.4%	5.1%	**21.9%**	16.6%	27.3%
		Montero	45.0%	**5.3%**	2.9%	7.6%	**32.2%**	27.2%	37.1%
27	% of mothers of children 0 - 23 months of age who mentioned at least two way of reducing the risk of HIV infection	All Project	S/M	**28.8%**	25.1%	32.5%	**S/D**		
		El Alto	S/M	**23.2%**	18.2%	28.3%	**S/D**		
		Montero	S/M	**33.8%**	28.4%	39.1%	**S/D**		
	Grid areas represent indicators modified by the Project to capture the national norms								
******* There is no data for this indicator, but available data was on TT of at least one dose during pregnancy									
S/D This indicator was not measured on MTE by request of the Health Region Management Unit. The reasons are because the indicator showed an acceptable percentage and because the HRMU did not carry out specific activities for this indicators									
S/M Target was not established because the data was only to report the CS program on key indicators.									

Health staff and volunteers reported that in El Alto there have been problems referring pregnant women to deliver in one of the referral hospitals. El Alto has three referral hospitals, the Holandés Hospital, Los Andes Hospital and the Korea Hospital, which serve the entire area of El Alto with an approximate population of 800,000 inhabitants. The hospitals are overcrowded and often women deliver in the hallways or on stretchers.

The project has been promoting institutional delivery, but the fact is that District 8 does not have the capacity to meet the increasing demand for obstetrical services. During interviews with HVs and neighborhood boards, it was reported that women in their communities do not like to go to the hospital because they know the hospitals are overcrowded and health personnel do not treat them with respect; they make women remove their clothes in the cold weather and do not allow visitors. Responding to the increasing community demand, the Senkata health center has created a culturally and family friendly birthing room which attends births during the clinic's daytime schedule.

In El Alto, the team is using a three page leaflet called "Planning my Delivery." The design, field testing and dissemination were done by the MOH. The last page of the leaflet provides information for women who decide to deliver at home. The information is basically how to prepare a safe delivery kit. It does not mention the risks of having a home delivery attended by personnel who are not properly trained, or in the case of El Alto, where the husband delivers the baby. The leaflet is giving a false sense of security when women decide to stay at home to deliver. Moreover, the low level of knowledge and consistent lack of supplies makes El Alto one of the neediest areas of the country for improving obstetrical case management.

In Montero, institutional delivery has gone from 88% to 94%. However, some HVs and families reported that were unsatisfied with the services received. When interviewing health authorities, they referred that the medical attention in the Montero hospital was slow due to the increasing number of patients, so this factor has probably decreased the quality of service delivery.

Next Steps/Recommendations:

1. CSRA should be applauded for trying to reach pregnant and at-risk women by means of home visits, community education, and provision of ambulance transportation from the households to the hospitals. CSRA has identified areas which need immediate attention. The high rate of pregnancies (and teen pregnancies, particularly high in Montero) continues to be a problem for both El Alto and Montero. Continuation of these two activities should be parallel to improving the quality or maternal services given in El Alto and Montero. CSRA needs to collaborate with the Municipal Health Authorities and Regional Directorates for addressing the problem in a comprehensive manner. CSRA cannot continue promoting quality reproductive health services, while hospitals are not responding accordingly.
2. CSRA should look for ways to partner with other organizations that work in reproductive health, advocates for humanized delivery (a name that has been used to address cultural and quality of care issues); or work with the MOH to encourage the problem be recognized and dealt with.
3. Efforts to seek alternative sources of funding outside of the CS Project have started and should be continued. In El Alto, CSRA and the local sub-municipality have submitted a proposal to the Belgium government to construct a maternal hospital in Senkata. The proposal has been initially accepted, but it will require more effort to make it happen. In Montero, the Bolivian Red Cross has offered to expand one of the health centers to provide perinatal services, including the construction of delivery rooms.

4. In addition, the Senkata health center has expanded its services to include a delivery room with a few beds to attend normal deliveries according to the indigenous customs of the patients (during the normal clinic hours). They are making plans to attend births on a 24 hour basis. The consultant advised them that if that is the case, the center will have to be well-equipped to attend normal deliveries and receive additional training and equipment to deal with obstetrical emergencies. Finally, strong links need to be secured in case of emergency referral to the next level of care for emergencies or Cesarean section.

c. New Tools or Approaches

Refer to Section "Contribution to Scale/Scaling Up."

2. Cross-cutting Approaches

a. Community Mobilization

The project has utilized several community mobilization approaches to address the project in both project areas.

Census-Based, Impact-Oriented Methodology. CSRA and Curamericas have applied the Census-Based, Impacted-Oriented (CBIO) methodology in Bolivia for more then ten years. The CBIO methodology involves working with communities to establish a census and vital events registry of all community members, analyze the causes of the most common, preventable and treatable illnesses, as well as design a system for maintaining regular contact with each household. Using this model, the project developed relationships with community leaders and organizations in Montero and El Alto (OTB, Neighborhood Boards, educational institutions, and municipal authorities). The project presented the goals and methods of the population-based approach during community meetings and made written agreements to conduct a community diagnostic and share all results with the community. After the census was carried out, the groups devised an action plan according to the findings, evaluated the work conducted, and suggested improvements.

Community health workers and volunteers carried out a program of home visits, preventive education and promotion, and community surveillance; i.e., current diseases, births, deaths and migration. Community-based workers referred patients and clients to the health centers and hospitals of both project areas. This approach was also utilized to identify high risk groups, enroll new families and family members in the program, and provide health assessment and referral if an ill child or woman was found.

There were variations between El Alto and Montero in applying this methodology. In Montero, the project relied on community volunteers, while the majority of the community work in El Alto has been carried out by students of local nursing schools. The table below depicts the total number of nurses and auxiliary nurses that have rotated through CSRA health centers and applied the CBIO methodology:

University/Institute	Level	2003	2004	2005
Catholic University of Pucarani	Nurse	40	40	30
Public University of El Alto	Nurse	12	20	0
XX Century University of Llallagua	Auxiliary Nurse	0	2	2

Berlin Institute of El Alto	Auxiliary Nurse	6	10	10
Center for Integrated Development	Auxiliary Nurse	4	8	8
San Pablo Institute, El Alto	Auxiliary Nurse	0	2	2
Total		**62**	**88**	**52**

Nursing and auxiliary nursing students receive training in: CBIO, CB-IMCI, communication skills, family planning, nutrition, STIs, TB control, and pap-smear education and promotion. Students' rotations normally lasted for two months and the activities accomplished were: family census, home visits, referrals, and health orientation in health centers' waiting rooms.

Health volunteers were trained in: CBIO, CB-IMCI, communication skills, leadership, self-esteem, family planning, nutrition, STIs and pap-smear education and promotion, planning for delivery, and TB control.

The health volunteers in Senkata are local people (usually women) who were selected by local leaders to promote the new health services available at the health center, detect high risk patients, maintain the vital registry and refer patients. In Senkata, there are both block monitors "manzaneras" and health volunteers. They are distinguished by the fact that "manzaneras" are designated by the local political party and are seen to be volunteers supporting the local party. Although "manzaneras" currently support the work of the project, the majority of the volunteers are no longer working as "manzaneras" because they did not want to be associated with any political party. (See table below). District 8 of El Alto has 15 neighborhoods or urbanizations, which represent about 700 "manzanas" or neighborhood blocks. Each volunteer can cover from 6-20 manzanas, which include 50 families approximately. Volunteers meet every Tuesday to plan activities for the week, and receive family forms to follow-up. When interviewing HVs, they mentioned that the average time a volunteer stays in the post is 18 months.

In Senkata, it was necessary to change volunteer strategies, because in this urban environment, volunteers had the expectation of receiving a salary the way other counterpart institutions had done. For this reason the strategy was changed to concentrate on nursing students who would support the community activities as part of the community service component of nursing school. These nursing student volunteers had the advantage of being better prepared in health topics, and it was of mutual benefit for them and the communities to receive this type of hands on community experience. In Senkata, the home visit is complemented by a relationship with local authorities, who understand that health activities not only occur in the health centers, but rather they are share responsibility for the health of their district. Community leaders participate in health activities such as a communication network in case of emergencies, in which stores agree to open their doors 24 hours a day to make phone calls in the case of an emergency, and even politicians have agreed to get involved in emergencies day and night.

Health Volunteers in El Alto

Type of volunteer workers	2003		2004		2005	
	Trained	Abandoned	Trained	Abandoned	Trained	Abandoned
"Manzaneras"	40	25	23	18	4	2
Health Volunteers	-	-	17	6	15	2

In Montero, volunteers are called health guardians ("vigilantes"), and are identified by their communities and trained by health personnel. They detect and refer high-risk cases, counsel families, register vital events, and apply CB-IMCI.

Field work and a local epidemiological surveillance network in Montero incorporate schoolchildren as strategic allies. The project works on increasing knowledge, attitudes and health behaviors in young people with the help of teachers who work on mortality analysis of risky behaviors. In Montero, social organizations participate in the evaluation meetings of the health surveillance system, during which they have the opportunity to get involved in action plans and express their opinions about the health system.

Neighborhood Boards (Juntas Vecinales)/Territorial-Based Organizations (OTBs). Community organization is expressed in El Alto as Neighborhood Boards ("Juntas Vecinales") and in Montero as OTBs.

In El Alto, the Neighborhood Boards play an important role as community representatives, links with the sub-municipal office, and community organization. Community members are elected for two year periods. The results of their interviews showed that they are not fully aware of all activities carried out by the project. In regards to the volunteers, they did not have a good understanding of their role; on the contrary, they complained that volunteers did not have enough experience to manage ill persons. The interviewees were not satisfied with the immunization campaigns; they said that they are never informed when the immunizations teams are coming and that the campaigns force people to be vaccinated; they also complained that there were bad experiences with children who get sick after the campaign.

The Neighborhood Board members interviewed requested that the project pay more attention to clinical services in the area. They reported that besides the two referral hospitals for all El Alto that attend 24 hours a day; they do not know where to go if sickness occurs at night or weekends. They requested the Senkata health center to be upgraded to attend 24 hours a day, add health personnel, ideally specialists, and add more clinical services.

In Montero, the OTBs are invited two or three times a year to coordinate CSRA activities. OTB members participate in all training activities in their neighborhoods, and have developed a health fair. When OTB members were interviewed, they mentioned that their role is to coordinate with health services, organize community meetings and promote community participation in health activities.

The OTB members have a high opinion of health volunteers or "vigilantes," and when they were asked how they could continue financial support for the vigilantes, they responded that the municipal government has funds for this purpose, and the OTB could endorse this use after the municipal government approves it. Every family contributes Bs.2.00 (equivalent to US $0.25) a month; Bs1.00 goes to the local soccer team, so the other Bs.1.00 could go to support the "vigilantes."

The OTB members' recommendation is for the health service to continue with health education, particularly food preparation seminars on complementary foods; health education in schools;

increase the hours of attention of the health centers; continue with neighborhood health fairs; and to help doctors improve their counseling skills and dedicate more time for each consultation

Evaluation/observations:

1. CSRA is fortunate to be working in areas where strong cultural and (past) political laws and incentives brought communities together to solve problems and demand services. During previous administrations, community participation was actively promoted.
2. In El Alto CSRA has signed a contract with the Sub-Municipality and the Neighborhood Boards based on a shared vision of the future of a new model of family and community medicine in District 8, community control and co-participation. The contract (see Annex H) has been to share costs, obtain health personnel for the district and construct health facilities.
3. CSRA has surpassed the targeted number of volunteer workers to carry out most of the community mobilization, BCC, health education and referral systems in El Alto. However, it should be pointed that the success of this strategy in El Alto was at the expense of the local schools of nursing.
4. Communication between volunteer workers and Neighborhood Boards - is poor or nonexistent in El Alto.
5. In Montero, the approach to dealing with volunteers was different. Montero provided a small stipend for producing or delivering certain actions. For instance, payment for registering a new family or vital event, and home visits; i.e., pregnant women registration, information about the delivery and the newborn, death, and follow-up visits, among others.
6. The Montero OTBs are willing to contribute financially to maintain the HVs' stipend.
7. In both areas, the population is demanding that health services improve the quality of services delivered (particularly with regard to delivery services offered by MOH hospitals)

Next Steps/Recommendations

1. The contract between CSRA and District 8 health authorities and social actors is a unique experience in El Alto in which an NGO and local authorities share responsibilities for the project control and implementation. The contract is based on mutual trust and the firm commitment to jointly develop a family and community medicine model. CSRA needs to share this innovative approach with the entire PVO/NGO community in Bolivia and to learn from other experiences as well (see Annex H: Administrative Contract for the Management of Healthcare Establishments in the City of El Alto's 8th Municipal District).
2. The CBIO methodology has been the cornerstone for CSRA and Curamericas and should be maintained. It is a unique approach, and clear results can be directly attributed to this methodology. For some disease control activities CBIO is more useful and effective than for others. CSRA and Curamericas need to prioritize which exact activities volunteers can accomplish and develop a home visit protocol that would give step-by-step directions to the volunteer. The protocol would have to be developed based on a simple approach and clear activities and messages to deliver.
3. Scaling up of the CBIO methodology is, in general, not feasible by the municipal health system in areas not covered by the project; although, municipal authorities have recognized its value. CSRA can provide assistance along the following lines:
    a. Continue to consolidate the CBIO methodology in areas covered by CSRA, and based on that experience and results, provide recommendations for strategies and activities aimed to improve the municipal health system performance;
    b. Assist the municipal health system on strategic planning, monitoring and supervision;

c. Utilize a less labor intensive methodology, like LQAS (the project staff has decided to call this methodology "rapid monitoring") to monitor health interventions by supervision areas/health districts; and
d. Prioritize low performance districts and increase access to quality services in a collaborative manner.

4. Nursing students in El Alto are a potential resource that was not foreseen at the initiation of the project. They are an extremely valuable resource that needs to be cultivated and improved. The following recommendations are for CSRA and Curamericas to consider:
    a. Formalize the relationship between CSRA and the nursing schools through a memorandum of understanding, clearly specifying the roles and responsibilities of each one;
    b. It would be for the benefit of the schools of nursing to include the specific child survival and maternal health interventions in their formal school curricula;
    c. CSRA could develop an additional training curricula that would include the CBIO methodology implementation and management, and project specific activities;
    d. Joint development of work plans for the students by levels of complexity and defining what can be accomplished during their rotation, either at health centers or community work; and
    e. Joint supervision, monitoring and outcome evaluation.
5. To improve the community health volunteers performance, which is more relevant in Montero, CSRA and Curamericas may consider implementing the following recommendations:
    a. Prioritize and reduce the number of activities during home-visits. Prioritization will be based on the interventions that require a home visit for their success;
    b. Develop a simple algorithm or protocol for the volunteer, specifying step-by-step what to do; i.e., introducing themselves, explaining the purpose of the visit; update family records (new entries and discharges); key health messages in reproductive and child health); explore family needs; provide written/pictorial materials; announcements and arrange for referral if needed;
    c. Develop a job-aid for the home visit that would facilitate accomplishment of activities;
    d. Develop training curricula to carry out the home visit that would include role playing and actual visits to families' homes;
    e. Develop a supervision tool that would assess each of the steps to be accomplished; A version of this exists, but it should be strengthened, and
    f. Develop a monitoring and evaluation plan; i.e. revisit the homes to assess how the messages were carried out; post consultation visits to the health center; treatment compliance; behavior change; adoption of health protective practices, among others.
6. Volunteers have done a remarkable job at increasing the customer demand for health services. Nevertheless, CSRA needs to concentrate now on increasing the quality of health services and counseling.
7. CSRA has increased community participation in choosing and delivering health services through Neighborhood Boards and OTBs. In Montero, CSRA has proven that funding for volunteers can come from these community-based organizations and municipal authorities, so efforts should be made to consolidate these innovative ideas.
8. CSRA is working with other donor agencies to expand the Senkata health center, and will collaborate in the construction of a referral hospital. These two plans, one short term and another longer term, will respond some of the urgent needs of the Neighborhood Boards.

9. CSRA is currently carrying out joint meetings among the different social actors. The purpose is to learn about the work each one is doing and to strengthen collaboration. It is recommended that social actors take a more active role in planning and monitoring the quality and access to health services.

b. Communication for Behavior Change

Evaluation/observations:

*Participatory, inter-cultural approach to counseling during clinic visits and home visits***.** The project used a participatory approach called ARU as the first stage of its communication strategy. This approach involved working with health personnel, volunteers and the communities on their attitudes toward health knowledge and the way that health knowledge and behavior change is communicated to the population. Workshops and other community activities prompted participants to think about the stereotypes around health, the role of the health center in the community and the quality of care as a function of treatment by health personnel. The OPRA approach (Observation, Reflection, Personalization and Action) was used to train project staff and volunteers in the process of counseling during clinic and home visits.

*IMCI focus***.** CSRA has implemented the IMCI and CB-IMCI norms, job aids and IEC materials at both project sites. In Montero, key messages were conveyed using counseling cards, videos and activity sheets with health messages (that are turned in at the next visit). When the project detected difficulties at achieving increases in health knowledge, it adopted these items as part of its quality control (QAP) system. Random samples of clinic patients were surveyed after their prenatal visit (for example) to detect whether they were receiving adequate counseling on the topic of interest. In Senkata, in addition to applying CB-IMCI during home visits, volunteers distributed educational materials about danger signs in the newborn, young child, pregnancy, birth and post-partum.

Community Education. CSRA and volunteers have carried out community education and seminars with different groups and different neighborhoods in the project areas. Health authorities and neighborhood boards have also participated in these talks.

Health Fairs. The project has also carried out large health fairs. In El Alto, there was only one health fair, but with massive participation from the community, health workers and local authorities. In Montero, there have been several health fairs organized in collaboration with the community groups.

Next Steps/Recommendations:

1. There was a noticeable difference in the quality and depth of the content and messages delivered by health volunteers and nursing students in El Alto. In general, health volunteers had a wide range of knowledge, but it was superficial knowledge. There was still confusion regarding signs of danger; i.e., distinction between dehydration signs and cases of complicated diarrhea, or when to refer a child. Health volunteers were not able to explain how they counseled mothers on ORS preparation and administration. The same confusion was found when dealing with danger signs of pregnancy, delivery and post-partum. Nevertheless, it should be noted that volunteer workers always referred women to the hospital in any case of a perinatal condition.
2. In Montero, a great deal of concentration during home visits was on weighing children, but nutrition counseling was weak.
3. Home visits in general were not structured in a systematic way, so volunteers improvise their activities when visiting the family. Counseling also varied in content and depth.

c. Capacity Building Approach

(i) Strengthening the PVO Organization

Technical strengthening.

Curamericas participation in the CS-18 project has allowed Curamericas to appropriately modify the technical elements of the CBIO methodology to effectively work with poor, urban populations. When Curamericas first implemented the CBIO methodology in Bolivia, all of the project sites were strictly rural; however, as the rural populations migrated to a more urban setting, the CBIO methodology was adapted to remain effective for these families now at the urban margin. Dr. Henry Perry is scheduled to meet with the technical team of CSRA in November, 2005, to evaluate the current status of the CBIO methodology in the CS-18 project and give recommendations, if necessary, on how to update this methodology to meet the changing needs of Bolivia's more mobile population.

The CS-18 project has also permitted the organization to strengthen its program of volunteer medical and construction teams, which expands the donor base with informed, committed individuals who have personally witnessed and experienced this project in action.

In 2005, Curamericas was able to document the CBIO methodology with a grant from CORE. A copy of this manual is now available in CD or printed formats and also contains training materials. A Spanish translation of this manual will be available in November, 2005.

Organizational and Fundraising Strengthening

Curamericas has experienced changes and re-organization of staff since the beginning of the CS-18 project for Bolivia. Two of Curamericas' grants, one in Haiti and one in Mexico, reached their natural conclusions in 2003 and, as a result, several positions within the Curamericas technical department have not been re-filled after those staff members moved to other organizations.

In March of 2004, a new Executive Director with extensive experience with non-profit organizational management, board development, and fundraising was hired. In July of 2005, Kali Erickson, MPH, MS, joined Curamericas staff as the Senior Program Specialist and she backstops both of Curamericas' Child Survival projects; one in Guatemala and this project in Bolivia. Ms. Erickson has extensive international public health and child survival experience, particularly in Latin America. In 2005, Curamericas created a new position, Director of Annual Giving and Marketing, which will focus on increasing the organization's visibility and fundraising. While these employees are relatively new to Curamericas, their addition to the Curamericas' staff will bring long-term stability and an increase in both technical and fundraising capacity.

Expansion of the Curamericas Board of Directors occurred in 2005 with the addition of five new Board members. Curamericas' founder, Henry Perry, MD, PhD, MPH, is forming a

Technical Advisory Group as an adjunct to the Board of Directors to guide Curamericas' technical direction.

(ii) Strengthening Local Partner Organizations

CSRA. The organization's participation in the child survival project has contributed to the organization's technical and administrative development, as well as its important role within PROCOSI, the umbrella organization of Bolivian NGOs. This project has allowed CSRA to become a leader in the national level implementation and coordination of the IMCI and community-based IMCI. It has also adopted a successful quality control protocol as part of the child survival activities.

In El Alto, CSRA is considered to be a leader who is developing a pilot project for a new model for community health, which prioritizes patient treatment and cultural understanding, alongside shared responsibility with community leaders. CSRA's promotion of respect for the Andean world vision has prompted serious interest on the part of other health institutions in El Alto. The emphasis on cultural understanding has also contributed to the personal and professional growth of the health staff who work in CSRA's health centers as well as improved quality of care in the centers.

Community Organizations. CSRA approach to build the capacities of the District 8 health system involved joint planning and a contract for social control and shared responsibility and regular sessions for information analysis with the Neighborhood Boards. Every quarter, progress is analyzed with the Neighborhood Boards and MOH, and adjustments are made to the implementation plan. The approach with OTBs in Montero has been similar, with small variations, given that the social structure is not the same as in El Alto.

MOH. The project has invested in its MOH partner through training, joint supervision and material support for MOH programs. The Municipal health system and the DILOS have been involved in quantitative and epidemiological assessment of the impact of their activities on health.

Recommendations:

1. The staff is well integrated within the quarterly and yearly planning process with local stakeholders. However, CSRA needs to continue building upon this excellent rapport, strengthening the official partnership they have with the MOH and municipal health authorities to increase the project's accountability. Training provided to the MOH and municipal health system should come with an assurance by the MOH that follow-up supervision and monitoring will take place to ensure the trainings are utilized, particularly in the case of improving the quality of service delivery and referral centers. CSRA should further ensure that they can develop a mechanism for verifying that the follow-up was completed as agreed by the partners.

2. CSRA should convey the evaluation results to the MOH and municipal authorities regarding the weaknesses observed in some of the health interventions and the quality of services delivered at health centers and referral sites. CSRA needs to assure that the

MOH will improve the delivery of key interventions and those activities will be maintained beyond the project conclusion. Clarifying and reassessing the roles and responsibilities would be a first step to shifting the focus from trainings to quality of service delivery.

3. The MOH and other partners have been only peripherally involved in epidemiological assessment, implementation and use of the CBIO methodology and the KPC surveys. Greater integration could be realized with these activities, or CSRA could look to assess what surveys or information systems may be better suited to meet the monitoring and evaluation needs of the MOH. The key would be to assist the MOH to implement LQAS, as was discussed with the municipal and MOH authorities in Montero, so they can conduct analysis for making managerial decisions, and increase the effort in quality improvement methods.

(iii) Health Facilities Strengthening

Many activities have been realized to improve health services, particularly in District 8 of El Alto. Before the CSRA's project, there were virtually no health services available in District 8. CSRA was involved in soliciting funds for the Senkata health center from municipal authorities and another institution, with the shared goal that CSRA would administer the new health center. Construction teams were sent by Curamericas to work on the building. The District MOH has staffed the health centers with physicians, nurses and nurse auxiliaries, and CSRA has provided some equipment and technical support to implement health interventions. Donated medicines sent through Curamericas have allowed the health centers to serve indigent patients or provide medicines not covered by MOH pharmacy inventory. CSRA has brought health intervention norms, provided training, health information systems, surveys and quality assurance methodologies, indicating significant progress towards health systems strengthening. In Montero, CSRA had a longer presence, so its contribution has been mainly in training, and supporting the improvement of the MOH and municipal health systems. The local DILOS board credits CSRA with having a highly effective community surveillance system that has already been replicated in a scaled-down form in ten of the Montero network's health centers.

(iv) Strengthening Health Worker Performance

The training provided by the project has focused on strengthening the performance of clinical health workers performance in delivering clinical and community-based care. While it has been recommended that CSRA strengthen the quality of service delivery and home visits, the trainings have been completed as scheduled and have laid an important groundwork for the realization of gains in the second half of the project.

Mechanisms as incentives to volunteers have been developed only in Montero. In El Alto, CSRA is going to reassess its strategies of working with volunteers. Dr. Henry Perry will make a field visit to the El Alto project site in November to assess the current status of the volunteers in El Alto and will assist CSRA to re-design or devise a new strategy for dealing with volunteer workers.

(v) Training

CSRA's primary objective has been to improve the capacity of the MOH to deliver quality health care in an environment of respect for the patient. To this end, CSRA programmed an extensive training schedule, focusing on the training of MOH personnel in IMCI and CB-IMCI, breast-feeding and nutrition, reproductive health and care of the newborn. As noted in other sections, the primary weakness observed has been lack of systematic evaluation at the community level and quality of service delivery and counseling.

The following table shows the training received by the El Alto health personnel (physicians, nurses and nurse auxiliaries) by theme, hours of training number trained and who carried out the training.

Theme	Hrs	# Trainees	Trainers
Census-Based Impact-Oriented Methodology	16	32	CSRA
LQAS	8	5	CSRA
Administrative norms and procedures	8	6	CSRA
Communication skills	16	20	Curamericas visit
Self-esteem	8	20	CSRA
Leadership	8	20	CSRA
Quality assurance	16	32	CSRA
Family planning	16	20	CIES
Sexually transmitted diseases	16	20	CIES
Cervical cancer and pap-smear	16	20	CIES
Quality assurance methodologies	8	32	CISTEM - MSD
Health communication	16	8	CPC Aru
TB Control	16	20	MOH & MOS
Bio-safety	6	3	MSD
Rabies disease	6	4	MSD
Emergency contraception	16	1	MSD
Vacuum aspiration	16	2	MSD
IMCI	40	19	MSD-CSRA
CB-IMCI	8	32	CSRA
Planning the Partum	8	32	CSRA
3 a 5 of age life saving skills	4	1	PROCOSI
Nutrition	8	20	CRINN
Detection of the symptomatic respiratory	6	1	SERES
Respiratory diseases	6	2	SERES
Monitoring and supervision	4	20	CSRA
Gender	5	32	External Consultants
Breastfeeding	16	20	COTALMA
Neonatal IMCI	8	10	MSD

d. Sustainability Strategy

During the past 20 years, CSRA has worked with the Ministry of Health (MOH), municipal governments and communities to manage health programs. Each of the geographical units managed by CSRA included personnel paid by the MOH.

Working with different levels of government and communities during this time has shown that political favoritism, a lack of long-term professional commitment, poor motivation, racism, and professional jealousy significantly influence the quality and coverage of health services. These problems are strongly associated with a lack of sense of ownership of goals and objectives and the absence of leadership capable of motivating staff and generating needed change.

Ownership and leadership are as important as, or perhaps more important than, financial security and technical expertise in enhancing the long-term survival of health benefits for under-served communities. CSRA has developed a management model that provides leadership and fosters a greater sense of ownership on behalf of management, staff and local representative authorities and communities. Local NGOs such as CSRA, are one viable model for offering all of the essential ingredients for sustainability, including leadership and ownership.

(i) Financial Sustainability

CSRA has designed and is in the process of implementing a highly sustainable strategy for maintaining health services in Bolivia. The concept has been developed over last ten years during the Ancoraimes and Carabuco CS Projects in the Bolivian highlands, where the municipalities delegated CSRA the entire administration and management of their health centers, so in addition to implementing child survival and reproductive health activities, CSRA worked in close collaboration with the municipal health authorities. Under the CS-18 Project, CSRA brings this experience to the urban municipalities of El Alto and Montero.

For the current project, CSRA has approached the MOH officials of the World Bank funded Health Reform Project, who are also interested in developing the model of "*Contracting with nongovernmental organizations (NGOs) or other nonpublic entities to manage or deliver health services as one approach to improve both coverage and quality of care*" (see Annex H: Model of Public Healthcare Financing by means of Management Delegated to Multiple Providers and a Capitation System. Nathan C. Robison). CSRA Director Nathan Robison is developing a draft proposal where he describes the components of a model that captures the years of experience in Ancoraimes and Carabuco, and the WB approach to developing the model.

The objective of this strategy will be to contribute to the development of a financial model for health networks, combining the delegated administration to a multiple service providers with a capitation-based cost reimbursement system.

The rationale is that in Bolivia approximately 10% of the population receives services through the private sector, 22% through the social security system and about 45% are served by the public sector, leaving 22.5% unattended by any of the above mentioned services. Other estimates place the unattended population in Bolivia at about 38% (World Bank), and in rural areas, the estimate reaches 55%. Public health services are hindered by weak coordination between public services and private; only faith-based organizations seem to have better coordination. In the last ten years,

national health plans have created different models of health insurance (children, women, elderly and youth), but without the inclusion of the private non-profit sector.

In this context, CSRA has proposed a model with the following characteristics:

- Reimbursement for services delivered, combining delegated administration and a cost recovery mechanism:
    - The level of health service is the heath network, comprised of health districts, depending on the population size and geographic access;
    - Shared strategic management;
    - Delegated "day-to-day" administration;
    - Minimum MOH approved packages of services;
    - Cost per beneficiary and measurement of cost-effectiveness;
    - Cost-recovery scheme; and
    - Control mechanisms: financial, monitoring and evaluation

Both municipalities of El Alto and Montero have delegated to CSRA the full administration of the health services on a reimbursement of services delivered scheme and CSRA is currently receiving funds from the Maternal-Child Health Insurance (SUMI) and School Insurance. However, current schemes reimburse only a portion of operating costs.

The next step for CSRA is to consolidate this model and expand with other sources of funding. Preliminary talks have been carried out, and agencies like the World Bank-funded Health Reform Project and the Inter-American Bank have expressed some interest in developing this model further.

If the model proves to be successful, it could bring new light to the country and international community on how a NGO can assist governments to expand quality services to the neediest population. "Contracting appears to be an effective means of improving service delivery, and, in some instances, these results have been achieved at the same cost or lower than government delivery of the same services. For these cases, financial sustainability is not an issue" (Purchasing Basic Health Services in the Community Setting. Benjamin Loevinsohn and April Harding. September 2004. Health, Nutrition and Population (HNP) Discussion Paper. Health, Nutrition, and Population Family (HNP) of the World Bank's Human Development Network (HNP Discussion Paper).

Next Steps/Recommendations:

1. CSRA is attempting a highly sustainable strategy, which is more demanding than a standard CS project. CSRA should document "lessons learned" from the experience to share with the larger PVO/NGO community. As the project develops, it is important to foment communication between this project and others managed by Curamericas and by other organizations which implement similar strategies.

2. While not a specific objective, CSRA works with the district or municipal level to make a significant contribution to improving the capacity of these entities. Specifically, CSRA should work with the local MOH and municipal authorities to teach them to assess their needs using data and help them to discern which strategies would be most cost-effective and yield the highest impact given their particular circumstances.

(ii) Management Co-Responsibility

CSRA has promoted community participation not only through community control, but also through shared responsibilities for the successes and failures of strengthening health services. Management co-responsibility has been observed in the construction of the Senkata health enter, when funds and supervision come from the municipality, and when OTBs in Montero agreed to begin to cover the Health Volunteers *(Vigilantes)* monthly stipend.

CSRA has succeeded promoting a co-responsible management approach through the following actions: (1) transparency in their financial administration; (2) timely and full completion of CSRA's commitments and work plans; and (3) generating highly committed CSRA field workers.

C. PROGRAM MANAGEMENT

1. Planning

CSRA has a satisfactory system in place to plan activities from the national headquarters in La Paz to the two project regions. In each region, the teams coordinate with the corresponding municipal authorities and health system. Information was also shared with Neighborhood Boards in El Alto and OTBs in Montero.

After the submission of the DIP, CSRA had launching workshops in both areas. Each office and team member received a copy of the DIP in Spanish. Regional teams developed an annual plan called POA (Annual Operational Plan), when the DIP is broken down by year and tasks. All objectives have been reviewed and shown in their re-prioritized order following exercises completed during the midterm evaluation.

The headquarters office in La Paz has its own POA for administrative, financial and logistical support to the regions. In addition, the project has a multi-disciplinary implementation committee which visits both areas regularly. Finally, the project meets on a quarterly basis to analyze information at the national level, and on a monthly basis to analyze the information at the regional level.

Following submission of the MTE report, all parties will be given a copy of the report and final work plan.

2. Staff Training

As mentioned in section C.vi. Training, CSRA staff has been trained in conjunction with MOH/Municipal personnel. While this is appropriate given the goals of the project, it is still necessary for the project staff to maintain their skill levels above those of the Municipal/MOH, in order to serve as a technical resource to the local health systems. It would further be appropriate for CSRA to formally evaluate staff to assess current technical needs. A system of continual improvement could then be implemented. This would likely demand an increase in overall resources allocated to staff.

3. Supervision of Program Staff

Staff is primarily managed according to quarterly and annual action plans that are developed with the municipal health team, health centers staff and volunteers. While this system is adequate, improvements are warranted given the lack of overall project progress towards objectives.

CSRA has been working on a new approach for supervision, which is linked with quality improvement. CSRA designed the strategy in 2003 and ever since, progress has been slow due to the need to train staff, so not all areas have evolved at the same speed. CSRA changed the name of supervision to "acompañamiento," a Spanish word that means "walking together." Therefore, the vision of supervision is towards support and strengthens the staff's capacity to deliver quality services.

The four elements of the new supervision design are: responsibility, team work, empowerment and client-focus, and the objectives are: to improve the quality of services delivered through the CBIO methodology, and to improve the staff performance through professional development activities and the work environment.

CSRA has developed a policy and an implementation manual based on those principles. CSRA has five levels of supervision, or levels of decision making, and the outcome is based on measurable health results. To date, the methodology is in its implementation phase, alter the policy and manuals have been finalized and field-tested. Its implementation will be from now until the end of the project.

The supervision approach included supervisory checklists and quality standards that will take place in a given visit. Once the new approach is implemented, CSRA needs to evaluate its effectiveness and make recommendations for its institutionalization in the municipal health system. It will be crucial to assure that this plan is accepted by the Municipal Health System and assures accountability and self-evaluation.

4. Human Resources and Staff Management

The CSRA project staff is very competent and has great potential to achieve the expected results in the second half of this program. There has been no turnover of staff reflecting CSRA's level of commitment to its staff and sound management of personnel. The development of policies, job descriptions, and procedure manuals has been finished and now CSRA is disseminating and implementing these items.

Some key staff are taking higher level courses to advance their current curriculums; i.e. inter-cultural workshops, language classes, management and public health courses. While this is not an official policy of CSRA, the staff's ability to access these classes reflects CSRA's flexibility; this will assist with the transition to other jobs if staff members are not able to stay on after the end of the CS project. (CSRA has a clear strategy to obtain municipal funding once the CS project ends, but it is important that all staff are prepared for a budget reduction after the CS project).

An example of CSRA's staff management is shown by the fact that staff were transferred to the current child survival project from the previous Carabuco and Ancoraimes projects. CSRA will make every effort to move personnel to new sites if new grants permit them to use this strategy.

5. Financial Management

CSRA has managed funds appropriately as programmed in the first two years of the project. CSRA has a financial system in place that produces the necessary financial reports to Curamericas and USAID. In addition, the financial system is compatible with the local laws and regulations to be able to receive municipal government funds. CSRA also carries out annual audits with an internationally recognized company.

6. Logistics

The lack of BCG and measles vaccines at health facilities was a uniform complaint during the mid-term evaluation and in El Alto and Montero. This issue seem to be due to shortages at the MOH central level rather than logistical problems. Nevertheless, CSRA needs to discuss this issue with the municipal and MOH authorities because during the MTE missing cases were observed in both health centers visited. Also, authorities need to consider the expense for the family, in terms of transportation and time, to go back to the health center only to get one more vaccine.

In regards to the medicines and supplies for the other health interventions, there seems to be no problem in distribution, nor availability in the country. CSRA has committed to improving the logistics system used by the MOH. It is recommended to continue strengthening the Health Facility Assessments (HFA), in order to share results and strategies with the MOH at the DILOS and municipal level health authorities. Both health centers of El Alto and Montero had pharmacies, so it is recommended that CSRA assess how they are working and if more funds will be needed to expand or improve the variety of goods and supplies in the existing pharmacies.

7. Information Management

The Census-Based, Impacted-Oriented (CBIO) methodology being implemented by CSRA and Curamericas has been discussed in the Community Mobilization section, since it is an approach aimed to reach all families with health education and services. However, the methodology also provides a wealth of information about the family and its members. The CBIO is basically a family registration system which prompts involvement with primary health care services and behavior change activities. The records are kept at the health centers and monitor all benefits the family has received since the project started. Currently, the CBIO is computerized, and software is being developed and field-tested, which will integrate the family records with other information, like special studies, lab results, etc. Nevertheless, it should be pointed out that not all neighborhoods are registered, and one of the main problems with the methodology is that for large population areas, it needs a considerable number of health workers to maintain the records up to date.

In addition to CBIO, CSRA uses other assessment methodologies to collect data for the project. The project used KPC and focus group information to develop the DIP. The project has also carried out population-based studies to determine sources of information, effects of campaigns and health messages.

This system is adequate but can be improved. Recommendations included in other sections of this report include:
1. Although the project has used Lot Quality Assurance Sampling, the methodology needs to be revised to provide information by supervision areas; also, those areas that are still not registered

under the CBIO methodology can use sampling frames to monitor the benefits the family is receiving and change of attitudes towards project objectives.
2. Increase feedback of current data collection to communities.
3. Improve accountability by the municipal health authorities and the MOH to act on data collected, by enhancing the current partnership agreement.

8. Technical and Administrative Support

The project has received extensive technical and administrative assistance in the past two years. PROCOSI is the main PVO umbrella organization in Bolivia that brokers technical assistance from various sources from local and international partners.

The Quality Assurance Project has provided an invaluable support by training the teams of El Alto and Montero on how to define quality standards, indicators and to develop action plans for continuous improvement. Assistance was mainly to assess and improve management information systems, but the team will use the same methodology to improve project interventions.

Visits from Curamericas headquarters were rather limited. This problem has been addressed during the MTE and the new technical backstopper has expressed her willingness to improve communication and technical assistance in her areas of expertise, and to broker other sources of TA. Over the next two years, focus should be on sustainability and refocusing the role of health volunteers and payment schemes.

9. Mission Collaboration

Mission collaboration has been mainly through PROCOSI, the national PVO Umbrella organization.

D. OTHER ISSUES IDENTIFIED BY THE TEAM

No issues outside of the realm of the DIP or the mid-term evaluation were identified by the evaluation team.

E. CONCLUSIONS AND RECOMMENDATIONS

The intervention specific recommendations are provided under section B.1.b. Progress Report by Intervention Area. This section summarized the key recommendations made in the intervention section and throughout the report to synthesize the overall needs of the project as it moves into the second half of the program.

1. Strengthening local health systems. Community members state that health services have improved in the project areas in the last two years, especially in El Alto, since the project assisted in the construction and equipment of a health center, and made two other health centers functional. In Montero, CSRA expanded existing services by means of the census-based approach and increasing the health interventions. Interviews with community members and volunteers uniformly revealed that there was greater satisfaction with health services since the start of the project activities in these two areas.

2. One strategy in two different areas of the country. The CS project was ambitious from its conception. It not only had a large number of child and reproductive health interventions, but had

committed to work in two areas with very different characteristics, and in each area, there were a considerable number of activities and strategies to be carried out. As result of the MTE, allocation of funds for Montero were reduced and focus more in El Alto, where CSRA is new and there are more challenges to cover the entire target population stated in the DIP.

The CSRA's main strategy was to work through the municipalities and DILOS. Although this was an appropriate strategy to improve the overall health systems in both areas, this approach meant that CSRA does not have full control of the all factors that would affect the achievement of such results, since municipal and MOH health authorities also need to follow national priorities. In any case, there was a positive trend across the majority of the CS and health indicators.

3. Excellent relations between CSRA and the MOH and municipal health authorities. CSRA works directly with the health staff of each municipality and works with the DILOS (district level). CSRA staff is intimately involved with planning and capacity building at this local level and works in a cooperative manner with the municipalities.

4. Strengthening CSRA's managerial structure. CSRA identified key weaknesses in its managerial structure and began addressing these weaknesses before the mid-term evaluation. Prior to the evaluation, CSRA staff were trained in quality improvement methodologies, specifically geared to improving the quality of the information for decision-making. An in-depth training was completed by outside consultants and corresponding improvements began to be implemented by CSRA immediately.

5. Improve the quality of service delivery. The most successful strategies were the implementation of IMCI, LQAS for monitoring population-based indicators, continuous quality improvement, and the CBIO.

IMCI has helped the municipal health system to provide child health interventions in an integrated and systematic manner. The factor that facilitated introduction of IMCI was that it was also a government priority, which needed support to introduce and expand it.

IMCI is already in place, but more effort is now needed to improve the quality of service delivery; i.e., a system to monitor the quality and performance of health workers delivering IMCI, logistic support to make basic medicines and supplies constantly available, and IMCI at the community level. However, it must be pointed out that the KPC midterm survey indicators on families' knowledge on the early recognition of danger signs of childhood illnesses and when to seek help, etc, showed positive trends. The major challenge at this point is to establish a high quality IMCI strategy at the health facility level.

In terms of data for decision-making, CSRA has used LQAS and CBIO methodologies through the CS program. Nevertheless, its transference to the DILOS/Municipal health system has not occurred yet, nor were the results disseminated. Thus, CSRA will have to use the time remaining in the project to complete that last phase.

6. Remain focused on the goal of improving the capacity of the municipal and MOH health system. The Bolivian health system is going through an accelerated decentralization process. Currently, almost all decisions pertaining to strategic planning, prioritization of activities, coordination with

national and international donor and cooperating agencies, and budgeting, are responsibilities of the municipality, and all matters related to staffing are the responsibility of the DILOS. Therefore, CSRA has been right to implement its strategies within both systems. The process of transferring technologies and institutionalizing key health interventions is a long-term goal. However, in a relatively short time, CSRA has assisted the municipal and DILOS to introduce some key ones.

7. Community participation. Probably due to cultural factors and the influence of the Law of Popular Participation, communities and Neighborhood Boards in El Alto show tremendous cohesiveness and ability to work cooperatively to meet their health needs. CSRA' support has improved community participation but there is still ample opportunity to improve upon this success for improving community participation.

8. Focus on results for the total target population rather than on registered families. The project was successful in implementing a wide variety of trainings and activities supporting each of the CS interventions. Home visits were crucial to achieve results; however, the results were not consistent across all areas, particularly in neighborhoods where the CBIO methodology was not implemented. CSRA clearly needs to have one single implementation strategy that covers communities registered under the CBIO methodology as well as neighborhoods where registration was not possible, and then use two different monitoring and supervision strategies. If the implementation strategy is the same in both communities, the results should also be the same, even if the family registration is not the same. The recommendation is to move beyond monitoring each family and use sampling frames whenever needed. It is important for CSRA to evaluate the quality of service delivery in both cases.

9. Project Management and Technical Assistance. CSRA's management approach was decentralized in both administration and substantive matters, which facilitated coordination and support to the local municipalities and DILOS. Nevertheless, CSRA has a senior management team that oversees the implementation of all projects and makes greater decisions regarding the program in the country.

The municipal health system has provided CSRA funds to implement the national insurance programs, a new remarkable achievement for a private agency, but this is an approach that will become more common in the near future. For future activities, it is recommended to also strengthen the management component through effective health information and logistic systems, and to support strategic planning and sustainability.

10. Improve the capacity of CSRA staff. The CSRA staff serves as a technical partner to the municipality; however their technical skills need to be continually upgraded to maintain their usefulness as a source of information and assistance to the municipality. There should be an increased effort to upgrade and maintain the technical and managerial skills of the project staff by increasing communication between headquarters (Curamericas and CSRA), and project staff (already in progress), and between project staff and other PVO projects including expert groups especially via the internet (CSTS, CORE, BASICS, etc.). In addition, a systematic review of staff skills and training needs should be completed on a regular basis, as often as every six months.

F. RESULTS HIGHLIGHT

The project goals included strengthening the capacity of health volunteers (HVs) and the MOH and municipal health systems in El Alto and Montero.

These interventions are implemented through the Census-Based, Impact-Oriented (CBIO) methodology of primary health care within the communities that are served.

CSRA has strengthened the EPI at the service delivery level, but it will require some further changes in strategy to meet optimal immunizations coverage.

The percentage of mothers of children who had rapid or difficult breathing and who were taken to a trained health worked have increased in both areas, and the percentage of mothers who recognize danger signs in the newborn has also increased in both areas.

CSRA has successfully implemented diarrhea case management through the implementation of IMCI and CB-IMCI. All indicators for diarrhea management and use of ORS have surpassed the stated targets at the DIP.

The Montero team has taken an interesting and practical approach to increase hand-washing with soap; the hand-washing indicator has gone from 3.5% to 40.9%.

The levels of coverage for the maternal care objectives are moving in a positive direction, toward the stated goal, as the percentage of deliveries attended by trained personnel have increased.

The project has been promoting institutional delivery, but District 8 does not have the capacity to meet the increasing demand for obstetrical services.

Community members state that health services have improved in the project areas in the last two years, especially in El Alto, since the project assisted in the construction and equipment of a health center, and made two other health centers functional.

The CSRA CS project was ambitious from its conception. It not only had a large number of child and reproductive health interventions, but had committed to work in two areas with very different characteristics.

Excellent relations were observed between CSRA and the MOH and municipal health authorities.

The most successful strategies were the implementation of IMCI, LQAS for monitoring population-based indicators, continuous quality improvement, and CBIO.

It is recommended that Curamericas and CSRA focus on results for the total target population rather than on registered families.

G. ADDITIONAL INFORMATION TO MID-TERM EVALUATION REPORT – PERFORMANCE MONITORING PLAN (PMP)

1. Contribution to Scale/Scaling Up

Goal: To improve the health status of low income rural and urban families in developing countries.

Theory of Change: Public-private partnerships, specifically locally-controlled outsourcing of local, government owned health systems to private entities, together with the identification and follow-up of individual families can provide better, more cost effective health services, particularly in high-risk communities.

Design for Implementation: Model includes two key elements: 1) locally-controlled outsourcing of government-owned services to private providers, and 2) a system for establishing and maintaining contact with every family in service area.

1. Locally-controlled outsourcing

- Local Municipal Health Boards (LHB) outsource management of Local Health Systems to private entities.
- Local Municipal Health Boards, LHBs, created by national law to decentralize management of local health infrastructure. Composed of one representative each from:
    - Municipal Government
    - Ministry of Health, and
    - Comité de Vigilancia (CV) or Municipal Oversight Committee (end-user representation).
- Role of LHBs in model:
    - (Precise official role in continual debate and fluctuation from government to government)
    - Long range planning;
    - Decides terms of reference and contractual conditions
    - Selects the provider through out-sourcing mechanisms, and for overseeing and evaluating provider performance.
    - Defines package of services, basis: national health plans, local epidemiological data, local priorities, financial resources available from within and from without system, and unit costs per service.
    - The LHB appropriate mechanism for bottom-up, top-down, outside-in resolution of local health care issues by bringing.
- Role of provider:
    - Provide quality services to end users
    - Hire and fire personnel
    - Manage funds resulting from payment for services
    - Secure all inputs required for service provision
    - Manage and maintain government health infrastructure
- Characteristics of outsourcing process:
    - Open, competitive bidding or recruitment process.

    - Contracts to private organizations (existing NGOs or church related, incentive: survival) or companies (new, incentive: profit).
    - Reimbursement tied to performance
    - Relatively short term (three year?) contracts, introducing market-driven competition and incentives that enhance quality
    - Multiple party (MG, MOH, community authorities) involvement reduces potential for corruption and enhances accountability to communities
- System of payment (critical) through capitation (per capita) or per service mechanism for reimbursement, accepted by government
- Accountability and control through clearly defined terms of reference, contractual conditions, performance indicators and evaluation procedure
    - Census-based, Impact Oriented, CBIO, (see below) information system provides locally specific data for decision making and performance measurement, clearly enhances accountability and control since activities can be traced to families and individuals.
    - Human resource capital improvement indicators developed to enhance cost-effectiveness decision-making by governments and providers.
- Financing from a combination of sources including (Bolivia):
    - Municipal and/or national government reimbursement
    - Reimbursements from National Maternal and Child Health Insurance plans
    - Income from sale of selected services, medicines and supplies; and,
    - Other sources that surface according to national and international circumstances (example: resources currently available for health through international Highly Indebted Poor Countries (HIPC) initiatives).

2. System for maintaining contact with every family

Facility based service provision is complemented with systematic, periodic contact with every household through CSRA's Census-Based, Impact-Oriented (CBIO) approach.

- Components include:
    - Updated community or neighborhood census data;
    - Family folders for the registration and follow-up of individual health events;
    - Periodic contact with each family through home visits;
    - Registration of births, deaths and migrations; and,
    - Periodic participatory (management, staff and community leadership) analysis of mortality (or other indicators of most serious, frequent and preventable or treatable health conditions of the Local Health System jurisdiction.
- Fulfils the following functions:
    - Facilitates the development of trust between providers and end users (quality);
    - Allows needed services to be extended to every single family, particularly those at greatest risk (coverage and equity);
    - Permits designing interventions to tailor individual family needs (effectiveness);
    - Provides critical health information not available through clinic based services; and,
    - Assures a precise denominator for indicators of changing epidemiological patterns and program impact.
- Methodology proven to be effective with paid staff. Potential of participation of volunteer community health agents currently being explored.

Implementation: As this model is a new concept, CSRA will initially have to fulfill two major roles: first, that of promoter of the model itself and second, as a sub-contractor of management services within the application of the model. In the long term, in a given municipality, these two roles would theoretically enter into conflict of interest, and would best be served by two different entities.

As *promoter of the model*, CSRA will:

1. Draft regulations and terms of reference for the selection , contracting and monitoring and evaluation of contracted providers
2. Organize and follow-up with local health boards

As *contractor* of management services, CSRA requires:

1. An organizational structure with a regional office at the level of each municipal health system, supported by a national office. The organization will have the following capacities articulated between local and national levels: strategic planning, evaluation and model iteration and innovation; human resource development; financial and operational planning and oversight; and effective political and financial interaction with local and regional governments.
2. Streamlined administrative and financial management procedures
3. Streamlined technical norms and procedures
4. Changed internal institutional and potential client mindsets: "We are a business offering a valuable service for which we expect to be paid. We are not a foreign funded NGO offering handouts"
5. Effective feedback and interaction with clients (local and regional governments and end users)
6. World class software(s) for monitoring health indicators and unit costs
7. Funds from combination of local , national and international sources (see paragraph 7 of Design section)
    - $US 15.00/person/year primary care level paid from combination of sources
    - Resources required for secondary level of care not sufficiently understood yet

Benchmarks:

- Functioning Local Health Boards
- Functioning service contracts
- Reliable health information provided by CBIO HIS in model geographical units
- Model fully designed on paper-proposal for all government levels

Initial Results (obtained as of December 2003)

- Infant and child mortality reduced by 50%
- Significant reductions in maternal mortality
- Reductions in childhood nutrition
- Costs: $15 to $20 per inhabitant per year

Stagnation in efforts due to increased number of MOH paid employees and resulting reduction of control over personnel

Design for Growth:

- Success of project documented
- World-wide related experiences understood
- Pilot demonstration sites and formal training program

Design for Growth at the national level, within Bolivia

- Plan for spinning Contractor /Provider side of CSRA off from Model Development/ Promotion side.
    - Determine institutional capacity requirements of spin off entities
    - Plan and provide for sustainability of spin off entities
    - Key management and staff positions determined
- Model Development and Promotion component
    - Potential stockholders in proposal identified and lobbying and advocacy plan for favorable policy environment for application of model implemented
    - Criteria determined for scaling up by means of other types of providers (non-profit and for-profit
    - "Generic" technical (CBIO) and administrative (outsourcing) procedures ready for replication
    - Financing alternatives defined for other providers
- Contractor/Provider component
    - Criteria determined for scaling up by means of CSRA growth
    - Develop business and marketing plans
    - "Generic" technical (CBIO) and administrative (outsourcing) procedures ready for replication

Design for Growth at the international level

- Potential countries identified, similar prevailing conditions
- Technical and administrative procedures set for adaptation to different country settings
- Recruitment of potential partners and/or clients. CSRA would not seek to expand institutionally to other countries, but would operate thorough carefully selected partners or clients.
- Potential financing alternatives explored

Scaling Up:

- An organizational structure for Model Development/Promotion component with the following capacities for national and international levels: advocacy and lobbying; training; evaluation and model iteration and innovation;
- An organizational structure for Contractor/provider role with the following capacities: human resource development; financial and operational planning and oversight; effective political and financial interaction with local and regional and national governments,
- Key management and staff positions filled for both Model Development/Promotion and Contractor/provider roles.
- Funds raised for seeding national and international expansion

National level

- Advocacy and lobbying for government acceptance of outsourcing of PHC as one alternative option for service provision
- Marketing tools towards municipal and regional governments finalized
- Financial packages finalized

- Interested municipal governments identified
- Individual setting feasibility studies completed
- Contracts negotiated and signed

Benchmarks
- CSRA operating Local Health Systems under contracting model
- Several NGOs competing to provide quality services to municipalities
- Knowledgeable Local Health Boards directing competitive processes for the selection of quality providers
- Favorable policy environment maintained despite political changes

International level
- Financing arranged
- Initial expansion into one additional country through carefully selected partners or clients
- Further international expansion based on recent experience

Results at Scale:
- Steady expansion of model within Bolivia
- Middle income country level health indicators sustained
- Model adapted and applied successfully in other countries
- Significant health indicator improvements in several developing countries

Plan for Action
- Prove outsourcing model - Conversion of pilot units into demonstration/training centers
- Advocacy and lobbying for acceptance of model by key sectors:
    - Bolivian Government and policy makers
    - Key political leaders
    - Health officials in international organizations: PAHO/WHO, WB, IDB, USAID, etc.
- Spin Contractor /provider side of CSRA off from model development/ promotion side.
- Scaling up through Contractor / Provider side marketing to new municipal government clients
- Scaling up through identification and recruitment of other local (Bolivia) non-profits interested in applying model
- Identification of other countries with similar prevailing conditions and partners interested in model
- Transferal of technology to partners or clients in other countries.

2. Civil Society Development

It will be achieved by working closely with the Neighborhood Boards in El Alto to get them involved in accompanying the on-going evolution of the health system. Since most of the Neighborhood Boards' leadership changes from year to year with the Aymara system of rotation of authority, this is an on-going, time consuming activity. Most of these leaders enter their responsibilities with virtually little understanding of public health issues, and leave with a significant understanding.

Important efforts have gone into working with community volunteers, starting with the "Manzaneras" and ending with the less politically sensitive health volunteers. Much of this has included leadership training and work with self esteem, as well as integrating nearby higher education institutions into community based health action

In Montero, significant effort has gone into getting the local high schools (teachers and parents) involved in public health issues, particularly in reproductive health education and oral health.

Note: At times it has seemed to staff that the staff of child survival program has inherent difficulties for working with civil society in the sense that it has been perceived as being results-oriented as opposed to process-oriented. Working with civil society often entails significant effort at community-driven rhythms for which there is often not sufficient resources and long term results.

3. Widespread Development or Adoption of Innovative Approaches

See above in scaling-up

4. Equity

The CBIO methodology is oriented to achieving equity, i.e. it reaches all families, particularly those who do not easily access health services, precisely those who are often those most at risk and therefore most in need of these services

In Montero, the project serves primarily the migrant population, which in Bolivia's eastern lowlands is often poorly treated by local authorities and dominant ethnic groups.

In El Alto, CSRA is working on the impoverished outskirts of El Alto, a marginalized city in itself. It has an estimated annual population growth rate of close to 10%, incoming migrants from the rural areas and mines. It is an area that was completely underserved until the initiation of this project.

CSRA's experience has been that private (though still non-profit) management of government resources is more effective in reaching the more marginalized.

5. Visibility and Recognition of the Project and PVO Grantee

Curamericas and CSRA are organizations with relatively low profiles but excellent reputations; this project allows them to maintain that reputation. CSRA plays a leadership role in the PROCOSI network of Bolivian non-governmental organizations.

The close working relationship with the Neighborhood Boards in El Alto and the OTB's in Montero is the single most important activity related to improving and maintaining the visibility of the organization.

However, more effort and documentation is needed in this area.

H. THE ACTION PLAN

1. Action Plan for El Alto

IMMUNIZATIONS

Activities/Tasks	Deadline	Responsible	Materials/TA Needed
Conduct barrier analysis to understand families' perceptions regarding vaccinations, barriers and health workers performance.	-October 2005	1. Comunication specialist and field team	1. Analysis of barriers (stationary, transportation and food)
Participatory evaluation of the EPI with the District 8 Health Network (SERES), Sub-Municipality and Junta de Vecinos. 1. Feedback the conclusions to the community and leaders. 2. Negotiate with SERES authorities about EPI, immunization campaigns, availability of vaccines, days of immunizations at health centers, monitoring the full immunization schedule.	1. Atipiris until Oct 8, Mercedes until Oct 15, Senkata until Oct 13 2. October 20	1. Regional manager and technical team 2. Regional manager and representatives from the Juntas Vecinales	1. Feedback meeting (food, stationary and transportation) 2. Negotiation meetings (transportation)
Monitoring the full immunization indicators	- Monthly and during each information analysis meetings	- Regional technical staff by health center	- Information analysis meetings (stationary)
Training and monitoring of biosecurity measures	-Jan 2006	-Regional technical manager	-Technical assistance from Ministry of Health
Provide plastic cover for immunization cards (with a message about the full immunization schedule).	- October 28	- Regional administrator and regional technical staff	- Request and budget review
Expand EPI to "Unificada Potosí" Health Center	- October 28.	- Regional technical staff and health center director	- Stationary
Health education in waiting rooms and home visits about the importance of vaccination, availability, types of vaccines	-Ongoing	-Auxiliary nurses and nursing students	-Rotafolios, handouts, videos, all BCC materials
Incorporate a supervision checklist about quality in the application of vaccinations	Dec 2005	-Health center directors	-Office supplies
Continue reviewing family folders to identify unvaccinated children	Ongoing	-Auxiliary nurses in external consultations	---

IMCI and CB-IMCI

Activities/Tasks	Deadline	Responsible	Materials/TA Needed
Continue trainings on IMCI to new staff	- On as needed basis and according to a schedule	- Regional technical staff	- Food and stationary
Continue training on CFB-IMCI to new volunteers and nursing students	- On as needed basis and according to a schedule	- Regional technical staff	- Food, stationary and photocopies
Continue applying IMCI and CB-IMCI quality verification lists	- Ongoing	-Health center directors	- Stationary

INTERCULTURAL APPROACH

Activities/Tasks	Deadline	Responsible	Materials/TA Needed
Continue working on the intercultural health model through: 1. Holding a workshop about intercultural practices for community leaders in District 8 2. Workshops on traditional medicine for health personnel and municipal leaders 3. Create intercultural protocols on IMCI and reproductive health 4. Adapt the clinical consultation surrounding where children and women are seen).	1. Jan 2006 2. Dec-Jan2006 3. Feb 2006 4. Nov 2005-Feb 2006	1. District director 2. District director 3. Health personnel 4. Health center directors	1. Office supplies, transportation, facilitator, place 2. Office supplies, transportation, facilitator, place 3. Office supplies 4. Supplies that will be identified

DIARRHEAL DISEASE

Activities/Tasks	Deadline	Responsible	Materials/TA Needed
Continue with hands-on practice in preparing and using ORS during home visits to homes	Ongoing	Field staff	ORS

PNEUMONIA

Activities/Tasks	Deadline	Responsible	Materials/TA Needed
Continue implementation and evaluation of the reference system for referring children to level 2 facilities	Ongoing	Health center directors	Communication network functioning, reference tickets, costs associated with the ambulance, office supplies

NUTRITION

Activities/Tasks	Deadline	Responsible	Materials/TA Needed
Improve weighing techniques with health center staff: 1. Training staff according to KPC norms. 2. Provide equipment (calefaction, scales, shades). 3. Supervision (knowledge and weighing technique).	According to each health center scheduling. 1. November 30 2. November 30 3. According to monthly scheduling	1. Health center directors and district nurse chief 2. Health center directors and regional administrator 3. Technical staff and district nurse chief	1. Weighing techniques manuals and stationary 2. Purchase order, review SUMI budget 3. Transportation and stationary
Improve the conditions of the weighing rooms	- November 30	- Health center director and regional administrator	- Purchase order under SUMI funds

Develop and distribute counseling guidelines for normal and undernourished children.	- November 30	- Communication specialist, technical staff and regional administrator	- Stationary, photocopies and transportation
Supervise the correct application of counseling under IMCI feeding guidelines, in waiting room and home visits	--Ongoing	-Nursing staff and health center directors	-Office supplies
Incorporate elements and results from ProPan to promote nutritional practices	-Ongoing	-Regional technical manager	-Results of the study, Curamericas support
Strengthen reference system for children with grade F undernutrition	-Ongoing	-Nursing staff and health center directors	-Office supplies

MATERNAL HEALTH

Activities/Tasks	Deadline	Responsible	Materials/TA Needed
Reprint "Planning my Birth" brochure, which will include a white space to stamp telephone numbers and addresses.	- October 28	Regional administrator and health center directors	Perinatal card updated and purchase order.
Continue with the communication network, ambulance support and telephone service in Senkata	-Ongoing	-Director of Senkata	Gasoline
Seek funds for offering 24 hour a day service in the Senkata center	-Until Mar 2006	-Regional manager	

COMMUNICATION

Activities/Tasks	Deadline	Responsible	Materials/TA Needed
Begin diffusion campaigns (one message at a time) during home visits made by nursing students and volunteers. Formalize inter-institutional agreements with the schools of nurse (Catholic University, XX Century University and INFOCAL): 1. Develop training curricula for nurse students' field work. 2. Develop a work plan and a supervision plan by health intervention 3. Coordination meetings and follow up of the work plans.	1. January 30, 2006 2. January 30, 2006 3. Every end of field work rotation	1. Regional manager and representatives from universities 2. Regional manager representatives from universities 3. Technical staff, health center directors and representatives from universities	1. Stationary and transportation 2. Stationary and transportation 3. Stationary and transportation
Begin training field staff, volunteers and nursing students	In each induccion workshop for nursing students, and once a year for volunteers	Field supervisors in the 3 health centers and the communicator	Office supplies and transportation
Integrated health fair	Once per year	Director of geographic unit, staff from the three centers	Office supplies, prizes, posters

Training materials and job-aids: 1. Develop and inventory of all IEC materials and job-aids 2. List key messages the Project Hill deliver by health interventions. 3. Prioritize health messages (develop terms of reference for students develop materials). 4. Elaborate or adapt education materials: a. Adaptation of materials and photocopy them b. Produce or adapt materials for students. c. Produce or adapt IEC materials base don the revisions and prioritization	1. October 12 2. October 19 3. October 27 4. 4.a. November 7 4.b. November 7 4.c. November 12	1. Communication specialist, technical staff and regional administrator 2. Regional manager and technical staff 3. Regional manager and technical staff 4.a. Communication specialist, Senkata field staff, regional administrator 4.b. Health center directors, field staff and communication specialist 4.c. Communication specialist and technical secretariat	1. Data base, CSRA library 2. Key indicators, stationary 3. Stationary, key messages, transportation 4.a. Purchase order 4.b. Stationary 4.c. Stationary, photographs, drawings and photocopies.
Waiting room orientation by nurse students. 5. Develop training curriculum 6. Develop counseling guidelines. 7. Training nurse students: • Technical content • ORPA • Use of IEC and job aids. • Communication skills • Inter-cultural issues 8. Supervision by levels (walking together).	5) November 17 6) November 18 7) November 21-23 8) According to schedule	5). Regional manager, communication specialist and technical staff 6). Regional manager, communication specialist and technical team 7). Technical team 8). Nurses, nurse auxiliaries and communication specialist	5) Stationary and photocopies 6) Stationary and photocopies 7) Stationary and photocopies 8). Stationary and photocopies and supervision checklist
Information at doctors' offices and weighing rooms 9. Produce algorithms, counseling protocols and guidelines. 10. Training in counseling techniques and guidelines (physicians, nurses, nurse auxiliaries and administrative staff of District 8). 11. Supervision by levels (walking together).	9) December 15 10) January 15, 2006 11) According to scheduling	9) Technical staff, health enter directors, nurses 10) Health center directors and communication specialist 11) Health center directors and nurses	9) Obtain models and examples of counseling protocols and guidelines, stationary and transportations 10) Stationary, photocopies and transportation. 11) Checklist and photocopies.
Strengthening the home visit. 1. Finalize the home visit manual and validate it. 2. Training field staff	1. November 30 2. December 19-21	1. Communication specialist, technical staff and health center staff.	1.Stationary, photocopies and transportation

3. Discuss the results of the home visit with health workers of all levels. 4. Regular supervision of the home visits.	3. Data analysis meetings 4. According to scheduling	2. Communication specialist, field staff and regional administrator 3. Field staff and health center directors 4. Health center directors, communication specialist and field staff	2. Stationary, transportation, manuals. 3. Stationary, transportation 4. Stationary, checklist and transportation
Health information to Juntas Vecinales, community leaders and sub-municipal authorities of District 8: 1. Information about key messages 2. Share with community leaders and authorities about Project advances.	1. Quarterly meetings. 2. Quarterly meetings.	1. Regional manager, field staff 2. Regional manager, field staff	1. Stationary, photocopies and transportations. 2. Stationary, photocopies and transportations
Inter-institutional coordination and evaluation: PROMUJER, Red Cross.	- According to scheduling	- Regional manager and technical staff	- Photocopies.
Select key knowledge and practice indicators to devise monitoring tools	- Every six months starting June 2006.	- Technical team	- Exit interview questionnaires, photocopies and transportation
Meetings with Neighborhood Boards to promote key messages	-3 times per year	-Director of G. Unit and regional administrator	-Brochures, meeting supplies
Identify child care centers to share key messages with mothers	-3 times per year	-Regional directors	-Brochures

QUALITY ASSURANCE

Activities/Tasks	Deadline	Responsible	Materials/TA Needed
Strengthening the quality of service delivery: 1. Work on the expansion of health services and equipment (counseling room, laboratories, ultrasound and delivery room in Senkata. 2. Obtain necessary health staff from the Municipality to provide 24 hour attention in Senkata. 3. Analyze what are the factors that are causing delays in the attention of patients, make corrective actions. 4. Adjust quality standard on the quality improvement component. 5. Implement QAP program in Mercedes and Altipiris h 6. Hold workshop on quality	1. In process. 2. In process. 3. February 2006. 4. February 2006 5. First semester 2006 6. Jan 2006 7. Ongoing	1. Regional manager 2. Regional manager 3. Technical staff and health center directors 4. Technical staff and Senkata health staff 5. Regional technical director 6. Operations manager 7. Directors of each center	1. Not needed 2. Not needed 3-7. Stationary, photocopies and transportation.

client services in Senkata **7.** Follow-up of QAP program in the three health centers			
Review and implement the solutions found through the satisfaction study 1. Develop protocol for quality of care and communication between doctor and patient. Place in visible location the guidelines and protocols **2.** Continue educating the staff on quality of counseling and interaction doctor-patient and inter-cultural principles	1. October 28 2. According to scheduling	1. Communication specialist, health center directors, nurses and regional administrator. 2. Regional manager and intercultural principles consultant	1. Photocopies and posters. 2. Photocopies and transportation

INFORMATION SYSTEM

Activities/Tasks	Deadline	Responsible	Materials/TA Needed
Community Information Analysis meetings to analyze CBIO	-Ongoing	-Each health center	-Office supplies
Implement and follow-up of the cost analysis tool, in Senkata	-Ongoing	-Financial manager	-Office supplies, transport
Mini-survey to monitor progress toward indicators	-August to Sept 2006	-Regional technical manager	-Office supplies, training supplies, transport
Health Facilities Assessment	-Until Sept 2006	-Regional technical manager, operations manager	-Backstopper

SUPERVISION

Activities/Tasks	Deadline	Responsible	Materials/TA Needed
Monitoring plan for implementation and supervision system	-Until end of project	-Regional manager, operation manager	Office supplies

CBIO

Activities/Tasks	Deadline	Responsible	Materials/TA Needed
Continue to select and train volunteers	-Until end of project	-CBIO coordinators	-Training supplies
Assure implementation of CBIO en all the neighborhoods of District 8 through work with volunteers and nursing students	-Ongoing	-All staff, CBIO coordinators	-Office supplies, transportation
Sign institutional agreements with nursing schools (Catholic University, 20th Century University, INFOCAL) and the Health Centers 1. Design a training curriculum to carry out rotations in the health centers of District 8 that provide mutural benefits 2. Develop a work/supervision plan by programmatic area and levels of experience 3. Coordination and monitoring	1. Jan 30, 2006 2. Jan 30, 2006 3. At the end of each group's rotation	1. Regional manager and managers from each institution 2. Regional manager and managers from each institution 3. Regional technical manager, health center directors and institutional managers	1-3. Office supplies, transportation

meetings organized in relation to the inter-institutional workplan			

2. Action Plan for Montero

IMMUNIZATIONS

Activities/Tasks	Deadline	Responsible	Materials/TA Needed
Prioritize IZ activities to reduce this intervention's overall percentage of effort—should be only 10%.			
Develop two-dose TT strategy for pregnant women. Possible activities: CBIO follow-up by HV of pregnant women to assure two doses, group education activities on TT, vaccination of mothers of children 0-5 years. Include this indicator in miniKPC, as wasn't measured MTE.	First quarter of 2006	Project coordinators	Office supplies, and other supplies to be defined
Charge for the replacement of a lost immunization card.	Through the end of the project	All health team/HVs.	Photocopy maintenance.
Reprint more immunization cards for new children	Second quarter 2006.	Administration.	Printing costs
Provide plastic covers for immunization cards of children under age 2 with message about the full IZ schedule	Second quarter 2006 through the end of the project.	Regional directorate and Project coordinators.	Production costs
Continue with the census-based methodology to visit homes with children who are missing IZ doses	Through the end of the project	Neighborhood coordinators and HVs.	Stationery and envelopes
Continue with the LQAS methodology to verify immunization coverage in neighborhoods where regular home visits is not possible due to migration	Through the end of the project	Neighborhood coordinators and HVs.	Stationery, envelopes and transportation
Carry out sampling surveys to assess cold-chain process and immunization campaigns.	Design study by first quarter 2006 and second and carry it out on the second quarter	Municipal health authorities and field coordinators	Stationary, transportation thermometers and IEC observation guidelines
Carry out HFA which will include cold-chain aspects	Jan 2006	Regional director/ MOH	Office supplies

DIARRHEA CONTROL (20% of effort)

Activities/Tasks	Deadline	Responsible	Materials/TA Needed
Craft activities to give this intervention a greater priority Give priority to the key messages for all staff, HVs and BCC activities: 1) Danger signs for dehydration, 2) How to rehydrate, 3) Prevention of diarrhea	Ongoing	Regional director and technical coordinators	Supplies to be defined
Assure presence of and use of educational materials with group activities and home visits	Jan 2006	Technical coordinators	BCC materials
Create three new activities to share diarrhea BCC messages with families of children under age give	Feb 2006	Technical coordinators	To be defined

Continue CB-IMCI for new HVs	Ongoing	Technical coordinators	Office supplies
Continue applying verification checklists.	Ongoing	Coordinators of health centers	Office supplies
Finalize counseling and home visit protocols.	Nov 2005	Communicator, regional director, all staff	Office supplies
Print nutrition orientation cards for healthy and ill children	To be defined	CSRA HQ	Nutrition cards

PNEUMONIA CONTROL (20% of effort)

Activities/Tasks	Deadline	Responsible	Materials/TA Needed
Craft activities to give this intervention a greater priority			
Give priority to the key messages for all staff, HVs and BCC activities: --Rapid breathing for under 5s --For < two months: general illness signs	Nov 2005	All staff	---
Create three new activities for sharing pneumonia danger signs with pop	Dec 2005	Field staff	To be defined
Adapt prenatal care opportunity to focus on newborn pneumonia	Feb 2006	Technical staff	To be defined
Assure presence of and use of pneumonia danger sign educational materials	Nov 2005	Communicator, and regional staff	To be defined
Continue CB-IMCI for new HVs.	Ongoing	Field staff	Office supplies
Assure that BCC indicators for pneumonia are included in mini-KPC	Mini-KPC dates	Technical director	--
Continue applying verification checklists.	Ongoing	Technical director	Office supplies
Finalize counseling and home visit protocols.	Nov 2005	Communicator and all staff	Office supplies
Print nutrition orientation cards for healthy and ill children	To be defined	Communicator	Funds for printing

NUTRITION (25% of effort)

Activities/Tasks	Deadline	Responsible	Materials/TA Needed
Hold complementary food preparation workshops in conjunction with OTBs and families, concentrating on children under age 2 and in areas with greatest malnutrition. Invite growth faltering children to participate.	First semester 2006	Field coordinators	Training materials, print IEC materials, kitchenware and transportation
Strengthen protocol for giving vitamin A capsules to post-partum women (tying it to post-partum FP, newborns first check-up or children's IZ check-ups)	Jan 2006	Technical coordinators	To be defined
Carry out training and monitoring with MOH, DILOS on initiation of	Dec 2005	Field coordinators	Office supplies, meeting funds

BF within 1 hour			
Carry out nutrition fairs on food preparation and nutrition practices in priority neighborhoods once a year	Start on second semester 2006	Field coordinators	Training materials, print IEC materials, kitchenware and transportation
Provide follow-up every 15 days to children with severe malnutrition, and those under 2 with moderate malnutrition	Ongoing	Field staff	Transport
Participate in municipal health fairs	First semester 2006	Field coordinators	Training materials, print IEC materials, transport, kitchenware
Promote training and carry out follow-up visits in conjunction with municipal health corkers and Montero hospital staff	January 2006.	Regional coordinators, municipal health workers.	Transportation.

IMCI (DIARRHEA AND PNEUMONIA CONTROL, AND HAND-WASHING)

Activities/Tasks	Deadline	Responsible	Materials/TA Needed
Use QAP lists to verify use of clinical IMCI	Ongoing	Technical coordinators	Photocopies
Strengthen IMCI implementation strategy for IMCI	October 2005.	Technical coordinator	Office supplies
Adapt the strategy of hand washing education with school children and delivery of "soap-kits" for their homes to reach pregnant women and mothers of children under 24 months.	Participate in education district planning meetings in January 2006 and implement the activity by the second semester 2006	Technical coordinator	Training materials, print IEC materials, "soap-kits," and transportation
Coordinate with COSMOL (local water company) to distribute wand-washing educational materials and to train COSMOL workers	Last quarter of 2005	CSRA director and COSMOL workers	Training materials, print IEC materials and transportation

MATERNAL HEALTH (25% of effort)

Activities/Tasks	Deadline	Responsible	Materials/TA Needed
Work with MOH, DILOS to sponsor analysis of quality of care at the reference hospital, since we have noted complaints during MTE	Feb 2006	Regional coordinator	Office supplies, transport, meeting space
Define an activity for each monthly meeting with pregnant women to assure that meetings use principles of adult learning and active participation	Dec 2005	Technical coordinators	Office supplies, other materials as needed
Adapt the maternal health education for students aged 12-18 years to reach mothers of children under age two. Topics: • Self-esteem • Reproductive physiology	Participate in education district planning meetings in January 2006 and	Field coordinator	Stationary, IEC materials, flyers and transportation

• Pregnancy and delivery • Family planning • HIV/AIDS • Responsible fatherhood	implement the activity through the end of the project		
Promote key messages for HIV/AIDS prevention to: • School parents 2/year; • School teachers; • Meetings with education coordinators 3 times a year • Coordinate with Antonio day care • Mothers w/ children <2	First quarter 2006	Health coordinators	Stationary, IEC materials, flyers and transportation
Training on HIV/AIDS epidemiology with the Center of AIDS Referral for Project staff	Last quarter 2005	Regional coordinator	Stationary, IEC materials, flyers and transportation
Use family folders to monitor FP users so that health staff can make home visits	Ongoing	Field staff	Reprint IEC on FP
Follow-up and supervision on the use of "Safe Motherhood Promotion Cards" during home visits and clinic visits	Second quarter 2006 through the end of the project.	Field coordinators y	"Safe Motherhood Promotion Cards"
Implement the Non-Pregnant Health Card for MEF who visit the health centers	October 2005 through the end of the project	Nurse coordinators	Print cards
Implement QAP standards for the quality of FP counseling	Jan 200 through end of project	Regional coordinators	Photocopies
Expand ultrasound services with the Red Cross. Initiate the provision of delivery services by the Red Cross health center	Last quarter of 2005	CSRA Director	Medical equipment

QUALITY ASSURANCE

Activities/Tasks	Deadline	Responsible	Materials/TA Needed
Carry out HFA of three health centers	March 2006	Regional director and MOH	Office supplies
Assure revised QAP indicators for the five CS interventions, according to % of effort (nutrition, maternal and newborn care, diarrhea, pneumonia and IZ)	Feb 2006	Technical director, Regional CSRA supervisor	Office supplies
Carry out mini-KPCs every six months, with focus on indicators not measured in MTE	Ongoing	All staff	Office supplies, transportation, training costs
Strengthen the delivery of health messages by HVs	First seme4ster 2006 through the end of the project	Field coordinators	Stationary, IEC materials, flyers and transportation
Training health staff in communication strategies	Last quarter of 2005	Health communicator	Stationary, IEC materials, flyers and transportation
Obtain financial support to continue providing incentives to HVs	First semester 2006	Technical coordinators and CSRA Director	Stationary, IEC materials, flyers and transportation

ATTACHMENT A: Baseline information from the DIP

ADJUSTMENTS/CHANGES TO THE DIP

ORIGINAL PROPOSAL (CSP): ACTIVITIES, STRATEGIES	ADJUSTMENTS/CHANGES	JUSTIFICATION
APROCHES AND STRATEGIES OF THE PROJECT		
CENSUS-BASED METHODOLOGY "..CSRA has expanded the CBIO (census-based, impact oriented) approach to further elaborate the role of the community (community health volunteers) in the design, planning, implementation and evaluation of health activities in the target areas…" (Page 27).	**IN EL ALTO** Instead of Health Volunteers governing the CBIO system, community groups are playing a central role.	Due to El Alto's unique political structure, Neighborhood Board's have assumed an important role in all phases of CBIO planning, implementation and evaluation.
INTER-CULTURAL STRATEGY (within IMCI section) "….In conjunction with TARI, CSRA is currently conducting a study of current beliefs and practices of traditional practitioners, community members and local government leaders in El Alto. Study results will be used to further modify interventions and develop a cross-cultural model that establishes open dialogue between cultures. The program will modify how staff conducts existing clinical protocols (e.g., the IMCI strategy) …" (page 27). "….the relationship between health personnel and traditional practitioners will	**IN EL ALTO** The study with TARI will not be undertaken. Instead, work that will last at least 18 months has been started with a renowned Aymara consultant with workshops to sensitize staff at the three District 8 health centers as to the value of the Aymara culture and to develop culturally-appropriate health care services. Intercultural protocols will be developed for each of the	The project has chosen to focus on building a climate of respect between health care workers and the population, and the provision of culturally-appropriate services. Intercultural workshops focus on understanding the "Andean cosmovision" and its relationship with integrated health. The Senkata health center attends normal deliveries in a modified birthing room, using

also be strengthened particularly in El Alto. Specific activities conducted in the project's first year include: ensuring the adequacy of a culturally-appropriate environment and clinical protocols, cross-cultural training workshops for health personnel, local authorities, and other organized groups, and workshops among health personnel and traditional practitioners in order to share experiences and practices" (page 29).	intervention areas, along with quality control checklists to verify their implementation. Intercultural workshops and the clinical protocols will be shared with the municipality, Ministry of Health, and managers at each of the reference hospitals that see District 8 patients.	protocols that respect the cultural and familiar traditions of its patients. Photos and testimonies about this experience will be shared during monthly evaluation meetings and with representatives of the reference hospitals' maternity ward.
QUALITY ASSURANCE ".....Quality improvements using QAP standards, instruments and technical assistance will also be implemented on an institutional level to build organizational capacity..." (page 30).	**IN THE LA PAZ OFICE** In the La Paz office, the full QAP methodology will not be utilized to improve the administrative processes. However, some of it's principles will be applied to the current process of organizational development	The project has decided to place a priority on use of the QAP process for field staff and service delivery, though it will use some of the QAP tools in the administrative areas as new policies are phased in.
BEHAVIOR CHANGE COMMUNICATION STRATEGY FOR INDIVIDUALS, FAMILIES, COMMUNITIES, AND HEALTH WORKERS "...CHWs, HVs and other project staff also will be involved in educating caregivers and community members during group meetings..." (page 31).	**IN EL ALTO AND MONTERO** Although the project will not be forming its own groups, the project will take advantage of all opportunities to work with organized groups, such as agrarian groups, neighborhood boards, school groups and health fairs. A list of all existing groups will be written for each site, and the programming of health activities with them. Also, spaces like waiting rooms in heath centers will be used to promote key maternal and child health messages.	The conformation of groups in the urban context is very difficult given the number of families that engage in informal economic activities (90%) which force them to be outside their homes most of the day.

"….CSRA and PROCOSI, a local NGO network, will conduct a formative analysis of health behaviors in El Alto during the first year of the project. CSRA will conduct a similar analysis in Montero as well. These qualitative research studies will be used to revise and refine the key health education messages in the respective project areas…" (page 31). "…CSRA will also reach mothers and families through mass communication activities, such as local radio spots…" (page 32).	The full process of formative analysis will not be pursued. However, barrier analysis has been conducted in some of the intervention areas and will be completed for those which are missing. A grid showing barrier analysis activities, its results and modifications to program activities will be presented in the final report. Messages will not be broadcast by radio. However, radio dramas and spots will be shared with the population during health fairs, and in clinic waiting rooms. A list of other mass communication activities (such as health fairs) will be included in the final report.	The project has decided to rely on other project models, such as IMCI, to propose the ideal behaviors for the project populations. However, the "barrier analysis" method will be used to have a better understanding of why in certain programs, desired practices are not adopted by the families. Radio station listening preferences in both areas of the project are dispersed, increasing broadcast costs beyond those projected.
PROGRAM FOR HEALTH VOLUNTEERS "…El Alto will follow the following training schedule (page 33): 2003 36 volunteers for Senkata 2004 25 volunteers for Cumaravi 2005 35 volunteers for Atipiri	**IN EL ALTO** Effort will be made to continue recruiting Health Volunteers, but the project will not maintain the same numbers goal. Instead, greater emphasis will be placed on the activities of nursing students who will do rotations through the project. These students will make home visits to share key messages on maternal and child health.	Although the El Alto project site has invested time and money to train and support a large number of volunteers, it has been difficult to motivate and maintain volunteers without offering financial rewards. The contribution of nursing students promises to be more sustainable, based on agreements with local nursing schools. A proposal is in place to increase the number of nursing students and formalize their contribution with academic supervision.

KEY INTERVENTIONS		
STRATEGIC PARTNERSHIPS (Within PNEUMONIA CASE Management) "…..CSRA has a strategic partnership in place to closely collaborate community-level activities with Freedom from Hunger's local Bolivian NGO, CRECER… (page 43). ……These promoters, however, are not health personnel and have no formal training. CRECER would like CSRA's active involvement in capacity building and encourages health personnel to periodically participate in village banking sessions in order to promote services and provide health sessions…" (page 43).	**IN EL ALTO AND MONTERO** CSRA personnel will not participate in the training sessions at CRECER communal banks because the coverage of CRECER village banks is minimal. However, strategic partnerships will be developed with other NGOs working in the project areas. A list of all NGOs working in both sites will be developed and the assessment of collaborations among them will be included in the final evaluation (with focus on pneumonia BCC collaborations)	In El Alto there is only one CRECER communal bank where 20 people receive financial aid from this institution. CSRA has facilitated the participation of CRECER communal bank promoters in IMCI training, to the benefit of other sections of the city of El Alto.
NUTRITION AND MICRONUTRIENTS "….Implementation of TIPS methodology will begin in 2004 in both areas. ProPan will be first implemented on a pilot base in El Alto and implementation will be further evaluated due to budget limitations…" (page 45). "…..In addition to ProPan methodologies, the project will also utilize the Trials of Improved Practices (TIPS) methodology to test feeding recommendations for feasibility and acceptability in order to improve key nutritional behaviors. Curamericas will provide guidance to CSRA staff on TIPS so that they are able to develop an assessment and counseling guide on appropriate feeding recommendations..." (page 47).	**IN EL ALTO AND MONTERO** Based on results of the barrier analysis, TIPs strategies will be developed if needed. ProPan analytical methods will not be developed in their entirety. However, results from the research undertaken by the Pan-American Health Association in the second and third districts of El Alto will be used in the revision of the nutrition strategy.	The project has chosen to focus on promoting nutritional practices based on the dietary guides proposed by the IMCI, which have been developed according to the child's age and nutritional status

MATERNAL AND NEWBORN CARE "….CHWs and HVs will also train and counsel male partners and other family members on safe delivery and proper care of the newborn. This includes (but is not limited to) tying, cutting and cleaning the umbilical cord, washing the baby and keeping it warm, the administration of Vitamin K, proper breastfeeding techniques, and placement of the baby to the breast…." (page 50).	**IN EL ALTO AND MONTERO** Fathers and other family members will not be trained for delivery, as the project has chosen to support other birth preparation strategies and the goal of institutional births. The project will support preparation of a family Birth Plan, BCC activities related to danger signs for women and newborns, emergency communication networks, facilitate the clinic ambulance to bring laboring women to reference hospitals 24 hours per day, offer culturally-appropriate delivery services during regular clinic hours, and work with the reference hospitals on a community evaluation of delivery services and a strategic plan for improving delivery care at hospitals. In addition, the Senkata health center is working on its capacity to attend to deliveries 24 hours per day and advocating for the construction and CSRA's administration of a maternity hospital in District 8.	In observing the relatively high increase in institutional deliveries in both geographic areas, during the mid-term evaluation, the team has recommended concentrating on promoting institutional deliveries.

ORGANIZATIONAL DEVELOPMENT		
BUILDING ORGANIZATIONAL CAPACITY "….CSRA will also undergo an organizational assessment of its administrative, financial and human resource processes that will address improvements of various deficiencies in the organization. …. but has plans to incorporate the additional technical components addressed by the ISA methodology in its organizational development program. The CSRA methodology will use tools such as SWOT technique, which identifies the organization's strengths, opportunities, weaknesses and advantages and in-depth interviews and surveys to analyze and redesign processes and identify concrete follow-up activities…" (pages 77-78)	CSRA will not implement the ISA as a tool to assess the organizational development process.	CSRA has undertaken its own process of analyzing its organization. Using these reflections as reference, CSRA has been and continues designing and implementing a new series of policies and procedures, such as a new model for the support and supervision of human resources.

ANNEX B: Evaluation Team Members and Their Titles

El Alto, Department of La Paz

Name	Workplace	Position
Mercedes Apaza Quispe	Health Center Senkata 79	Auxiliary Nurse
Maria Eugenia Velasco	Health Center Senkata 79	Physician
Williams Valencia	Municipal District 8	Technical Manager
Maclovio Mamani	Health Center Mercedes - Atipiris	Census-Based Methodology
Gregoria Huanaco	Health Center Atipiris	Census-Based Methodology
Viviana Paco	Health Center Senkata 79	Nurse Auxiliary
Humberto Alanoca	Health Center Senkata 79	Management Information System
Luciano Tintaya	Health Center Senkata 79	Census-Based Methodology
Johnny Pinto	Health Center Mercedes	Census-Based Methodology
Richard Soria	Municipal District 8	Administrator
Jose Ibañez	CSRA Headquarters	Health Information System
Ramiro Llanque	CSRA Headquarters	Project Manager
Franz Trujillo	Municipal District 8	Director

Montero, Department of Santa Cruz

Name	Workplace	Position
Dardo Chavez	Health Center Cochabamba	Director
Mirtha Sanjines	Health Center Cochabamba	Regional Administrator
Mitma Claure	Health Center Cochabamba	Human Resource Coordinator
Femida Gutierrez	Health Center Cochabamba	Regional Technical Supervisor
Silvia Ajhuacho	Cruz Roja Health Center	Technical Coordinator
Marina Tenorio	Health Center CLEM	Technical Coordinator
Rosa Munoz	Health Center Cochabamba	Technical Coordinator
Victor Cordoba	Health Center Cochabamba	Nurse
Monica Almaza	Health Center Cochabamba	Census-Based Methodology
Hilda Perez	Health Center	Census-Based Methodology
Margoth Uriona	Health Center CLEM	Auxiliary Nurse
Marleny Suarez	Health Center Cochabamba	Auxiliary Nurse
Luzmarina Torrico	Health Center Cochabamba	Auxiliary Nurse
Edith Cuellar	Health Center	Auxiliary Nurse

ANNEX C: Evaluation Assessment Methodology

The core final evaluation team consisted of staff from CSRA headquarters in La Paz, field staff from El Alto and Montero, and an external evaluator. A Curamericas headquarters representative joined the MTE at the end of the field exercise and stayed in Bolivia for three additional weeks to assist the CSRA team to improve program performance based on the MTE results and recommendations.

The MTE used two main sources of information; a KPC survey based on LQAS methodology, and group and in-depth interviews with health volunteers and municipal health staff from El Alto and Montero. The sampling frame for the KPC survey was by each of the project areas, because both are different in terms of culture and epidemiological profile. El Alto is a sub-urban area of La Paz; it is in the Altiplano region, at about 4,000 meters above sea level; El Alto is the second largest city in Bolivia and mostly populated by indigenous populations. Montero is a town about 100 kilometers from Santa Cruz; although it has had a large immigration fro the highlands of Bolivia, originally was inhabitant by tropical indigenous groups and immigrants from the Argentina and Brazil. Language spoken in El Alto is predominantly Aymara, and Montero is Spanish.

CSRA staff developed the baseline and final evaluation survey questionnaires. Municipal health directors and technical staff were invited to participate in a one-day meeting to analyze and interpret the survey data and to make conclusions and recommendations by strategic objective. The ET prepared a background information package that contained: (1) the health project objectives, (2) main strategies and activities, and (3) the results by intervention presented in tables, with percents achieved at Baseline and MTE surveys. The group was then divided into analysis sub-groups that analyzed each intervention separately and then present the results to the entire MTE team.

Two in-depth interview guidelines were developed for health volunteers, neighbor councils (Juntas Vecinales) and health authorities, to obtain information on training and education received and if health needs were attended by the project. All group leaders and most participants were notified the week before the interviews.

Finally, the external evaluator visited two health posts, interviewing health personnel and HVs.

In addition to the collection of the cross sectional survey and qualitative information, the external evaluator requested the following documents from PH: 1) Project Proposal, 2) DIP, 3) annual work plans, 4) examples of training plans, 5) health information system forms, 6) monitoring and evaluation instruments, and 7) referral instruments.

ANNEX D: List of persons interviewed and contacted

Neighborhood Board: Senkata, El Alto

1. Ponciano Miranda, President
2. Alejandra Mamani, Vice-president
3. Martina Barbosa, Responsible for Health Interventions
4. Luisa Mamani

Health Volunteer: Senkata, El Alto

1. Jacoba Gutierrez
2. Candelaria Paxi
3. Neri Ramirez
4. Juana Vargas
5. Lidia Mamamni
6. Teresa Quispe

Sub-Municipality of District 8, El Alto

1. Benjamin Sajama, Sub-Major

Catholic University of Pucarani, El Alto

1. Martha Aliaga, faculty member and in charge of the students rotation in public health.

Municipality of Montero, Santa Cruz

1. Maria Pilar Villarroel, Director of the Municipal Health Directorate
2. Jasime Mamani, Health Network Manager
3. Victoria Maina, Health Network Supervisor

Health Volunteers: Montero, Santa Cruz

1. Nally castro
2. Guadalupe Balcazar
3. Mabel Vera
4. Concepcion Pacheco
5. Rosalva Pacheco
6. Rosmary Paichucana
7. Martha Alles
8. Vicente Saboada
9. Roberto Leon
10. Monima Coimbra
11. Isabel Roca
12. Isabel Palma
13. Irma Rojas
14. Cira Aima

Territorial-Based Organization Representatives, Montero, Santa Cruz

1. Sofia de Badani, Presindet of El Carmen
2. Jesús Segovia, President of Bolivar.

3. Walter Vasquez, Education Unit Director
4. Carlos Mendez, Education Unit Director
5. Maria Julieta Mina, School Teacher San Antonio
6. Isabel Vasquez, School Teacher San Antonio
7. Cecilia Moreira, Director
8. Mario Ugarte
9. Roberto Rued, CEDETAC (Confederación de Trabajadores Campesinos Agrícolas - Confederation of Agricultural Workers)
10. Ivert Masavi, President OTB
11. Reynaldo Aguilar, President OTB
12. Roberto Petterzon, President OTB, "3 de Mayo"

ANNEX E: Electronic Copy

ANNEX F. Special reports

Model of Public Healthcare Financing by means of Management Delegated to Multiple Providers and a Capitation System

Nathan Robison C.
15/07/04

OBJETIVE: The objective of this document is to contribute to the design of a health service network financing model, combining management delegated to multiple providers and a capitation system.

INTRODUCTION: Bolivia continues to be the South American country with the worst health indicators. It is comparable with various countries on the African Continent, which are considered by many to form the most underdeveloped zone in the world. To illustrate this fact, suffice it to compare the two most important indicators, which are infant[1] and maternal mortality[2].

It is true that these indicators reflect the country's general degree of poverty. Lack of basic services, such as water and sanitation infrastructure, unemployment and low wages, illiteracy and minimal schooling, as well as highly precarious living conditions are in large part responsible for the persistence of such poor health indicators in Bolivia.

However, it is equally true that these unacceptable indicators are a consequence of deficiencies in the management of the healthcare sector. That is to say, important improvements could be made in the areas of family and community health by improving the management of traditionally assigned intervention, such as, in the healthcare sector as well as in other sectors. This proposal is intended to offer an alternative for improving the healthcare sector's management.

JUSTIFICATION: According to the Pan-American Health Organization[3], approximately 10% of the Bolivian population is attended by the private sub-sector; 22% is attended by the Social Security sub-sector; and between 43% al 48% is attended by the public sub-sector or, in other words, by Health Ministry establishments. Therefore, 20% to 25% of the population is left without access to any of these sub-sectors[4]. According to the Poverty Map[5] which estimates the country's unmet basic needs, 38% of the Bolivian population lacks adequate healthcare. In rural areas, 55% of the population lacks adequate healthcare[6]. According to this data, almost 90% of the Bolivian population currently depends upon the State for the provision of healthcare services.

[1] Representation of World Population 2000. Population Reference Bureau
[2] Reproductive Risk Index. Population Action International Report Card 2001
[3] Bolivia. Healthcare in the Americas 2002. Volume II, Structure of Country Reports. PHO. Pag. 31
[4] According to this distribution, the placement of coverage by the non-lucrative private sub-sector is not established.
[5] Bolivia: Poverty Map 2001. National Population and Housing Census. INE. Pag. 10
[6] ibid. Pag. 14

This dependence upon State services is exacerbated by the very weak relationship between sub-sectors, particularly between those dependent upon the State and private sub-sectors. Some level of coordination exists between the public system and some non-lucrative players (certain establishments belonging to the Catholic Church and some NGOs) by way of agreements which in some way facilitate the acquisition of additional resources from other countries. The clearest example of the lack of coordination between sub-sectors is that no means exists by which lucrative and non-lucrative private sub-sectors might participate in the various insuring models promoted recently by the State (Mother Child Insurance, Basic Health Insurance, and now, Universal Mother Infant Insurance). These models were designed to reimburse only the costs of medication and related supplies used for approved treatments, without taking into account the costs of personal services and many other operating costs, thus allowing for only the public sector's participation.

A high percentage of the population that depends upon the public sub-sector and Social Security, suffers serious problems regarding the quality and warmth of services provided. The majority of Social Security establishments are saturated. Many people who have access to State services choose to use private services, including traditional providers. These, however, are people with a certain level of income. Those who do not have such resources, constituting the vast majority of the country's population, are virtually condemned to depend upon the deficient services provided by the State.

In a poor country like Bolivia, healthcare spending should be oriented to increase the productive capacity of production factors—workforce, land and capital[7]. It can be called investment only if spending is oriented towards incrementing capacity. Healthcare spending in Bolivia is highly concentrated in curative attention, considered "consumer goods" (expenditure), rather than investment. The PHO estimates that only 4%[8] of spending is invested in prevention and promotion, which are the areas with potential to contribute the most to incrementing the country's productive capacity.

"State modernization" tendencies which are currently fashionable in the management of the State, suggest that tasks could be more effectively conducted if certain basic functions were separated: such as, the functions[9] of a) regulator and norm setter, b) financer, and c) executor. It is accepted that according to this theory, the Ministry of Health would limit its action to regulator and norm setter. (Some suggest that it would be better to even further separate those two functions.) In the case of the Bolivian healthcare sector, the Ministry of Health performs three functions: norm setting, provision of services, and financing. Since promulgation of the Popular Participation Law, the sector has been injected with financing that it previously did not have. The Ministry of Health maintains control of human resource financing, the sector's most important area.

The State's tendency toward modernization also suggests that its tasks would be better conducted through further decentralization. In the healthcare sector's public sub-sector, the management of

[7] Dieter K. Zschock . Health Care Financing in Developing Countries. American Public Health Association. International Health Programs. Monograph Series. No. 1. 1979. Pag. 9.
[8] Bolivia. Health in the Americas 2002. Volume II, Structure of Country Reports. PHO. Pag. 44
[9] ibid. Pag. 31

human resources remains centralized, certainly due to the complications implicit in its extensive decentralization[10].

In most countries, personal services consume almost one-third of recurrent health spending, and Bolivia is no exception. Therefore, human resources should be an important consideration in any discussion of decentralization. The end purpose of true healthcare sector reform is to improve performance, thereby improving the health of the country's inhabitants. The success of sector reforms in reaching these objectives fundamentally depends upon what has been able to be achieved regarding human resources[11].

One big problem in the public sub-sector is inefficiency, poor quality and lack of warmth on the part of public service personnel. This is principally due to the fact that the Ministry of Health is such a large institution that two basic elements do not work: an adequate incentive system and an institutional culture that promotes key essential values (such as, quality, honesty, self-management, etc.).

In contrast, evidence suggests that the non-lucrative sector is more efficient[12] and effective, and offers higher quality, warmer service. Besides, the private non-lucrative sub-sector has made more of an effort to invest in prevention and promotion. NGOs[13] are responsible for 97% of spending on these types of programs in the country.

A definition of Healthcare Sector Reform is "deliberate and sustained change to improve the sector's efficiency, equity, and effectiveness[14]." This implies changes to what is done, how it is done, and who does it. The State's Political Constitution establishes[15] that "the State is obligated to defend human capital, protecting the health of the population." The Constitution also establishes[16] that all Bolivians have the "fundamental right . . . to healthcare." It does not establish a State obligation to provide healthcare services to the population. The content of this document is directed at proposing just that.

PROPOSAL BACKGROUND: This proposal was born as a result of the past twenty years of the Rural Andean Health Council's experience.

The Rural Andean Health Council (RAHC) is a national civil association with non-lucrative ends which has administered primary healthcare in rural and near-urban zones in Bolivia since 1983. The Ministry of Health, by way of a series of covenants, delegated the management of healthcare service networks in different areas of the country to the Rural Andean Health Council.

[10] Kolehmainen-Aitken, Riitta-Liisa. Myths and Realities about the Descentralization of Health Systems. Management Sciences for Health, 1999. Pags. 39-64.
[11] Ibid, Pag.40.
[12] Cárdenas, Marina. Nacional Accounts of Healthcare Financing and Spending. Bolivia. DDM, Harvard; PHR, Abt Associates; Ministry of Health and Social Foresight. 2000. Pag. 86, 46.
[13] Ibid. Pag. 52
[14] Berman, Peter. Health Sector Reform in Developing Countries. Harvard University Press. 1995. Pag. 15.
[15] Political Constitution of the State. Article 158
[16] ibid. Article 7, Clause a)

The RAHC along with other partners has managed networks in the following areas over the past twenty years: the Municipalities of Carabuco and Puerto Acosta in the Camacho and Ancoraimes Provinces, Omasuyos Province in the Department of La Paz, the Municipality of Sipe Sipe in the Department of Cochabamba, and Montero City in the Department of Santa Cruz. Currently the RAHC maintains a presence in Ancoraimes, Montero and, beginning in 2003, in the City of El Alto's 8th Municipal District in the Department of La Paz.

Until 1994 and 1995, when the Popular Participation and Administrative Decentralization Laws took effect, the RAHC had a 90% dependency upon foreign resources, making it an unsustainable long-term endeavor from a financial point of view. The promulgation of these two laws opened the door for RAHC to successfully mobilize important State resources benefiting the institution's range of influence.

One of the resources successfully mobilized by the RAHC was the number of personnel assigned by the Ministry, through the Departmental Health Services, to the aforementioned municipalities. Though the RAHC's strategy of increasing the number of State-held positions in these municipalities was successful in improving financial sustainability of related healthcare services, the increase in State-dependent personnel made managing human resources more and more difficult regarding quality. Without adequate control over the performance or payment of personnel, the RAHC's capacity for quality control notably diminished.

This institutional antecedent constitutes a valid experience supporting this document's proposal.

DESCRIPTION OF THE MODEL: The following describes a model of an integrated system of healthcare cost reimbursement combining management delegated to multiple providers and a capitation system:

- Scope: network of services
- Strategic shared administration of the network of services
- Delegated management
- Package of Services
- Cost of the model
- Scheme of proposed financing
- Control mechanisms, evaluation and monitoring

Administration Components of the Model: The model's administration has the following characteristics:

Scope: Network of Services: According to the latest legal dispositions[17], the administration's scope of public health services is the service network. The network is composed of the following elements:

- A "second level" hospital with resolution capacity in the four basic specialties, with bedding-in services.
- Various "first level" healthcare establishments with out-patient capabilities.

[17] Supreme Decree No.

It is important that the geographical limits of the network of services be delimited with exactitude, in order that the responsibility for execution of healthcare activities may also be clearly defined.

Shared Administration of the Service Network: This model separates the functions of service network administration from its management. In this model, the strategic administration of the service network—such as planning, follow-up and strategic evaluation—is shared by all investors. The Local Health Directory (LHD) is responsible for conducting these functions. Since the Ministry of Health and Municipal Governments are the principal investors in the network of services, they compose the leadership of this directory. If there are other significant investors in the network of services, they should also participate in the strategic administration composing the LHD.

The LHD defines the terms of reference, selects, contracts and conducts a follow-up of the network's management, which for purposes of this model, is delegated.

The norms, policies, and procedures for the content of the terms of reference are defined by the Ministry of Health in a way that the contractor is obligated to meet technical norms as far as all healthcare programs. One of the dangers of decentralization is normative dispersion[18] .

Delegated Management: The Ministry of Health and Municipal Governments delegate management of the network of services to a private, non-lucrative or lucrative entity under contract, making this entity a true contractor. This delegation includes:

- The power of selecting, contracting, evaluating and discharging the human resources required for the appropriate execution of tasks foreseen in the terms of reference.
- Management of the financial resources generated by the provision of services. The contractor is responsible for correctly applying all dispositions of the SAFCO Law, as it is managing State resources.
- Custody and management of the State's physical property which is provided for use in the execution of tasks foreseen in the contract's terms of reference.

Management is delegated by way of a contract with both commercial and legal characteristics, differing from other agreements binding delegated management in such rare cases in which it had been presented in the country previously. For example, in contrast with previous agreements, the contract clearly establishes the obligations of all parties involved and establishes sanctions in the case of noncompliance.

The principal characteristic of this delegated management is the manner of pay, which is in cash, and will be described later.

Ideally, the contract would delegate the management of a complete network. Nevertheless, the possibility of delegating the management of smaller parts of service networks—assuming geographical limits of such fractions can be precisely defined—should not be discarded.

[18] Kolehmainen-Aitken, Riitta-Liisa. op. cit. Pag. 14

In this model, incentive for quality service exists through the participation of one or more contractors in a market of local healthcare network managers; whereby the most effective are more sought after and better paid, while the less effective are, in the medium term, left by the wayside. Quality is inherent in work that allows for individual incentives, institutional culture, and values. Instead of the sector being run by one large, less-effective business with tens of thousands of workers, the sector is run by medium-sized entities which allow it to work quality issues more effectively.

Service Package: The current government's[19] healthcare policies, like those of past governments, establish a full gamut of services to be provided and are structured in approximately the following way[20]:

1. Integral attention for prevalent childhood diseases, prioritizing:
    a. Immunizations c) Management of diarrheic illness
    b. Nutrition d) Management of pneumonia
2. Feeding and nutrition
3. Integral attention for women, sexual and reproductive health
4. Integral attention for school-aged children and adolescents
5. Integral attention for senior citizens
6. Family violence—attention and prevention
7. Mental health
8. Healthy habits and lifestyles
9. Occupational health
10. Oral health

These programs are complemented by what the previous government called Epidemiological Shield, which consists of programs to control the spread of the following highly contagious or prevalent diseases:

1. Chagas
2. Malaria
3. Tuberculosis
4. Yellow Fever
5. Leishmaniasis

Currently, the first-level establishments dependent upon the public sector, particularly in rural areas, are limited to performing two functions: on-demand curative outpatient care and conducting immunization campaigns. All other activities and programs within the policies of the Ministry of Health are either not realized or only very sporadically, depending upon occasional orders sent from above or very occasional initiative taken by some functionary.

The Rural Andean Health Council offered the following package of services to the Municipality of Carabuco, Camacho Province in 2001[21]:

[19] www.sns.gov.bo
[20] Strategic Healthcare Plan 1997-2002. Ministry of Health and Social Foresight. Pags. 19-20
[21] RAHC. Annual Evaluation Carabuco. 2001.

Basic Package Offered by RAHC

First Level of Attention

1. Integral attention for prevalent childhood diseases, prioritizing:
    a. Immunizations
    b. Nutrition (control and orientation)
    c. Management of diarrheic illness
    d. Management of pneumonia
2. Integral attention for women, sexual and reproductive health
    a. Prenatal control
    b. Labor and childbirth
    c. Family planning
    d. Sexually transmitted diseases
    e. Cervical cancer screening
    f. Administration of the tetanus toxoid
3. External consultations for the general population
4. Dental and oral health
5. Detection, diagnosis and treatment of tuberculosis
6. Control of canine rabies

Such intervention has been provided by healthcare establishments applying combinations of the following complementary strategies:

1. Orientation and services through routine home visits
2. Education and orientation in organized groups
3. Communication and orientation in local health fairs
4. Participation by community agents

This amount incorporates the cost of a first-class information system capable of conducting a very precise follow-up of health indicators using what RAHC calls Census-Based Methodology, which is further described in the "Control, evaluation and monitoring mechanisms proposal" section.

The management team worked during this entire period with municipal authorities, members of the Municipal Health Council, providing information and managing municipal resources for the healthcare system, as much Basic Health Insurance as important additional resources.

Provision of this package received corresponding administrative, accounting, logistical and managerial support.

In compliance with the current proposal, the contractor is committed to completing a matrix of activities with its respective indicators negotiated between parties, according to the prevailing health conditions in the jurisdiction at the time the contractual relationship is begun. These initial health conditions are established through a baseline study developed to this effect.

The contractor guarantees that human resources dedicated to the network are duly trained and up-to-date on all the latest technological advances of the sector.

Services offered by the contractor will vary according to economic conditions of the contract. If one of the contractors, a Municipal Government perhaps, seeks to improve the quality of students' healthcare, for example; this element of the package could be enhanced according to that contractor's available resources.

Some additional services a contractor may offer according to the conditions of the contract could include:

- Technical assistance in the planning, follow-up and strategic evaluation of the service network
- Management of additional economic resources for the network
- Training of local and municipal authorities in the decentralized management of public healthcare

Cost of the Model: The RAHC was able to provide the package of services described above for a total cost of US$15.00 per person, broken down as follows:

Rural Andean Health Council
Estimation of Cost per Person per Category
(In US$)

Category	**Cost per Person**
Technical personnel	7.99
Administrative personnel	1.49
Management and support personnel	0.90
Personnel Cost Subtotal	**10.39**
Training	0.31
Communication with community	0.06
Use and maintenance of vehicles	0.99
Medication and supplies	1.34
Consultations	0.35
Travel expenditures	0.31
Basic services	0.11
Communication services	0.28
Maintenance of infrastructure and equipment	0.29
Various expenditures	0.63

Institutional development expenditures	0.08
Recurrent Operative Cost Subtotal	**4.75**
TOTAL COST PER PERSON PER YEAR	**15.13**

This total per-person cost includes a prorating of the organization's national office expenditures.

This amount is close to the approximately US$14.00 that the public sector distributes for each person who depends upon this sub-sector, obviously offering curative attention with a poorer showing as far as coverage and results.

Scheme of proposed financing: Clinging to the spirit of current legislation, which establishes the following criteria:

- Technical human resources are covered by the National General Treasury through the Ministry of Health.
- Universal Mother Infant Insurance provision of supplies and medication through that mechanism.
- Basic services and operating costs of the system covered by municipal resources.
- Other operating costs of the system covered by income generated by the sale of services, other medication and supplies.

Therefore, we propose that a contractor be reimbursed in the following way:

1. National General Treasury, per person US$8.00
2. Municipal Government, per person US$4.00
3. Universal Mother Infant Insurance US$1.50

TOTAL: US$13.50

The remaining US$1.63 would be covered by generation of local income.

Obviously, this fundamentally covers first-level attention. The second-level establishment would be covered in a similar way, making the corresponding calculations.

Control, evaluation and monitoring mechanisms proposal: The Rural Andean Health Council has characterized itself by implementing what they refer to as Census-Based Methodology. This work methodology has the following components:

1. An annual census of all families in the zone of influence
2. A file registering each family home and all the most pertinent data regarding the health of its inhabitants

3. Regular visits to each home with varying frequency depending upon risk factors of each family
4. A birth, death and migratory registry
5. Verbal autopsies of maternal death and children under five years old
6. Periodic mortality analysis sessions, including estimates of mortality rates

This methodology allows for various advantages from an operative point of view, including confidence building between families and their provider, provision of services if necessary, promotion of healthcare services in the establishments, etc.

In addition, from the point of view of control, evaluation and monitoring healthcare activities, this methodology provides the following advantages:

1. By conducting the census, the denominators used to calculate indicators for different interventions are able to be determined quite precisely.
2. Through the system of data collection and family files, it is possible to control the services provided, even including patients' first and last names.

This system of information will allow contractors to prove not only the provision of services but also to confirm the basis by which it calculates the number of people for whom it intends to charge under the capitation system.

Finally, since precise geographical limits and the basis to determine denominators used to calculate indicators exist, surveys may be conducted in order to determine the results of educational activities (knowledge gained, outlook, and practices) which are difficult to measure through a system of information.

ADMINISTRATIVE CONTRACT FOR THE MANAGEMENT OF

HEALTHCARE ESTABLISHMENTS

IN THE CITY OF EL ALTO'S 8th MUNICIPAL DISTRICT

In the City of El Alto, Department of La Paz, Republic of Bolivia, the parties voluntarily agree to sign this Administrative Contract, in compliance with the following clauses:

FIRST: Parties to the Contract

This Administrative Contract is signed by the following parties which are in conformance with the Local Healthcare Directory (LHD) of the city of El Alto:

- The Municipal Government of the City of El Alto, legally represented by the Hon. the Mayor, Dr. José Luis Paredes, hereafter referred to as the Municipal Government
- The prefecture of the Department of La Paz, through Departmental Healthcare Services (DHS), represented by Dr. Enrique Huaricallo, Director of EADHU, hereafter referred to as DHS
- The Oversight Committee, represented by its President, Pedro Huanaco
- Rural Andean Health Council, represented by its President, Ricardo Pereyra and its National Director, Nathan Robison Carttar, hereafter referred to as RAHC.

SECOND: Background and Justification

The 8th Municipal District of the City of El Alto has a current population of approximately 34,000 whose socio-cultural characteristics include mostly poor, migrant families (mining districts, high plains and others). At present, the district has a healthcare network composed of three establishments.

The LHD with popular participation, in accordance with Supreme Decree 26875, constitutes the maximum authority in shared healthcare management with popular participation in compliance with the National Healthcare Policies established by Universal Mother Infant Insurance (UMII) and applied in programs prioritized by the Municipality.

The Municipal Government of El Alto, which in accordance with the Popular Participation and Municipalities Laws, conforming with the new Management Model stipulated in Law 2426 and, through its representation before the LHD and its directional dependence upon MHD for health issues, exhibits competency in healthcare through its celebrated agreements and contracts with other decentralized organizations or institutions for the best execution of its functions. Management, outfitting, maintenance and improvement of the physical infrastructure of healthcare establishments stand out as well. It also responds to the petitions, representations, solicitations, and acts of social control by Neighborhood Assemblies and the Oversight Committee.

The Departmental Healthcare Service (DHS) is responsible for execution and vigilance of compliance with norms emerging from the central level of the Municipality, joining different sectors (public, Social Security, NGOs, church and private) in order to achieve equal access to healthcare services for the population.

The Oversight Committee, according to Supreme Decree 26875, shares healthcare administration with popular participation in the framework of its abilities in order to achieve active participation in healthcare planning, as well as the social control of healthcare program administration.

The Rural Andean Health Council has been performing healthcare functions in the rural, near-urban area of the Department of La Paz and the urban area of Montero in Santa Cruz, since 1992.

The RAHC, whose principal activity is the management of healthcare service networks, has been conducting activities that range from primary healthcare attention to providing support in other fields, such as promotion of water for human consumption, basic sanitation and housing improvements among others; all of which are directed at improving the population's health in an integral way. Since April of 2003, RAHC—through an initial Administrative Contract signed between the same parties as this contract—has been managing the Senkata 79 Healthcare Center, which during nine months has exceeded all expectations of reaching goals set forth in the agreement. At the end of 2003, such results obtained by RAHC were presented to the corresponding authorities as evidence of competence and fulfilment of commitments.

FOURTH: Object of the Administrative Agreement

This Administrative Contract has, as its object, technical and administrative delegation of healthcare establishments in the 8th Municipal District of the City of El Alto to the Rural Andean Health Council.

Specific Objectives:

1. Organize a family and community healthcare model through the implementation of Census-Based Methodology and strategies of humanization and inter-culturalism in establishments belonging to the 8th District.
2. Design, implement and develop healthcare services in those which offer complementary attention combining Western and Andean (herbology) medicine.
3. Design, implement and develop a Community Epidemiological Oversight System by joining social networks with the network of healthcare establishments, under principles of co-responsibility.
4. Implement IAPCI Clinic and Community strategies in order to contribute to the reduction of infant malnutrition, morbidity-mortality due to acute diarrheic illness and pneumonia.
5. Support and strengthen the implementation of municipal healthcare policies—Obligatory Health Insurance (OHI), Manitos, Healthcare Defense, and others).

6. Contribute to the avoidance of maternal mortality in the area, by increasing coverage and prenatal control, detection and follow-up of pregnancies, attention by trained personnel during labor, improvement of sexual and reproductive health services, according to national norms.
7. Strengthen the reference and counter-reference system's effectiveness between district healthcare establishments and more complex levels.
8. Implement a financial management system model which is efficient and effective in the 8th District's healthcare establishments in concordance with current legal dispositions.
9. An objective of the City of El Alto's 8th Municipal District network of establishments, in particular, is to agree to set annual goals for indicators with LHSD. These goals can be modified in case of extraordinary support for the 8th District's infrastructure, human resources and equipment.

The population falling under the responsibility of the 8th Municipal District's three healthcare establishments consists of 12,741 inhabitants of the 8th District.

Population data will be adjusted according to census data captured from implementation of "Census-Based Methodology Oriented to Impact," applied in the areas of reference.

SIXTH: Responsibilities of the Municipal Government of El Alto

1. Turn over the infrastructure and equipment of the 8th Municipal District's healthcare establishments in its totality, to RAHC, by means of notarized inventory. Inventory which will form part of this contract.
2. Delegate physical management of the District's healthcare establishments to RAHC.
3. Cover the following aspects, consigned in S.D. 24447 of the Popular Participation Law, with Municipal resources:

    - Repair and expansion of infrastructure
    - Provision and replacement of supplies
    - Training of personnel
    - Maintenance of a porter for each healthcare center
    - Other municipal obligations in accordance with Law No. 1551

4. Delegate management of locally generated resources, generated by each of the healthcare establishments in the 8th Municipal District, to RAHC.
5. Streamline resources from other sources of financing and donations in order to benefit the conceded establishments.
6. Repay RAHC (monthly) for UMII, Obligatory School Health Insurance, and other insurance scheme loans, in accordance with legal dispositions; and receive RAHC receipts in accordance with legal norms currently in place.
7. Establish distribution of items for the 8th Municipal District's establishments before the adequate authorities in normal population growth.

8. Actively participate in periodic internal and external evaluations of progress and execution of Annual Operative Programming indicators with network management, through its representatives in the LHSD.
9. Annual verification of each establishment's inventory.

SEVENTH: Departmental Healthcare Service Responsibilities

The Departmental Healthcare Service's obligations, through EADHU follow:

1. Formally and opportunely provide all the norms, guidelines and national policies necessary for the healthcare establishments' proper function, as well as, evaluation parameters for goal completion, coverage, and application of healthcare programs.
2. Provide technical assistance, giving priority to: the Expanded Immunization Program (EIP), UMII, Integral Attention for Prevalent Childhood Illnesses (IAPCI), Sexual and Reproductive Health Program (SRHP), Institutional Fortification, and additional technical support in other areas.
3. Train personnel in the application of norms, program guidelines, and national and departmental policies, at the request of RAHC, free of charge.
4. Conduct follow-up upon completion of this contract, in accordance with Article 8, Clause d, regarding follow-up and evaluation.
5. Be responsible, along with the Municipal Government, for the supervision, evaluation, and control of compliance with norms, policies, objectives and programmed goals in healthcare, within the framework of the Annual Municipal Operative Program and quality of attention, through the LHSD.
6. Delegate responsibility for quality of attention, to RAHC.
7. Delegate the application of norms and regulations of financial resource management, within the 8th Municipal District's healthcare establishments, to RAHC.
8. Fully delegate administration of the 8th Municipal District's healthcare establishments' human resources to RAHC. Administration includes participation in the selection of personnel, and coordination and evaluation of their performance.
9. Assign sufficient personnel as necessary, funded by the National General Treasury, according to norms of normal population growth and needs of the establishments.
10. Guarantee working stability in the 8th Municipal District's healthcare establishments, based on performance evaluations conducted by RAHC.
11. Negotiate before the central level, the normal growth of healthcare human resources for the El Alto Municipality and its assignment to the 8th District, in accordance with national policies and studies or analysis defining the real necessity of personnel by category.
12. Make viable in an opportune way, personnel changes requested by RAHC.
13. Opportunely provide sufficient quantities of the biological and medical supplies for national programs in accordance with the goals established in the Annual Operative Programming.

14. Provide RAHC with necessary technical counseling by way of corresponding technical units, including application of the SAFCO Law.
15. Respect the signed inter-institutional agreement with RAHC, with relation to the use of registries for generating information destined for the National Healthcare Information System (NHIS).
16. Respect complementary strategies and activities that could be conducted by RAHC, as long as they do not go against national healthcare policies or beneficiary families and have as their only purpose, contributing to the integral well-being and equity of the same.
17. Provide human resources in accordance with the following outline, in agreement with clause 9 of the present, for purposes of this Administrative Contract.

Tables of Healthcare Establishments' Human Resource Necessities: to be Annexed

EIGHTH: RAHC Responsibilities

1. Manage the 8th Municipal District's healthcare establishments, accepting responsibility for primary healthcare attention provided by each establishment assigned by the administrative network. These responsibilities include the development of AOPs, their periodic follow-up and evaluation, elaboration of monthly plans, and periodic presentation of data, according to Ministry of Health and DHS norms, in compliance with the law.
2. Administrate the 8th Municipal District's network of healthcare establishments, structuring a quality, decentralized, disperse model in accordance with healthcare reform.
3. Preventative maintenance of healthcare establishments' equipment under its management.
4. Perform preventative maintenance of the infrastructure.
5. Monitor indicators of quality of attention.
6. Ensure efficient, effective functioning of the financial management system for the 8th District's healthcare establishments.
7. Strengthen interaction with the District's social network (Security Patrols, Healthcare Defense, neighborhood organizations, and others)
8. Develop and coordinate inter-sector healthcare activities within the framework of the National Healthcare Plan, benefiting the 8th Municipal District's network of establishments.
9. Comply with all the laws of the Republic regarding management and labor, including the SAFCO Law (1178) for treatment of all economic resources of State and institutional dominion.
10. Manage establishments' locally generated economic resources, guaranteeing that 100% be used in their healthcare activities, area of responsibility, and in subjection to the legal dispositions currently in place.
11. Manage human resources of delegated healthcare establishments, working on function manuals, supervision and monitoring systems according to the norms in place.

12. Present quarterly and period-end reports to LHSD regarding activities developed in the establishments pertaining to programmed advances, goal completion and use of resources.
13. Provide all UMII first attention level services conforming to Law 2426 and its regulations.
14. Provide Obligatory School Health Insurance services corresponding to the first attention level.
15. Provide corresponding registries and documentation relating to UMII and OHI services provided, to Municipal Healthcare Direction on a monthly basis.
16. Support and strengthen UMII and OHI within the framework established by corresponding legal dispositions.
17. Provide preventative, promotional and curative services to children from Manitos children's centers within the 8th District.
18. Comply with NHIS by presenting data to the management network.
19. Sign agreements in favor of the District's healthcare establishments and/or coordinate activities with other institutions providing healthcare services.
20. Formulate the AOP and present it to the LHD for approval.
21. RAHC is responsible for follow-up and evaluation of activities in coordination with LHSD, the management network, MHD, and the DHS Board. The signing parties commit themselves to active participation in such activities. Costs of follow-up and evaluation should be contemplated in the budget of each healthcare establishment.
22. Hire the following personnel for the Senkata 79 Healthcare Center.

Senkata 79 Healthcare Center

Human Resources	No.
DOCTOR	1
UNIVERSITY-EDUCATED NURSE	1
HEALTHCARE TECHNICIAN	1
ADMINISTRATOR ACCOUNTANT	1
AMBULANCE DRIVER	1

These personnel providing services, corresponding to the commitment assumed by the institution during the establishment's first Administrative Contract, will remain unchanged.

NINTH: RAHC Attributions

a) Regarding Human Resources:

RAHC will direct and manage the 8th Municipal District's healthcare establishments. This includes the direction and management of their human resources delegated by DHS and the Municipal Government; duly RAHC must render accounts of its activities in accordance with the terms of this contract.

RAHC will be able to solicit change due to restructuring or problems regarding the performance of the Municipal Government and/or DHS functionary, by reporting it by way of written petition to corresponding entities (MHD, LHD, LHSD and DHS).

b) Regarding Sale of Services and Tariffs:

All economic resources generated by the sale of services in each establishment, will be managed and invested according to the following guidelines:

I) They will be managed by RAHC.
II) They will be used exclusively to cover working costs of each healthcare establishment and may not be used for other ends by any party.
III) They will be deposited in an exclusive bank account opened by RAHC in its name, allowing easy and transparent inspection by the Municipal Government.
IV) They will be invested according to the approved budget, which will in turn be incorporated into the Municipal Government of El Alto's AOP.
V) RAHC will render documented, quarterly accounts of resources used, to the Municipal Government, through the management and direction of the Municipal Healthcare Network.
VI) An audit of these resources may be performed by the Municipal Government, along with RAHC, at any time.
VII) Tariffs on those services subject to sale will be proposed to the LHD by RAHC according to parameters established by public healthcare systems, for their approval.
VIII) The Municipal Government will make payments for UMII and Obligatory School Health Insurance services provided within the timeframe established by legal dispositions in place, subject to RAHC presentation of corresponding documentation.

FIFTEENTH: Duration, Period In-Force, and Resolution

The initiation date of this Administrative Contract will be April 1st of 2004, for a renewable period of five years.

For resolution of the Administrative Contract pertaining to management of the 8th Municipal District's network of establishments, the parties will have a three-month period for transition and closure of joint operations.

RAHC will return the properties and equipment of the establishments under its management in good working order, assuming depreciation and wear-and-tear due to normal use, according to legislation in place. In the case of loss or destruction of property conferred by this contract, due to substantiated carelessness or negligence, such inventoried items should be replaced immediately by RAHC.

SEVENTEENTH: Conformity

It is hereby set forth, in the City of El Alto, on the ninth day of the month of June, in the year two-thousand four.

Hon. Dr. José Luis Paredes M.
MUNICPAL MAYOR
EL ALTO

Nathan Robison C.
NATIONAL DIRECTOR
RURAL ANDEAN HEALTH COUNCIL

Dr. Enrique Huaricallo
DIRECTOR, DEPARTMENT OF HEALTHCARE SERVICES (DHS) – LA PAZ

Ricardo Pereyra
BOARD PRESIDENT
RURAL ANDEAN HEALTH COUNCIL

Pedro Huanaco
PRESIDENT
EL ALTO OVERSIGHT COMMITTEE

ANNEX G. Project Data Sheet form – updated version

Child Survival and Health Grants Program Project Summary

OCT-31-2005

Curamericas (Bolivia)

General Project Information:

Cooperative Agreement Number: HFA-A-00-02-00035-00
Project Grant Cycle: 18
Project Dates: (9/30/2002 - 9/29/2007)
Project Type: Standard

Curamericas HQ Backstop: Kali Erickson

Field Program Manager Information:

Name: Ramiro Llanque Torrez
Address:
Phone: 591-2-241-2495
E-mail: rllanque@csra-bolivia.org

Alternate Field Contact:

Name: Nathan Robison
Address: Casilla 13387
La Paz
Phone: 591-2-241-2495
E-mail: nrobison@csra-bolivia.org

Funding Information:

USAID Funding:(US $): $1,300,000 **PVO match:(US $)** $1,300,000

Project Information:

Description:
The Census-Based Impact-Oriented Child Survival project's goal is to significantly improve the health and nutrition of preschool children and women of reproductive age, with a focus on decreasing perinatal, infant, and maternal mortality, in the rural communities and town centers through improvements in

health care and health promotion access, quality, and coverage. It will strengthen community support through the training of CHWs and health volunteers (HVs), and increase access to CS services through home visit and clinical consultations; increase demand for health prevention and treatment services through health education, the Integrated Management of Childhood Illnesses approach, and community maternal and neonatal health care strategies; and, increase the capacity of CSRA, municipal governments and the MOH to successfully plan, budget, implement and evaluate sustainable community child survival services. This will be achieved by offering four key child survival interventions: nutrition and micronutrients; maternal and newborn care; control of diarrheal disease; pneumonia case management; and immunization

Project Partners:
Consejo de Salud Rural Andino (CSRA)

Project Sub Areas:
El Alto
Montero

General Strategies Planned:
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
Lot Quality Assurance Sampling
Community-based Monitoring Techniques
Participatory Evaluation Techniques (for mid-term or final evaluation)

Behavior Change & Communication (BCC) Strategies:
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)
Field Office HQ
CS Project Team
Local NGO (None Selected)
Dist. Health System
Health Facility
Staff
Health CBOs
Other CBOs
CHWs

Interventions/Program Components:

Immunizations (10 %)
(IMCI Integration)
(CHW Training)
(HF Training)
- Polio
- Classic 6 Vaccines
- Vitamin A
- Surveillance
- Injection Safety
- Community Registers

Nutrition (25 %)
(IMCI Integration)
(CHW Training)
(HF Training)
- Comp. Feed. from 6 mos.
- Growth Monitoring

Pneumonia (20 %)
(IMCI Integration)
(CHW Training)
(HF Training)
- Pneum. Case Mngmnt.
- Case Mngmnt. Counseling
- Recognition of Pneumonia Danger Signs

Control of Diarrheal Diseases (20 %)
(IMCI Integration)
(CHW Training)
(HF Training)
- Hand Washing
- ORS/Home Fluids

- Feeding/Breastfeeding
- Care Seeking
- Case Mngmnt./Counseling

Maternal & Newborn Care (25 %)

(IMCI Integration)
(CHW Training)
(HF Training)
- Neonatal Tetanus
- Recog. of Danger signs
- Newborn Care
- Post partum Care
- Normal Delivery Care
- Birth Plans
- Emergency Transport

Target Beneficiaries:

	El Alto	Montero	Total Beneficiaries
Infants < 12 months:	**890**	**619**	**1,509**
Children 12-23 months:	**723**	**926**	**1,649**
Children 0-23 months:	**1,613**	**1,545**	**3,158**
Children 24-59 months:	**2,979**	**2,244**	**5,223**
Women 15-49 years:	**9,592**	**6,989**	**16,581**
Population of Target Area:	**35,574**	**26,836**	**62,410**

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
El Alto 25/248 10.1% 3.7
Montero 25/323 7.7% 2.9

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 older sibling
Sub Area Name Numerator Denominator Percent(calculate) Confidence Limits
El Alto 58/165 35.2% 7.3
Montero 47/154 30.5% 7.3

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
El Alto 159/341 46.6% 5.3
Montero 302/342 88.3% 3.4

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
El Alto 193/341 56.6% 5.3
Montero 281/342 82.2% 4.1

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
El Alto 68/84 81.0% 8.4
Montero 51/83 61.4% 10.5

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
El Alto 31/63 49.2% 12.3
Montero 26/58 44.8% 12.8

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
El Alto 17/94 18.1% 7.8
Montero 59/134 44.0% 8.4

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
El Alto 36/94 38.3% 9.8
Montero 98/134 73.1% 7.5

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
El Alto 0 0 0.0% 0.0 Montero 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
El Alto 82/341 24.0% 4.5
Montero 117/342 34.2% 5.0

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
El Alto 12/23 52.2% 20.4
Montero 17/38 44.7% 15.8

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
El Alto 62/267 23.2% 5.1
Montero 100/302 33.1% 5.3

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
El Alto 18/341 5.3% 2.4
Montero 12/341 3.5% 2.0

TB TREATMENT SUCCESS RATE
Description -- Percentage of new smear positive cases who were successfully treated
Numerator: Number of new smear positive cases who were cured plus the number of new smear positive cases who completed treatment
Denominator: Total number of new smear positive cases registered
Sub Area Name Numerator Denominator Percent(calculate) Confidence Limits
El Alto %
Montero %

Comments for Rapid Catch Indicator

Maternal TT indicator was modified to be % of mothers who received 1 dose(not 2 doses) of TT in their last pregnancy. Full vaccination indicator was modified to be % of children 12-23 months fully vaccinated before 13 months (not 12 months) because Bolivian immunization protocols dictate that measles is given at or after 12 months. The sick child indicator was modified to be % of mothers of children 12-23 months (not 0-12 months) who recognize at least 2 danger signs that indicate the child needs treatment.