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MIDTERM EVALUATION REPORT

Partnership for the Community Management of Child Health/ Partenariat pour la prise en charge communautaire de la santé infantile (PRISE-C)

Benin, Health Zones of

Allada/Ze/Toffo (AZT)

Dassa/Glazoue (DAGLA)

Save/Ouesse (SAO)

October 31, 2012

Cooperative Agreement Number: AID-OAA-A-10-00047-00
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This report was produced for review by the United States Agency for International Development.

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Any factual errors that may remain in this report despite the team's best efforts is regrettable and must be considered the sole responsibility of the principal authors.

Evaluation Team Leader: Pierre-Marie Metangmo

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Acronyms

ARI	Acute Respiratory Infection
AZT	Allada/Zè/Toffo Health Zone
BCC	Behavior Change Communication
CEID	Centre d'Expertise d'Ingénierie pour le Développement Durable
CHS	Center for Human Services
CHW	Community Health Worker
CRS	Catholic Relief Services
DAGLA	Dassa/Glazoue Health Zone
DIP	Detailed Implementation Plan
IMCI	Integrated Management of Childhood Illnesses
KII	Key informant interview
KPC	Knowledge, Practices and Coverage
M&E	Monitoring and evaluation
MOH	Ministry of Health
MTE	Midterm Evaluation
NGO	Nongovernmental organization
OR	Operations Research
PIHI	High Impact Interventions Package
PISAF	Integrated Family Health Project
PMP	Performance Monitoring Plan
PRISE-C	Partnership for the Community Management of Child Health
PROMUSAF	Promotion des Mutuelles de Santé en Afrique
RAS	Réseau Alliance Santé
SAO	Save/Ouessè Health Zone
USAID	United States Agency for International Development
VHDC	Village Health and Development Committee

Executive Summary

The Center for Human Services (CHS) is implementing a four-year child survival innovation grant funded by the USAID Child Survival and Health Grant Program (CSHGP) through the Partnership for Community Management of Child Health (PRISE-C) that aims at improving the maternal and child health outcomes in three health zones of Save/Ouesse (SAO), Dassa/Glazoue (DAGLA) and Allada/Ze/Toffo (AZT) in Benin. A Midterm Evaluation (MTE) was conducted from August l6 through October 5, 2012 to inform and strengthen the progress, and effectiveness of activities currently implemented toward achieving the PRISE-C project's intermediate results.

PRISE-C was developed to strengthen the community health delivery system of the Republic of Benin, focusing on and around the community health workers (CHW), in the health zones AZT in the Atlantique Department, and of SAO and DAGLA in the Zou/Collines Department. PRISE-C's objectives are aligned with the Benin Ministry of Health directives and guidance on community health service delivery and are as follows:

- To increase community engagement with the community health system;
- To increase demand for curative and preventive services; and
- To strengthen the performance and sustainability of community-based health services.

As an innovation grant project, PRISE-C is also implementing an Operations Research (OR) component, testing the effect of a community collaborative approach on community health worker (CHW) performance and retention.

PRISE-C was designed to address the need for high impact preventive and curative care services at community level in order to improve maternal and child health as recommended by the Benin's National Health Development Plan of 2009-2018. The overall approach was built off of URC/CHS past experience implementing successful community activities in Benin with the USAID funded Projet Intégré de Santé Familiale (PISAF). The three main strategies developed include: 1) Create a conducive environment for the promotion of community maternal and child health; 2) Improve knowledge, attitudes and practices towards maternal and child health and promoting uptake of mutuelle memberships; and 3) Improve support to CHWs by the health workers and reinforce the knowledge and skills of CHWs.

PRISE-C, with the MOH, trains and supports CHWs in the health zones to implement the Ministry of Health package of community level activities (PIHI) which covers a range of services, including providing preventive and curative community-based services for malaria, diarrheal diseases and acute respiratory infections, as well as promoting the use of maternal health services based on the comprehensive CHW package of services. This support seeks to put in practice the framework of the National Directives for Community Based Health Promotion that clearly defines community structures involved in the community health service delivery system.

The evaluation team found that significant progress was made toward achieving the project's results. A review of the PRISE-C workplan shows that all planned activities were completed, and that those outstanding were on schedule.

PRISE-C worked at multiple levels of the health care system to create or strengthen systems that support a conducive environment for MCH promotion at community level. Activities have included actively engaging key stakeholders,

providing technical assistance to MOH community health support structures at all levels, and ensuring that functional Village Health Development Committees (VHDC) were in place in all served communities. PRISE-C and the MOH developed a comprehensive BCC strategy aimed at increasing household knowledge of and practices for MCH promotion and skilled care seeking. PRISE-C strengthened the zone and commune community health supervisors' programmatic support to CHWs, identified and addressed training gaps, and ensured a strong supervision system was in place. Improvements were made in CHWs equipment, medicine supply, and supportive supervisions.

For the OR component which tests the effect of using the Quality Improvement (QI) collaborative approach to improve performance and retention, PRISE-C has conducted formative research, developed an implementation manual for the community level collaborative, oriented CHW and community members on quality improvement methods, and conducted two learning sessions to share experiences and monitor progress.

Some of the challenges facing PRISE-C that have affected implementation of some activities are listed below and should be addressed as the project unfolds.

- The process for implementing the National Directives for Community Based Health Promotion is unclear and has had to be developed by PRISE-C in close collaboration with the MOH.
- PRISE-C had to lead the way in developing and putting in place this infrastructure for the payments of CHWs as indicated in the national guidelines. This has delayed the initiation of payments and resulted in project implementation delays.
- The provision of essential medicines and supplies to CHWs is challenging in some of the areas.
- The scope of work of the PRISE-C project seems to be largely beyond the funding level. Human resource capacities are limited and the project can only cover a small proportion of the target population.

Based on the findings of the Midterm Evaluation, the team proposes the following recommendations:

- The National Directives for Community Based Health Promotion guidelines should be widely disseminated and proper orientation provided to users at the periphery.
- Communes and health zones should take on funding and supervision responsibilities to ensure performance and sustainability of the proposed community health service delivery system.
- Essential drugs and basic equipment must be provided to CHWs without interruption.
- Better coordination among partners to ensure a comprehensive approach to community health delivery system that trains all CHWs on the community PIHI package.

Summary conclusions: After a slow start, the PRISE-C project has made remarkable progress in increasing community engagement with the community health delivery system, fostering behavior change and improving health workers skills for MCH at community level. A strong base has been established that should contribute to further achievements in years 3 and 4. However, such short term and much localized programs are unable to achieve significant improvements in MNCH indicators. Nevertheless, PRISE-C should document and share the great value of the collaborative approach to quality improvement at community level as QITs and learning sessions are effective boosters for community engagement with community health delivery system. This could be done through publishing articles in local papers, supporting platforms of experience sharing such as joint supervision meetings or health conferences where PRISE-C results could be presented. PRISE-C should continue to support the revival of VHDCs and the enrollment and training of more CHWS.

Table 1. Summary of Major Project & OR Accomplishments at Midterm

Project Inputs	Activities	Outputs	Outcomes
Project Objective 1. To increase community engagement with community health delivery system			
Key stakeholders orientation at all levels	• Orientation sessions conducted for health teams from communes, health zones, community leaders and MOH directorates	• All key stakeholders (184 people) including health workers, opinion leaders, community groups, and CHWs oriented • National Steering committee established • Technical teams in place • PRISE-C content discussed with 48 members of the zone executive committees	• Buy in from all key stakeholders • Improved community engagement for community health
Participatory Community Diagnosis Update trainings for CHW supervisors about the role and responsibility of the VHDCs	• Training of zonal trainers • Community diagnosis conducted • Supervisions and annual VHDC/ CHW workplans developed	• 37 Supervisors trained • 95 villages diagnosed • Trainers put in place or revitalized VHDC in all 80 villages in the 3 • 118 CHW identified • 76 VHDC put in place • Annual plan developed	• 89 villages with VHDC and with annual workplans • 75% of villages with monthly meetings
Baseline survey	• Baseline survey tool developed • Data collected	• Baseline report • DIP developed	• Baseline data available • DIP approved
Technical assistance to support VHDC/QIT	• Quarterly Coordinating Meetings • Monthly QIT meetings	• Annual plan implementation monitored • Performance assessment	• 97% VHDC functional in DAGLA • 100% in SAO and 53% in AZT
Project Objective 2. To Increase demand for high impact community preventive and curative services			
BCC Strategy developed	• BCC strategy developed • Community BCC workplan developed • BCC material distributed	• Good use of BCC material • Radio programs developed and broadcasted	• Increased healthy behavior • 97% of children exclusively breastfeed • 62% of children slept under ITN
Support to CHWs	Two BCC specialists hired	• 2 BCC agents trained	• Improved supervision
Promoting the uptake of mutuelle membership	• Mutuelle messages and literature distributed • Information sessions conducted	• Slow uptake in SAO and DAGLA • Initiation in AZT	• Increased access to services
Project Objective 3. To Strengthenperformance and sustainability of the community health delivery system			
Reinforce the knowledge and skills of CHWs	• Training of trainers conducted • CHWs trained on community PIHI • CHW equipment with UNICEF kits	• 45 CHWs trained on community PIHI in 2 regions • 30 CHW with UNICEF kits	• Improved case management
Medicine and equipment supply	• Distribution of ACTs • Distributions of ITNs	• 13,440 plackets of ACTs distributed in Zou/Collines • 77,316 mosquito nets distributed	• Increased # of children well treated
Strengthening Supervision	• Monthly group supervisions conducted in each health area • Quarterly field supervisions conducted	• 93 monthly supervisions • Site-visit to 109 out 118 CHWs	• Improved supervision and health
Operations Reseach Objective. To assess the effect of a community level collaborative on CHW performance and retention			
Formative research	• 4 focus group discussions conducted • Data on the CHWs and their communities collected • Community mapping of children <5 in SAO and DAGLA	• Data served at guiding the OR design • OR approved by U.S. IRB &Benin stakeholders	• OR design improved
Implementation manual	• Implementation manual developed	• Implementation manual	• Standardized training
Launch of the 4 collaboratives for community high impact health interventions	• Orientation session for the quality improvement methodology conducted	• 81 participants from 31 villages • 4 collaboratives in place	• Improved community engagement
QIT coaching	• 31 villages coached in the SAO zone	• Challenges identified and addressed • Implementation of identified solutions	• 97% of QIT functional • Improved ownership
Learning Sessions in SAO	• Results on improvement indicators presented • Experience sharing	• 88 CHWs trained in community health package	• Participants empowered
Qualitative evaluation	• Consultant identified and hired • Surveyors identified and hired • Data collected • Interview of CHWs leaving the project	• Evaluation report completed	• Recommendations made

Midterm Evaluation Methodology

A Midterm Evaluation of the PRISE-C project covering the period from start of the award (September 30, 2010) to the end of the third quarter of FY12 (June 30, 2012) was conducted in August and September 2012. This descriptive evaluation conducted by an external evaluator used participatory methods to identify the progress made with regards to program performance, discuss lessons learned, challenges, and best practices, and assess the extent to which the intermediate results (IRs) were achieved.

Approaches used were mainly qualitative, with review of routinely collected quantitative data from the project PMP.

Preparation Phase

Document review. Documents related to the project were reviewed to better understand the goal, objectives, key indicators, annual progress, and the overall management structure.

In-brief planning meetings. The team held a planning meeting and phone calls between the consultant and PRISE-C/Center for Human Services (CHS).

Tool development and revision of evaluation schedule. Semi-structured interview guides were developed, and the evaluation agenda was discussed and amended.

Field Work Phase

Key informant interviews (KII). KIIs were held with project staff and key stakeholders involved in the project including the MOH community focused team members, Zonal Board members, Community Health Workers, Village Health Development Committee (VHDC) members, village leaders, staffs of partners' institutions such as CEID, PISAF, and Africare. A semi-structured interview guide was developed to explore topics and themes and ensure that comparable information is obtained from the stakeholders.

Group discussion. Group discussions were held with women groups, VHDC and other beneficiaries, to obtain first hand information.

Field site visits. The team visited different implementation sites to observe and to elicit information regarding program relevance, efficiency and sustainability, as well as the benefits, challenges, and limitations experienced in the course of program implementation. The sites visited were selected using geographical, epidemiological, and technical coverage criteria.

Lists of all those interviewed during the field visit are included in Annex 8.

Reporting Phase

Review of data collected. The qualitative data collected were analyzed.

Mission and Partners' debrief. A PowerPoint presentation was made to the mission and key partners in Benin to highlight key findings, challenges, and recommendations. Comments were incorporated into the report.

Data Collection Tools

Data collection tools were developed. Data collection tools included a semi-structured interview guide for different target groups: 1) MOH key informants; 2) PRISE-C staff and partner implementers; 3) CHW and VHDC members, and 4) Beneficiaries (Religious leaders, women group leaders and mothers of children under-5 years of age).

Places Visited

The team visited the following sites for key informant interviews, group discussions, and site observations:

Zone	Commune	Arrondissement	Village	CHWs
SAO	Save	Sakin	Ouoghi Gare	DAFASSAWA Dramane
	Ouesse	Kiliboro	Yaoui	ADJIBOYE Angele
DAGLA	Dassa-Zoume	Kpingni	Fita - Ayede	NANAMOUWA Pierre
	Glazoue	Sokponta	Camate - Ybiyem	DEGNON- AYEMA Louise
AZT	Ze	Ze	Goulou	DJEDE Bouraima
	Toffo	Toffo Center	Zeko	HOUEDANOU Christophe

One limitation to the methodology is that due to limited resources, the project did not conduct a quantitative survey for the MTE. Quantitative data used were from the project's routinely collected data. Some villages selected for the interview were inaccessible and informants were hard to find. Also, group interviews only gave a general idea of each individual member understanding of the project and key messages.information system and compiling it in such a way to inform health interventions impact on the reduction of diseases burden in project areas.

Data Quality and Use

The baseline survey used the 30 cluster KPC survey that is standard for Child Survival programs and of good quality. PRISE-C has an M&E Officer dedicated part-time to the project who monitors the data generation and reporting process.

The project collects data through the national health information system (HIS) that is in place in intervention zones. The reporting rate from communities to communes and from communes to zones is high. Project staff work with health personnel to clean and validate the data from communities before inputting them to the commune and zone health information system.

The project has provided CHWs and VHDC members with training, registers and other reporting forms which capture CHW and VHDC activities and are used by both the national health system and the project for reporting good quality data. At monthly supervision meetings, CHW reporting tools are reviewed and discussed by peers, and corrections are made when needed before tabulation.

Separate qualitative data are being collected for the OR component; very good quality data were provided for this MTE. Monthly meetings as well as quarterly and annual reports provide opportunity for the project staff to review and use the quantitative and qualitative data generated for management and technical decisions. The project may consider using LQAS for the monitoring of its activities and the change in its indicators. This will help direct its limited resources towards areas of intervention that need it the most.

The project has worked to strengthen the quality of community level data captured through the MOH health information system. However, PRISE-C has been focused on community level data and has only used limited facility data.

PRISE-C Project Overview

The Partnership for Community Management of Child Health (PRISE-C) is a USAID/CSHGP funded innovation grant project led by the Center for Human Services (CHS) in Benin under Cooperative Agreement No. AID-OAA-A-10-00047-00. This four-year project (September 30, 2010 - September 29, 2014) builds on locally proven community-based health activities and aims at improving maternal and child health in 3 of the 34 health zones of Benin: Allada/Ze/Toffo (AZT) in the Atlantic Department, and Dassa/Glazoue (DAGLA) and Save/Ouesse (SAO) in the Zou/Collines Department.

Benin's maternal and newborn mortality remain unacceptably high despite substantial efforts to increase the country health service network and families' awareness of major maternal and child complications. In 2011, under-5 mortality rate was estimated at 118 per 1,000 live births and maternal mortality ratio at 410/100,000[1] (UNICEF. The State of the World's Children: Adolescence, an age of opportunity. New York: UNICEF; 2011). Most of those deaths occur at home without a skilled health service provider attending. Also, a high total fertility rate (5.4) is an important factor that increases women and children risks of morbidity and mortality. According to the 2009 report of national health statistics, the top five causes of child heath consultations in Benin were malaria, acute respiratory infections (ARI), gastro-intestinal infections, anemia and diarrhea; with three quarter of all child hospitalizations being for malaria, anemia and ARIs.[2] PRISE-C targets those diseases in its technical interventions, and focuses on strengthening the level of services closest to women and children at community levels. Community Health Workers (CHWs) in the health zones receive support to implement the Ministry of Health package of activities which covers a range of services, including case management of diarrhea, pneumonia and malaria, behavior change communication and health education.

PRISE-C's objectives are aligned with National Directives for Community Based Health Promotion and are as follows:

- To increase community engagement with the community health system;
- To increase demand for curative and preventive services; and
- To strengthen the performance and sustainability of community-based health services.

Project activities support Benin's health policy for decentralization and community health systems, and the USAID strategic objective for health. PRISE-C's activities build off of more than 10 years of implementation of community activities in Benin by URC/CHS, and specifically the experiences with the USAID funded Projet Intégré de Santé Familiale (PISAF).

1 UNICEF. The State of the World's Children: Adolescence, an age of opportunity. New York: UNICEF; 2011.

2 Sante Mdl. Annuaire des Statistiques Sanitaires 2009. Cotonou2010

Progress Towards Achieving Results

The following is the M&E matrix that summarizes the evolution of the routinely collected indicators at the project midterm.

Table 2. M&E Matrix – Progress at Midterm

Objectives	Indicators		Data Source	Baseline Value	MTE Value (June 2012)	Final Target	Explanation of Progress
1. Increased community engagement with community health delivery system	1	Number of villages with a complete (3 member) village health development committee	Health Center Annual Workplan	No Data	89	80	All villages are covered
	2	Number of villages with a health workplan	Health Center Annual Workplan	No Data	89	80	All villages are covered
	3	% of villages with community representation at at least 75% of monthly CHW meetings	CHW Supervisor Reports	61.5	75.6	100%	In Progress. Needs more supportive supervision
2. Increased demand for high impact community preventive and curative services	Household Knowledge and Practices						
	5	% of infants from 0-6 months who are exclusively breastfed	CHW Performance Reports		97.2	98%	Excellent
	6	% of mothers ages 0-23 months who can name two danger signs (pregnancy, newborn or post-partum)	CHW Performance Reports	19.9	93.1	95%	Good Progress
	7	% of newborns seen by a health worker at least 2 times in their first week of life (1-3 days and 3-7 days)	CHW Performance Reports	19.9	31.1	70%	In Progress Needs Support
	8	% of children 6-59 months monitored for acute malnutrition	CHW Performance Reports		87.9	90	Excellent
	12	% of children from 0-59 months who live in a household with a handwashing station at/near the latrine	CHW Performance Reports	0.2	6.6	20	Needs more work
	13a	% of children ages 0-59 months who live in a household who drink water from a pump or who treat their drinking water with Aquatabs	CHW Performance Reports	47.4	56.8	50%	Excellent
	16	% of children in the catchment area from 0-59 months who sleep under an LLIN	CHW Performance Reports	44.8	61.9	80	Good Progress
	28	% of children less than 1 year old who were vaccinated during outreach activities conducted according to the workplan in villages more than 5 km from a health center	CHW Performance Reports	30.2	99.5	100	Good Progress

Objectives		Indicators	Data Source	Baseline Value	MTE Value (June 2012)	Final Target	Explanation of Progress
2. Increased demand for high impact community preventive and curative services	**BCC activities**						
	29	# of health education talks given by the CHW	CHW activity form	223	380	488	Good Progress
	30	% of health education talks held	CHW Performance Reports	59.2	71.2	90	In Progress
	31	% of children under 5 who had a home visit from a CHW in the quarter	CHW Performance Reports	43.4	64.8	80	In Progress
	CHW Case Load						
	35	# of ORS packets distributed by the CHWs in the quarter	CHW Case Register	70	409	152	Excellent
	36	# of ACTs distributed by the CHWs in the quarter	CHW Case Register	4,130	4,040	9,026	Improved distribution system
	37	# of LLINs distributed by the CHWs in the quarter	CHW Case Register	215	0	469	No distribution was made this quarter
	38	# of cases seen by the CHW	CHW Case Register	1,155	3,379	5,000	Good Progress
	Mutuelles						
	39	# of joint education talks with RAS/ PROMUSAF/Mutuelle Network Partner	CHW activity form	0	38	70	In Progress
	40	% uptake in mutuelles	RAS/ PROMUSAF reports	0	1.5	20	Increased sensitization
3. Strengthened performance and sustainability of the community health delivery system	**Knowledge and Skills**						
	41	# of CHW supervisors trained in supervision techniques	PRISE-C Training Records	49	n/a		Training was done
	42	# of CHW trained in PIHI-C	PRISE-C Training Records	117	n/a		Training was done
	CHW performance						
	43	Proportion (%) of children from 6 -59 months treated for malaria	CHW Performance Reports	51.8	48.3	90	Drug supply issue
	44	Proportion (%) of children from 2-59 months treated for diarrhea	CHW Performance Reports	2.2	8.2	90	Drug supply issue
	45	Proportion (%) of children 2-59 months treated for acute respiratory infections (ARI)	CHW Performance Reports	4.2	14.4	90	Drug supply issue
	46	Proportion (%) of children 6-59 months correctly treated for malaria according to national guidelines	CHW Performance Reports	99.6	99.6	100	Very good Knowledge of protocols
	47	Proportion (%) of children 2-59 months correctly treated for diarrhea according to national guidelines	CHW Performance Reports	100	88.2	100	Very good Knowledge of protocols
	48	Proportion (%) of children 2-59 months correctly treated for ARIs according to national guidelines	CHW Performance Reports	98.6	100	100	Very good Knowledge of protocols
	49	Proportion (%) of referrals for malaria, diarrhea, ARI and malnutrition in children 2-59 months which were justified	CHW Performance Reports	100	100	100	Excellent

Objectives	Indicators		Data Source	Baseline Value	MTE Value (June 2012)	Final Target	Explanation of Progress
3. Strengthened performance and sustainability of the community health delivery system	**Supervision**						
	50	# of MOH supervision visits received by CHW in the quarter	CHW Register	99	198	792	Need for Support
	51	# of monthly CHW meetings held	Health Center Records	0	18	72	Need for Support
	52	# of PRISE-C coaching visits to CHWs by zone	PRISE-C Activity logs	0	6	24	Need for Support
	53	# of PRISE-C coaching visits to CHW supervisors by zone	PRISE-C Activity logs	0	24	72	In progress Needs Support
	Sustainability						
	54	# of health zones with community health advisory board in place (> 3 members)	PRISE-C Records	0	3	3	Excellent
	55	# of CHWs leaving their post (Retention)	CHW activity form	0	9/118	< 5% of all CHWs	On track

Discussion of Progress Toward Achievement of Objectives

Contribution Toward Objectives/Results

Project Management and Start Up Activities

The evaluation team found that all startup activities were successfully completed before the DIP final approval in September 2011. The project team was hired and oriented early enough for them to present the project to the health authorities for buy in. Other startup activities included developing and harmonizing the project workplan with those of partner health zones, conducting and disseminating the results of the baseline survey. PRISE-C concluded this startup phase while preparing and submitting the DIP for USAID approval.

PRISE-C is managed out of the central office in Cotonou, which houses the project manager, the technical team and the finance and admin staff. CEID is the subcontractor on the project, with 2 zonal health agents in the 2 health zones furthest from Cotonou (SAO and DAGLA). Central staff supervises and visit SAO and DAGLA health zones at least once a month. In AZT, project activities and supported from the central office. Staff performance is reviewed on a regular basis, and support mechanisms are in place for improvement. The Project Director, Mme. Akogbeto, oversees the day-to-day technical and administrative needs of the project. She reports to the CHS/URC Country Representative and liaises with key project stakeholders and local partners. The CHS headquarters team provides experienced technical support of field activities.

In the beginning, there was only 12% coverage of the population in the project intervention health zones. With the additional CHWS trained by PRISE-C, the current coverage is 20%. Due to budget constraints, each project CHWs cover approximately 70 households which is more than double the 30 initially planned, and which is recommended by the MOH guidelines. There is a need to increase the total number of CHWs in the intervention area in order to reduce the number of households covered towards a goal of 30 households. This would allow for easier engagement in promotion of healthy behaviors at household levels.

Project Objective 1: To increase community engagement with the community health system

The PRISE-C project was designed with special attention to increasing the engagement and participation of the community with the community health system. This first objective of the PRISE-C project focuses on creating an enabling environment for community health delivery system.

Strategy 1: Create a conducive environment for community child and maternal health

The Director of the Mother and Child Services at the MOH and the Departmental Health Director of AZT interviewed during the MTE expressed great support and acknowledgment of PRISE-C's contribution in supporting the provision of quality health services to remote and hard to reach rural communities in its intervention areas. Likewise, all other stakeholders interviewed during the MTE show satisfaction with PRISE-C implementation and reiterated their commitment to supporting and participating in project's activities.

At zonal level and in each of communes served by the project, all key community stakeholders including opinion leaders, community groups, and community health workers were oriented to

the project early on. The PRISE-C project was discussed with 48 members of zonal executive committees. These included the coordinating physicians, head physicians, nurses and zone midwives, community activity managers, social workers, a few managers of women's groups and associations, and representatives of partners who work in these health zones. Participants made various commitments in support of the project.

CHW supervisors were trained and oriented to understand the role that the villages have in the selection and support of the work of the CHW. They helped revitalize the VHDC in each of the 80 villages across the 3 health zones.

The use of participatory method for community diagnosis, priority setting, program implementation and quality monitoring has led to a greater community involvement and a greater use of local knowledge.

CHWs and VHDCs are functional in all project villages and receive support from community leaders who allow them to use village meetings venues to convey key health messages and help them convene special meetings when needed. Community leaders also help the CHWs mobilize mothers and children for immunization and growth monitoring sessions. As shown in the graph below, the proportion of children visited each month has increased due to the good collaboration between CHWs, VHDCs and village leaders.

In all villages visited, CHWs have received considerable support from VHDC members, which has enhanced confidence in the benefits of the program and made it easier for community members to accept PRISE-C's activities.

Project Objective 2: To increase demand for community preventive and curative services

A major contributing factor to poor maternal and child health in PRISE-C intervention areas is the lack of awareness and limited access to community health services provided by CHWs. The focus of this objective was to develop community-level BCC activities to increase awareness and change behavior so that mothers and families adopt attitudes, behaviors and practices which will improve maternal and child health. A Behavior Change Communication (BCC) strategy was developed and implemented and a community BCC

Figure 1. Percentage of children <5 years visited at home by a CHW per month (October 2011–June 2012)

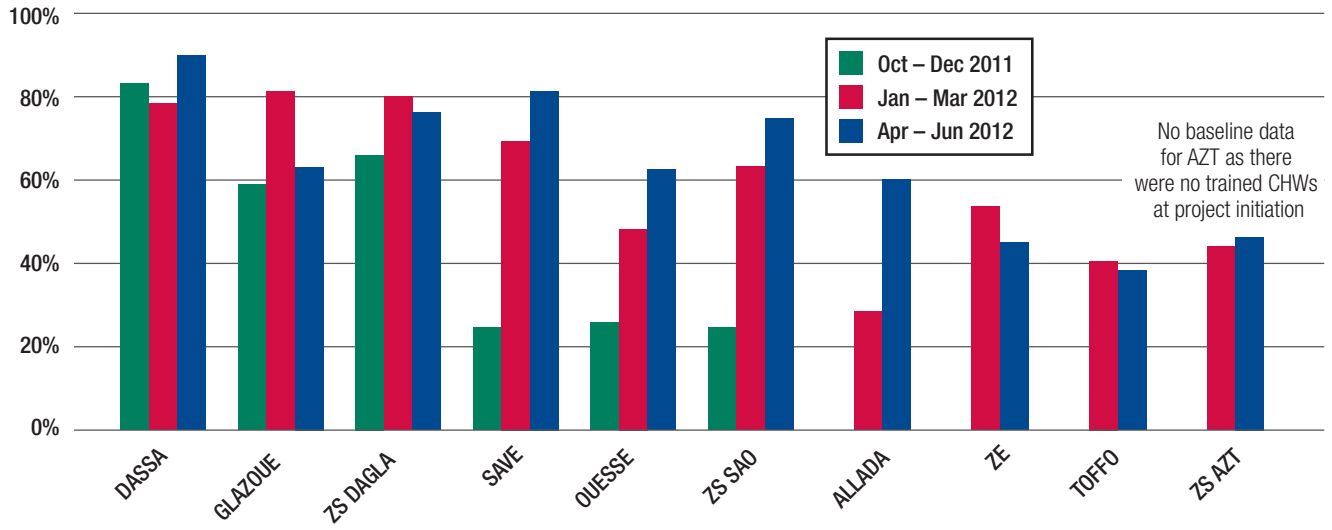
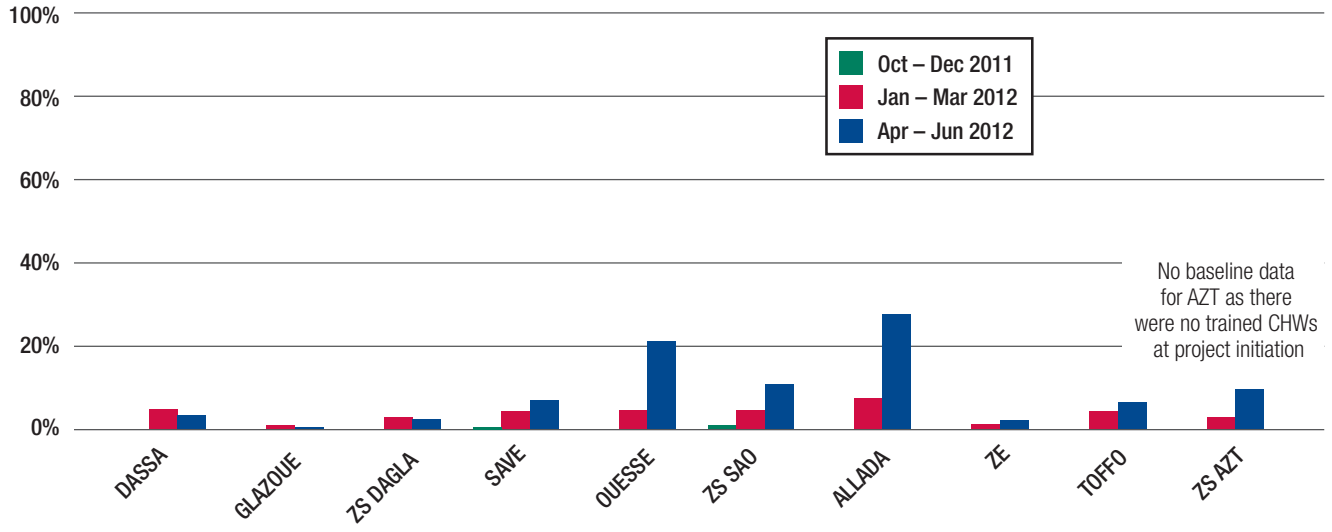


Figure 2. Percentage of children 0-59 months living in a household with a handwashing point at/near latrines (October 2011–June 2012)



workplan was developed to serve as road map for community-level communication activities.

Two BCC agents were hired to support the project in the health zones of SAO and DAGLA by providing consistent, on-the-ground support to CHWs and their supervisors.

Strategy 1: Improve knowledge, attitudes and practices towards maternal and child health

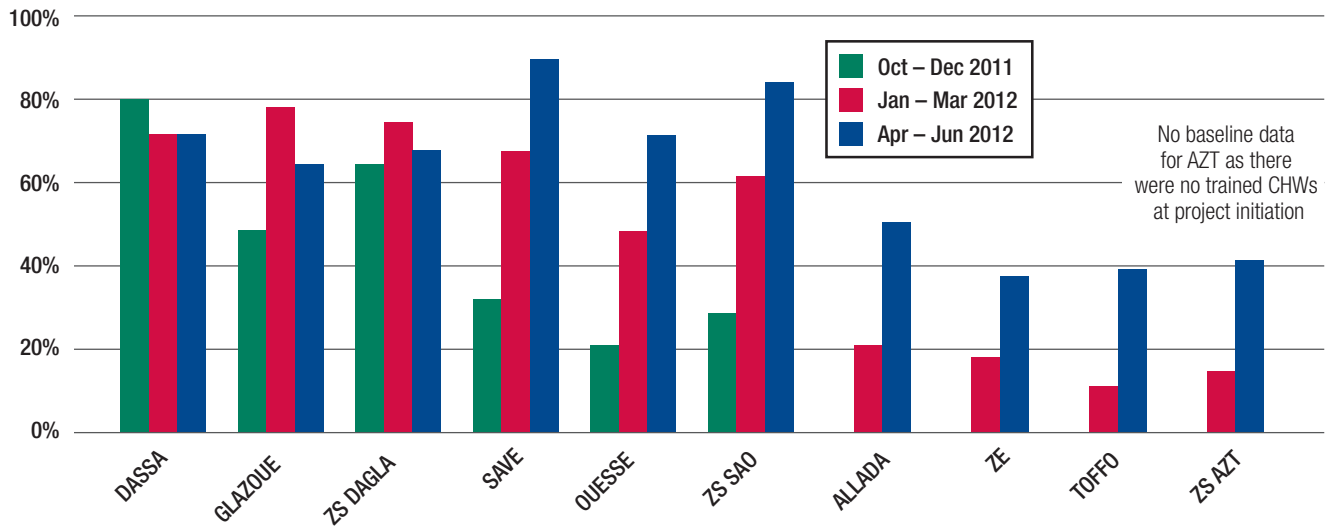
A review of the M&E table above shows remarkable result in the vast majority of indicators. Those outstanding are in position to improve before the end of the project. For example, the below indicators on children living in a household with a handwashing point at/ near the latrine went from 0.2% at baseline to 6.6% even though the end target is 20%.

Handwashing is one of the most difficult practices and the project target may have been set too high for the context. However, the evaluation team observed that CHWs are working hard to ensure families build latrines and install handwashing points near it. Indicators related to malaria treatment have remained stagnant or even gotten worse due to serious problems with the medicine supply system. ITN distribution is no longer done routinely by CHWs but through national campaigns and health facilities. However, for villages in the project zones where ITNs were distributed, the number of children sleeping under ITNs was high as shown in the Figure 3.

Strategy 2: Promote uptake of mutuelle membership

As part of the PRISE-C strategy to increase demand for community preventive and curative services, the project is working to increase participation in mutuelles, or community health insurance groups. Participation in a mutuelle can reduce the financial barriers to accessing services and therefore increase demand. Current mutuelle membership uptake is very low at 1.5% and the end of project target of 20% may have been set too high as well. However, PRISE-C is working with the mutuelle networks PROMUSAF and RAS which are active in Collines to assure that mutuelle messages and literature are spread through community health system channels as well as in AZT to identify a mutuelle organization to work with to promote mutuelles in the area. In general,

Figure 3. Percentage of children 0-59 months sleeping under ITNs (October 2011–June 2012)



the overall mutuelle uptake has remained low. But coordinated effort between PRISE-C, government and other key players may eventually change the tide.

Project Objective 3. Strengthened performance and sustainability of the community health delivery system

A critical component of this project is to strengthen the overall performance and sustainability of the country's community health delivery system.

Strategy 1: Reinforce the knowledge and skills of CHWs

The first step in this objective was for PRISE-C to train 22 coordinating physicians, head physicians, and head nurses of all health centers with CHWs in the two health zones of SAO and DAGLA as CHW trainers. 11 CHW trainers were trained in the AZT health zone. These trainers then trained 118 total CHWs in the three health zones on the Ministry's community level integrated package of high-impact interventions.

Six weeks after the trainings, onsite post training follow-up was provided to CHWs. PRISE-C staff and local MOH supervisors identified and addressed barriers to initiation of activities. In the AZT zone, one of these barriers was and continues to be drug availability. In Collines, Global Fund distributed 13,440 packets of ACTs and 77,316 mosquito nets to CHWs in 2011.

All three indicators for children treated against malaria, diarrhea, and ARI are low and this could be attributed to the drug supply issue as well as the definition of the target and the way indicators were calculated. But for children who were treated, the treatment received was correct in almost all the cases.

Improvements of community health services availability and accessibility are in progress. However, during field interviews, a few zonal and commune health supervisors reported not always having sufficient resources (means of transport and incentives) to ensure community health activities oversight. This may affect the quality of CHWs services and motivation.

Strategy 2: Improve support to CHWs by the Health Facility Workers

PRISE-C has worked with partners to ensure the MOH recommended two-prong supervision system is in place including:

Monthly group supervisions to assess CHW performance, strengthen CHWs skills, collect and analyze data relating to services, ensure the supply of drugs, plan monthly activities; and quarterly on-site supervision assessing the performance of the CHWs, enhancing their skills and motivation and assisting them to solve specific problems encountered.

The supervision indicators are lagging behind. During quarter 3 of 2012, three monthly group supervisions were conducted. At least one site-supervision was conducted during the quarter in each village. The project is working on this but it will take extra effort to ensure communes and health zones are equipped and motivated to take this over. Supervisions are conducted by government staff who often lack resources and motivation. Also, the culture of accountability is not well established and it is not always clear who is in charge and how performance is assessed. For the current situation to change there is a need for more resources and greater accountability.

Innovation: Assessing the effect of a community level collaborative on CHW performance and retention

PRISE-C is an innovation grant project with an Operations Research (OR) component testing the effect of using the Quality Improvement (QI) collaborative approach to improve performance and retention of CHWs. The intervention is being implemented in the SAO health zone, with the health zone of DAGLA being used as the control zone. In the intervention zone, community quality improvement teams (QITs) comprised of CHWs, and village community health stakeholders, implement changes to improve performance on specific community child health indicators. In the control zone, CHWs receive routine support from their supervisor and their VHC.

Formative research was conducted during which data on CHWs and their communities were collected and served to guide the OR design. An implementation manual was developed to provide standardization for the community level collaborative activities.

An orientation session for the quality improvement methodology as applied to community maternal and child health was conducted with 81 participants from 31 villages. Follow up visits were conducted in January 2012 in SAO zone to confirm the installation of QIT and initiation of activities.

Learning Sessions in SAO

As a key piece in the collaborative QI methodology, learning sessions are held every quarter. The first learning session, held in April 2012, brought together QITs of the SAO zone to present results on their improvement indicators and share lessons from activities implemented and seek advice to address weaknesses identified. Following the presentation of results, each team identified the changes they introduced to address the improvement indicators. Top QITs were acknowledged, based on QIT and CHW functionality then each QIT developed an action plan for the next quarter to be posted in the QIT's community.

The second learning session was held in August 2012 where functionality results were calculated, plotted on the performance charts and shared with the group. All four of the collaboratives showed improvement on their indicators over the results from the first learning session in April.

Quantitative data collected are a part of the PMP, and are linked to individual CHWs so that they can be stratified by factors such as gender and education level in addition to comparison of intervention and control zone.

Contextual Factors

A major contextual factor was that in 2010, Benin developed National Directives for Community Based Health Promotion in

a document that for the first time clearly defines community structures involved in the community health delivery system, roles and responsibilities of a CHW, CHW performance indicators, and a policy on motivation of CHWs. Therefore, the ground was favorable for PRISE-C to support and strengthen the community health service delivery system. Also, the 2011 Operational Plan for National Scale-up of High Impact Interventions for the Reduction of Maternal, Neonatal and Child Mortality states that one of the main gaps in the health care system is around the CHW, whose work is an absolute necessity in the implementation of community family health activities. However, the Plan does not state explicitly where these gaps are located and which mechanisms are in place to help addressing them. It is not clear where the leadership responsibility resides and how the funding will work. PRISE-C has had to lead the way in developing and putting in place the infrastructure for the payments of CHWs as indicated in the national guidelines. This has delayed the initiation of payments and resulted in project implementation delays.

Another contextual factor that may be affecting results is the challenging provision of essential medicines and supplies to CHWs. Because the MOH of Benin is under-funded, under-staffed and often confronted with management issues, health structures in the project area tend to be short on critical medicine and basic equipment supplies. The evaluation field visit confirmed shortages of the essential medicines for community maternal and child health in some villages.

CHWs in Benin are generally men or women with a basic level of education, chosen by their village to conduct health activities in their community. Initially CHWs were trained by implementing partners to conduct activities on specific health topics. However, the 2010 National Directives state that all CHWs must be trained on a comprehensive package of services including preventive services (hygiene included), neonatal health, infant and young child nutrition and community case management of illnesses. PRISE-C takes this comprehensive approach though it is labor intensive and resource demanding.

The cost of CHWs per unit and per year is important to keep in mind. In application of the national directives for community health, each a CHW should cost around $1,000 (one thousand USD) for the first year including initial training, and a little less than $500 per year for the following years. If we estimate 1 CHW for 50 families this is an important budget for each commune or zone. A table showing the yearly cost per CHW is shown below.

Items	Unit Cost (FCFA)	Number/Year	Total Cost (FCFA)
Training	328,995	1	**328,995**
Equipment	92,755	1	**92,755**
Monthly Supervision	3,500	12	**42,000**
Quarterly Supervision	9,000	4	**36,000**
Quarterly incentives for CHWs	15,000	4	**60,000**
Total Year 1			**559,750**
Total following year (minus Training)			**230,755**

Role of Key Partners

Partners	Role in Project	Result of Collaboration/ Suggestions for improvements
Centre d'Expertise d'Ingenierie pour le Developpment Durable (CEID)	• Responsible for community mobilization, health care workers and VHDC's training on planning and implementation of community health activities	• One CEID full time staff was hired for the project and based in SAO. • CEID collaboration with PRISE-C leaded to a strong community mobilization in the project area
Child Survival Unit of the MOH The MOH offices at Department, Zone and Commune levels	• Work in team to support and develop VHDC and CHWs • Ensure PRISE-C workplan is coordinated with the MOH workplan	• Participated on the planning of the project's initial phases with focus on trainings. • Joint supervision, but need for more resources and MOH leadership for sustainability.
PISAF	• PISAF is the other CHS-URC implemented project in Benin	• PISAF initiated some of the work identifying and re-invigorating the VHDCs in SAO and DAGLA. • PISAF provided much of the printed material that PRISE-C used for BCC. PISAF also provided technical assistance for the development of the mutuelle aspects of PRISE-C's project
CRS and Africare	• Large INGOs supporting Community health care in Benin. Must coordinate with PRISE-C to harmonize CHW training, supervision and BCC activities	• PRISE-C is working closely with PISAF, CRS and Africare on coordination and harmonization of CHW training, supervision and BCC activities. This type of coordination needs to be enforced by the Government everywhere.
PROMUSAF and RAS	• Promotion of mutuelles	• Adequate information and materials are provided to people in the project area on mutuelle membership. This needs to be coordinated with the MOH upcoming Universal Coverage scheme.
Village Health and Development Committee	• Community partnership and support	• The VHDCs are instrumental in community mobilization and in the promotion of good health practices and behaviors. Increased supervision and support is needed to keep current momentum.
USAID Benin Mission	• Support	• PRISE-C maintains good communication with the Mission and has attended all planned quarterly meetings. Also, occasional in-person meetings have been organized with the Mission representatives.

Overall Design Factors that are Influencing Progress Towards Results

A number of design factors have influenced PRISE-C progress towards results.

The decision to work closely with the MOH at all levels and in all phases has increased the likelihood that the MOH sustains management and technical activities, after the end of the project. The cascade training strategy has ensured the consistency of project messages and activities with those of the MOH and empowered health personnel that are involved.

On a less positive side, the scope of work for PRISE-C seems larger than the available funding provided. As a consequence, human resources are stretched and the project can only cover a small portion of each intervention health zone. PRISE-C was developed to strengthen the community health delivery system with a focus on the CHWs but project activities are too limited to be held exclusively responsible for its achievement. For example, result indicators include the improvement of community case management while the project is not responsible for the essential medicine supply chain. It may help if indicators are more targeted toward results that are a direct result of project activities.

Also, the project relies heavily on CHWs and VHDC to carryout key BCC promotion activities. The number of families covered by each CHW in reality is more than the double of what was originally planned. As a consequence, CHWs are overstretched. PRISE-C should consider additional coordination with future Africare and CRS work in the project intervention zones for an increase of the number of CHW in intervention areas where they overlap, and for a cost share.

Conclusions and Recommendations

Summary Conclusions

The PRISE-C project has made remarkable progress in increasing community engagement with the community health delivery system, fostering behavior change and improving health workers skills for MCH at community level. In total, the level of community engagement with the community health delivery system has improved and is on track. Structure has been revitalized and created where it didn't exist. Stakeholders have been oriented and trained. VHDC are in place and play key roles in the community health delivery system. Engagement of departments, zones and communes in the system has drastically increased.

The PRISE-C project and approach are welcome and well appreciated. However, awareness of roles and responsibilities of each stakeholder is still weak and needs to be strengthened. Likewise, accountability and performance evaluation of health workers are not yet part of the local working culture of the MOH and other public structures. Assistance should be provided to MOH and communes in order to increase accountability and performance evaluation of health professionals in the Benin health system. The culture of accountability is key to sustainability and ownership.

Some indicators were targeted too high but efforts are being made to achieve progress. A strong base has been established that should contribute to further achievements in years 3 and 4. However, such short term and much localized programs are unable to achieve significant improvements in MNHC indicators. For that to happen, it will take a national-level, comprehensive, focused and effective program that is owned and managed by the health zones or communes and that is customized to meet respective and specific needs. That may be beyond the scope of the Child Survival program in its current setting.

Summary Recommendations

Based on the findings of the Midterm Evaluation, the team proposes the following recommendations:

For the project:

- PRISE-C should document and share with the MOH and other stakeholders the great value of collaborative improvement approach at the community level as QITs and lessons learned sessions are effective boosters of community engagement with community health delivery system. This could be done through publishing articles in local papers, supporting platforms of experience sharing such as joint supervision meetings or health conferences where PRISE-C results can be presented.
- PRISE-C should continue to advocate for and to support the revival of VHDCs and the enrollment of more CHWS as budgetary possible since this has shown good potential for increasing demand and use of community health services. But strategically, this is the responsibility of the government of Benin since, CHWs and VHDCs have become official extension of the decentralized community health system. The challenge is the cost, as financial motivation is now mandatory for CHWs and VHDCs.

- The M&E record shows significant improvement in health promotion indicators. Some indicators related to disease case management are stagnant due to a shortage of essential medicine with supply chain issues beyond the control of the project. However, CHWs have improved assessment capacity and are prescribing appropriate treatments at least for malaria, diarrhea and ARI.
- PRISE-C should ensure that all CHWs are trained on community PIHI full package that includes nutrition as this appears to be one critical area of child health. More training should be provided for CHWs to effectively assess children nutritional status and to promote recognition of danger signs by family members, optimal breastfeeding and complementary feeding as appropriate.
- The USAID mission in Benin is keen on morbidity reduction data and the project may think of gathering such data from the health information system and compiling it to inform health interventions and impact in project areas. The project should follow facility level data to understand disease evolution and make decisions accordingly.

For the MOH:

- The National Directives for Community Based Health Promotion guidelines developed by the MOH should be widely disseminated and proper orientation provided to users at the periphery.
- Communes and health zones should take responsibility for the funding and supervision of CHWs to ensure performance and sustainability of the proposed community health system.
- Quality essential drug and basic equipment must be provided to CHWs to avoid stock-out.
- It is important to adopt a comprehensive approach to a community health delivery system that ensures that all CHWs are trained in the full community PIHI package. Additionally, better coordination among partners or projects should reduce CHWs workload and paperwork improving the impact on maternal and child health at community levels.
- There is a cost to the proposed community health system. This cost should be covered by a stable and appropriate institution. External donor-funded partners' projects can give a hand but are not ultimately responsible for setting up a functional system in the country.

Action Plan for Responding to Evaluation

The following action plan is in development by the project and key stakeholders to respond to the evaluation recommendations.

Recommendation	Action	Key actors (MOH, PRISE-C, other stakeholders, etc.)	Timeline
For the Project			
Document and share with the MOH and other stakeholders the great value of collaborative improvement approach at the community level as QITs and lessons learned sessions are effective boosters of community engagement with community health delivery system.	Hold a meeting after the final midterm evaluation report is released to discuss results and identify sustainability strategies. Audience to include all levels of MOH.	PRISE-C, MCZS SAO	November 2012
	Sharing of results with community stakeholders after third learning session.	PRISE-C, MCZS SAO	November 2012
	Documentation and dissemination of technical briefs, lessons learned and success stories.	PRISE-C, USAID	Throughout the project with a goal of 2 per year.
Advocate for and support the revival of VHDCs and the enrollment of more CHWS as the budget will allow.	Review meeting with the Zonal Health Team and the mayor's offices to discuss scale-up of child survival interventions in their zones	PRISE-C, Zonal Health Teams	Early 2012
	Discussion on how the project can provide non-financial support (such as technical support) for training and supervision of additional CHWs in the project areas	PRISE-C, Zonal Health Teams	Early 2012
Advocate for improvements on the community supply chain issues	Review meeting with the VHDCs on community-level supply chain management and roles and responsibilities	PRISE-C, Zonal supervision teams	November 2011 – January 2012
	Ensure follow-up visits by VHDCs		
Ensure that all CHWs are trained on community PIHI full package that includes nutrition as this appears to be one critical area of child health.	Development of nutrition counseling cards	PRISE-C, BCC network in Zou/ Collines and community health service section of MOH	November 2011 – January 2012
	Look for ways to provide further training to CHWs on nutrition counseling		
Follow facility level data to understand disease evolution and make decisions accordingly.	Discussion with Zonal teams to receive facility data on a quarterly basis as a way to understand disease evolution for decision making.	PRISE-C, EEZS	November 2011 – January 2012

Recommendation	Action	Key actors (MOH, PRISE-C, other stakeholders, etc.)	Timeline
For the Project			
The National Directives for Community Based Health Promotion guidelines developed by the MOH should be widely disseminated and orientation provided to users at the periphery.	Advocacy session with ministry level officials for wider dissemination of the National Directives for Community Based Health Promotion guidelines	National Public Health Office	
Communes and health zones should take responsibility for the funding and supervision of CHWs to ensure performance and sustainability of the proposed community health system.	Review meeting with the Zonal Medical Director and the Zonal team to discuss ways to integrate supervision of the CHWs into their action plans and budgets	PRISE-C and Zonal Health Teams	Early 2012
Quality essential drug and basic equipment must be provided to CHWs to avoid stock-out.	Advocacy with Zonal Medical Director and the Zonal team to identify ways to improve the community distributions supply chain	PRISE-C and Zonal Health Teams	November 2011 – January 2012
Adopt a comprehensive approach to a community health delivery system that ensures that all CHWs are trained in the full community PIHI package.	Advocacy with the Ministry of Health to ensure all CHWs receive full PIHI package, as well as revise the CHW tools to reflect the complete PIHI package	PRISE-C, MOH	2012
The cost of the proposed community health system. should be covered by a stable and appropriate institution. External donor-funded partners' projects can give a hand but are not ultimately responsible for setting up a functional system in the country.	Review meeting with Zonal health teams and the mayor's office to identify sustainability strategies	PRISE-C, Zonal Health teams, Mayor's Office	Early 2012
	Further discussion with MOH to develop agreed upon sustainability plan	PRISE-C, MOH	2012

Annex 1. Learning Brief

Improving Community Health Worker Performance and Retention in Benin via Community-level Quality Improvement Collaboratives

Maternal and child mortality remain unacceptably high in Benin[3] in spite of substantial efforts to increase health service network and caretakers' awareness of major maternal and child health complications. Studies show that most of those deaths occur at home without a skilled health provider attending.[4] Benin's 2011 Operational Plan for National Scale-up of High Impact Interventions for the Reduction of Maternal, Neonatal and Child Mortality, recognizes community health workers (CHWs) as key players in the community health service delivery system. However, their effectiveness remains poor partly because of inadequate performance and high turnover which continue to be a challenge.

In 2010, the USAID Child Survival and Health Grant Program (CSHGP) awarded the Center for Human Services (CHS), a four-year child survival innovation grant to implement the Partnership for Community Management of Child Heath project (PRISE-C). The project aims to improve maternal and child health outcomes in three of Benin's most at need health zones of Save/Ouesse (SAO), Dassa/Glazoue (DAGLA) and Allada/Ze/Toffo (AZT) by strengthening community health systems and health workers' performance. As an innovation grant project, PRISE-C is conducting an operations research (OR) study to test ways to improve the retention and performance of CHWs. The study seeks to assess the impact of a community-level quality improvement collaborative in improving the performance and retention of CHWs in SAO, the intervention zone, compared to DAGLA, the control zone. CHWs in both zones receive financial incentives as described in the Benin Ministry of Health's directives. Quantitative data on CHW performance and retention, as well as qualitative data on factors affecting performance and retention, are being collected. In addition, there is a cost-effectiveness component which assesses the costs of implementing the financial motivation policy alone and those of implementing the improvement collaborative in comparison with their respective effects on performance and retention. The OR is conducted with a total of 86 CHWs in the two zones, in 54 villages located more than 5 km away from a health center.

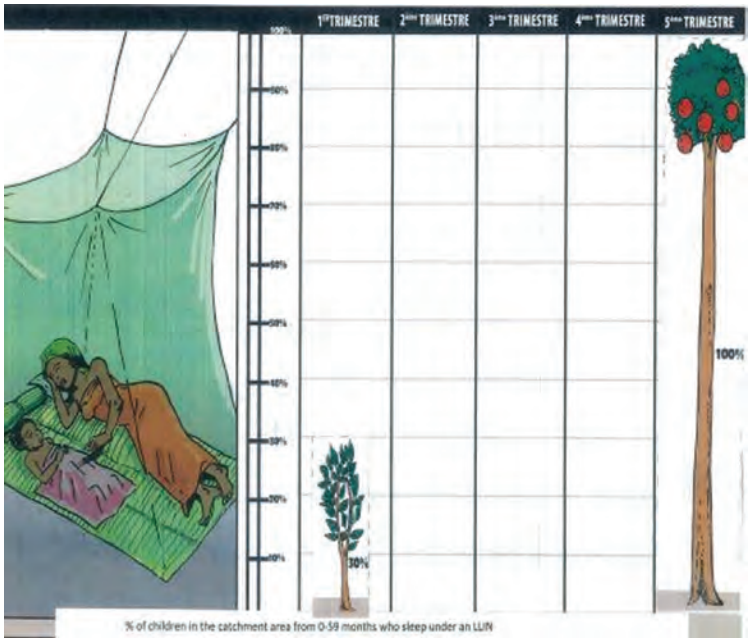
As part of the operations research, formative research was conducted to guide planning and implementation of the study. This formative research provided valuable sociodemographic data on the CHWs and the communities in which they work, as well as identified key community members for participation on the Quality Improvement Team (QIT). For example, youth leaders had not been previously identified as possible members of the QIT, but after focus group discussions identified them as key community health stakeholders, they were included in the QITs.

An orientation session on quality improvement methodology as applied to community maternal and child health was conducted with 81 participants from 31 villages in the intervention zone. Participants, including CHWs, members of village health committees and other village dignitaries such as village

3 In 2011, under-5 mortality rate was estimated at 118/1,000 live births, and maternal mortality at 410/100,000 -UNICEF. *The State of the World's Children: Adolescence, an age of opportunity.* New York: UNICEF; 2011

4 A study of the MOH in 2006 showed that 69.3% of those deaths occurred at home in the department of Couffo. MOH, Directives Nationales pour la promotion de la santé au niveau communautaire, MOH, August 2011

chiefs and elders were taught QI methodology (e.g., how to plan, implement, and evaluate small changes in quick succession); and how to identify the QIT members and orient them on QI methodology. Follow up visits by the PRISE-C staff confirmed the installation of QIT and initiation of activities by the CHWs.



Example of Performance Chart developed by PRISE-C for the Indicator on Sleeping under a LLIN

One key feature of the community collaboratives is the learning session. These learning sessions bring together QITs to present results on their improvement indicators, share lessons learned, consider how to spread their innovations to other sites and identify strategies to address challenges. On the first day of the first learning session held in April 2012, results on improvement indicators were calculated by PRISE-C staff and shared with the QITs who then plotted their results on a performance chart. In order for the performance charts to be understood by all participants, only some of whom have attended school, PRISE-C developed a visual aid using trees of varying heights to denote percentages instead of the

Figure 4. Evolution of key indicators in the two zones

	Zone	Q4 2011 (Baseline)	Q2 2012	Indicator change from Baseline to Q2 2012
% of newborns seen by a health worker at least 2 times in their first week of life (1-3 days and 3-7 days)	DAGLA	36.8%	44.4%	7.6%
	SAO	19.6%	48.4%	**28.8%**
% of households with a handwashing station at/near latrines	DAGLA	0.0%	1.7%	1.7%
	SAO	0.3%	11.0%	**10.7%**
% of households who drink water from a pump or who treat their drinking water with Aquatabs	DAGLA	74.7%	62.3%	-12.4%
	SAO	25.6%	83.5%	**57.9%**
% of children in the catchment area from 0-59 months who sleep under an LLIN	DAGLA	64.7%	68.3%	3.6%
	SAO	28.9%	84.6%	**55.7%**
% of health education talks held	DAGLA	90.6%	91.5%	0.9%
	SAO	36.2%	83.6%	**47.4%**
% of children under 5 who had a home visit from a CHW in the quarter	DAGLA	66.3%	76.5%	10.2%
	SAO	25.1%	75.4%	**50.3%**

Larger postive indicator change bolded
Intervention zone results shaded

typical line graphs. For example, a result of 10% is represented by a small tree in the early stages of development while a result of 90% is represented by a tall tree close to bearing fruit. A result of 100% was depicted with a fully grown tree bearing fruit. In all cases a fruit bearing tree is plotted as the "goal" so each QIT could see what they were working towards.

On the second day, the top 3 QITs were acknowledged based on QIT and CHW functionality.[5] Each QIT then developed an action plan for the next quarter, which were documented and posted in the QIT's respective community. The second learning session was held in August 2012 and on its second day, the groups discussed changes/ practices they had introduced to address the improvement indicators.

After nearly a year of data collection, a difference in the evolution of CHW performance indicators has been observed between the intervention and control zone. The first 2 quarters of data show a large jump in indicators related to CHW activities in the intervention zone such as the proportion of newborns seen by a CHW at least 2 times in their first week of life and the proportion of planned health education sessions held.

Initial qualitative data findings showed that financial motivation was more frequently cited as a motivator for performance in the control zone, while recognition by the community, competition and training were more frequently cited as a motivator for performance in the intervention zone. A similar pattern was observed in regard to retention of CHWs.

Recommendations:

1. During the first learning session, all indicator results were presented and the best performing teams were acknowledged. This public acknowledgement is motivating for those teams that performed well but also provides motivation for other teams to perform better. PRISE-C needs to consider how to keep QIT members motivated and maintain high performance levels without providing financial incentives.
2. Improve the durability of the QIT sheets which includes charts on level of performance with a corresponding image, actions taken during that semester to address the indicators as well an action plan. Given that each QIT carries back and displays their performance data in a communal place, the sheets may not have a long life.
3. Encourage QIT to be creative in their communication with community members and consistent with their support to CHWs as qualitative surveys have shown that community recognition and support were two important determinants to CHWs performance and retention.

5 QIT functionality was determined according to the number of monthly QIT meetings held during a given quarter. CHW functionality was assessed on the following criteria: CHW with no stock outs of 4 medicines, CHW conducted at least 6 household visits and covered at least 30 households, CHW participated in at least 2 supervision visits (either individual or group) and CHW stayed at least 45 days out of the quarter in their respective catchment area.

Annex 2. List of Publications

April 30, 2012: Spring 2012 CORE Group Meeting, Wilmington, DE "CHS Benin OR Presentation," Marthe Akogbeto

October 9, 2012: USAID Washington Brownbag Presentation "Lessons learned on CHW performance and motivation," Marthe Akogbeto

Annex 3. Project Management Evaluation

Planning

PRISE-C is being implemented according to a Detailed Implementation Plan (DIP) that was carefully planned with the participation of all key stakeholders. Special attention was given to the planning of startup activities such as the identification, selection and training of all staff. M&E indicators were discussed and a clear system set up for data collection, analysis and use for decision making. However, end of the project target for a couple of indicators may have been set too high. For example the target for "children from 0-59 months who live in a household with a handwashing station at/near the latrine" was fixed at 20% at the end of the project rising from 0.2 at baseline.

Supervision of Project Staff

PRISE-C is managed out of its Cotonou-based office, which houses the project manager, the technical team and the finance and admin staff. CEID is the subcontractor on the project, with 2 zonal health agents working in the 2 health zones furthest from Cotonou (SAO and DAGLA). Central staffs supervise and visit SAO and DAGLA health zones at least once a month. In AZT, project activities and CHWs are supervised and supported from the main project office. Staff performance is reviewed on a regular basis, and support mechanisms are in place for improvement. The Project Director, Mme. Akogbeto is responsible for the day-to-day technical and administrative oversight of the project. She reports to the CHS/URC Country Representative; oversees the work of the other technical staff; and liaises with key project stakeholders and local partners.

The CHS Team provides experienced headquarters technical support of field activities through various methods, including (1) review of technical strategies before implementation; (2) formal review of overall technical activities after six months, including reporting of results to date; and (3) annual technical reports emphasizing outcome data.

Supervision of CHWs

The 2 CEID health agents provide day-to-day support to CHWs and their supervisors for implementation of project activities. As recommended by the National Directives on Community Health Promotion, PRISE-C and partners implement a joint two-prong supervision system as follows:

- Monthly group supervisions which bring together all CHWs and a head nurse at a health center to assess CHW performance, strengthen CHWs skills, collect, process and analyze data relating to services, ensure the supply of drugs and supplies, and plan monthly activities. The zonal and communal focal persons are expected to participate in this monthly supervision. During this supervision session, supervisors review CHW registers, data collection forms, present and discuss hypothetical situations or issues that could arise in project intervention communities, assess CHW knowledge, provide practical training sessions and validate performance reports. The monthly group supervision is working well and effectively serves its purpose. During the last quarter (Q3, FY 2012), three monthly group supervisions were conducted in each health area of the three project's health zones for a total of 93. This monthly group supervision approach is new and ownership is yet to be taken by zone and commune health supervisors.

- Quarterly on-site supervision aims to assess the performance of the CHWs, enhance their skills and motivation and assist them to solve specific problems encountered. The head nurse of the health center, the zonal and communal focal point for each CHW together coordinate to provide at least a quarterly on-site supervision during which they review the records of care provided during the period, directly observe the CHW at work, survey and validate the data recorded, conduct an opinion survey, evaluate the CHW work environment, and give constructive feedback. At least one site-supervision was conducted during the last quarter in each of the PRISE-C project's covered villages.

Human Resources and Staff Management

CHS provides overall technical direction and management of the project, with CEID as subcontractor, and works closely with key local stakeholders, to build local capacity and ensure sustainability of project results. Working relationships among project personnel are very strong and the staff takes much pride in their work. A national level consultative committee, comprised of MOH officials and other key stakeholders, has been set up to provide continuous guidance for the life of the project. This does facilitate knowledge exchange between the project, the MOH and other stakeholders.

Financial Management

Project finances are well maintained and captured in an accounting system where the project manager and financial administrator record budget forecasts and track both expenditures and variances. Accurate and up-to-date financial reports are generated from the accounting systems that are used to monitor budget implementation. The project has managed to stay within budget for the first two years and is on track to remain so.

Logistics

No major problem was reported on the procurement and distribution of project equipment and supplies.

Information Management

The project collects data and maintains records on staffing, volunteer training and logistics. At the community level, CHWs are trained to maintain the village maternal and child health registers from which community level data are reported on a monthly basis. This system of data collection is very thorough and feeds the national information system. At the level of PRISE-C, the M&E officer compiles data generated to inform project's indicators.

Technical and Administrative Support

The project has four Key Personnel positions, two of which are currently filled and approved by USAID/Washington: 1) Field Program Manager, Marthe Akogbeto; and 2) CHS HQ Technical Backstop, Sara Riese. Mme. Akogbeto and Ms. Riese are responsible for coordinating all communication with CSHGP officials and ensure effective communication and collaboration between project and headquarters staff. They are responsible for mobilizing technical and administrative support needed for effective and efficient project implementation. As the backstop for the other URC/CHS implemented project in Benin, Ms. Riese provides linkages and synergy between the two programs, along with Dr. Frantz Simeon, the Country Representative for URC/CHS who oversees both projects in country. Ms. Waverly Rennie, a CHS/URC Quality Improvement Advisor with special focus on BCC, provided additional technical expertise at the beginning of the project.

In addition to support from Ms. Riese as the technical backstop, the project staff is also supported at corporate headquarters by a Program Officer, Project Coordinator, QI Advisors/Technical Specialists, and the Associate Director for Administration and Finance, a Corporate Monitor, a CHS Contracts Official, and staff accountants from CHS's finance department. The Program Officer works closely with Mme. Akogbeto and Ms Riese to coordinate operations and technical support to PRISE-C and all CHS-URC projects in Benin. The Project Coordinator provides administrative backstopping to the project staff, ensuring that all project reporting deadlines are met and that financial records are kept up to date. The Project Coordinator reports to Mme. Akogbeto and Ms. Riese and works in close coordination with headquarters contracts staff as well as project staff to ensure accountability of project finances. In country, the Administrative Finance Officer is responsible for day-to-day management of funds, under the supervision of the Field Program Manager and Country Representative; she also works in close coordination with the project coordinator.

Management Lessons Learned

Monthly Group supervisions and quarterly on-site supervisions are instrumental to PRISE-C's success as both contribute to the improvement of community health service quality through the continued training, motivation and support to CHWs and VHDCs in project intervention areas.

It was important to put in place a national level consultative committee, comprised of MOH officials and other key stakeholders, as it has since then provided continuous guidance and mentoring support for the project to be accepted and supported at peripheral level.

The information system has been well articulated to the national health information system. At the community level, CHWs maintain the village maternal and child health registers from which community level data are reported on a monthly basis and recorded in the national information system.

Annex 4. Workplan Table

Status of Activities planned from October 1, 2010 to September 30, 2012

		Objective Met	Activity Status
Project Management		**Ongoing**	
	Present the project to health authorities		Completed
	Orient Project management team and conduct team building/workplanning workshop		Completed
	Orient Community and Facility Activities Coordinators and department MOH partner staff		Completed
	Develop detailed first annual workplan and harmonize it with MOH workplan at the zonal levels		Completed
	Implementation of the baseline survey		Completed
	Analyze survey and study results		Completed
	Share survey results with stakeholders and community representatives		Completed
	Develop detailed implementation plan (DIP) with stakeholders and community representatives		Completed
	Finalize training and supervision schedule		Completed
	M&E training for Zonal data managers		Completed
Strategic Objective: To Accelerate the Delivery of Proven, Low-Cost Maternal and Child Health Interventions by Strengthening Community Health Delivery Systems		**Ongoing**	
IR 1: Increase Community Engagement with community health delivery system		**Ongoing**	
1.1	**Create an enabling environment to community child health promotion**	**Ongoing**	
1.1.1	Orientation for CHW Zonal Trainers on participative community diagnosis		Completed
1.1.2	Annual Community Development Action workplanning by Village Health and Development Committee (VHDC)		Completed
1.1.3	Annual Village Health and Development Committee Meetings (every 6 months between the workplanning meeting)		Ongoing
1.1.4	Execution of community development actions plans		Ongoing
IR 2: Increased demand for community preventive and curative services		**Ongoing**	
2.1	**Improving knowledge, attitudes and practices towards child health**	**Ongoing**	
2.1.1	Adapt a behavior change strategy from MOH's, PISAF documents and baseline survey results		Completed
2.1.2	Identify, train and put in place zonal field agents for SAO and DAGLA		Completed
2.1.3	IEC package training for Health Care Workers		Completed
2.1.4	Provide IEC materials to Health Care Workers (from MOH/PISAF)		Completed
2.1.5	BCC refresher training for CHWs and select womens group members (Costs included in Qly meeting costs)		Completed
2.1.6	Provide BCC materials to CHWs (from MOH/PISAF)		Completed
2.1.7	Collaboration with other local partners to harmonize radio messages on maternal and child health		Ongoing
2.1.8	Collaborate with mutuelles to ensure key messages for mothers on key practices for children's health		Ongoing
2.1.9	Work with local women's groups theater to educate mothers on key practices for children's health		Ongoing
2.1.10	Follow up BCC activities in the villages and health facilities		Ongoing

		Objective Met	Activity Status
2.2	**Promote the uptake of mutuelle membership**	**Ongoing**	
2.2.1	Discussions with community leaders to raise awareness about mutuelles and their services (Costs included in biannual vhdc meeting)		Ongoing
2.2.2	Facilitate the links between community and mutuelles organisations (PROMUSAF, RAS etc) for new mutuelle implementation in AZT		Ongoing
2.2.3	Work to improve relations between facilities workers and members of mutuelles		Ongoing
IR 3: Strengthen Performance and Sustainability of the Community Health Delivery System		**Ongoing**	
3.1	**Improve functional programmatic support to CHWs by the Health Facility Workers**	**Ongoing**	
3.1.1	CHW Training Package and Facilitators preparation - all zones		Completed
3.1.2	IMCI supervision refresher for health center supervisors of CHWs		Completed
3.1.3	Follow-up visits to health centers to assure proper supervision of CHWs		Ongoing
3.1.4	Monthly Meetings of CHWs and health center supervisors (Supported by Africare)		Ongoing
3.1.5	Support for quarterly on-site supervision visits by CHW supervisors to CHWs		Ongoing
3.1.6	CHWs Financial Incentive		Delayed, but ongoing
3.1.7	Identification of zonal level community health committee		Completed
3.2	**Reinforce the knowledge and skills of CHWs**	**Ongoing**	
3.2.1	TOT for CHW Integrated case management trainings in AZT		Completed
3.2.2	Integrated case management training for CHWs		Completed
3.2.3	Post training follow up		Completed
3.2.4	Provide refresher training on identified gaps in knowledge and skills (Costs included in Quarterly meeting costs)		Ongoing
3.2.5	Follow-up visits to CHWs to reinforce knowledge and skills		Ongoing
Operations Research		**Ongoing**	
OR1	Develop research protocol and discuss with stakeholders		Completed
OR2	Submit approved OR concept paper to the Comite d'Ethique in Benin for approval		Completed
OR3	Formative research-initial phase		Completed
OR4	QI methodology training		Completed
OR5	Introduce collaborative in intervention zone-initial zonal collaborative meeting to identify priority health issues		Completed
OR6	Routine data collection of CHW performance indicators		Ongoing
OR7	Annual completion of the CHW system functionality assessment tool		Tool adapted and certain pieces being completed annually
OR8	Quarterly focus groups with hi/mid/low performing CHWs, VHDC members, CHW supervisors		Delayed, but first round completed and ongoing
OR9	Quarterly Learning Sessions of Community level Collaborative		Ongoing
OR10	Monthly QIT meetings at village level-CHWs and VHDCs		Ongoing
OR11	In-depth interviews with CHWs on retention (endline and baseline and as needed with any CHWs who leave their post)		Ongoing

Annex 5. CHW Training Matrix

Training Month/Year	Focus of Training	Project Area	Participants	Number Trained
March 2011	ToT for Integrated Package of High Impact Interventions at community level (PIHI-comm)	SAO and DAGLA	Trainers and supervisors	22
April 2011	PIHI-comm	SAO and DAGLA	Community health workers (CHW)	45
September 2011	PIHI-comm	SAO and DAGLA	CHW	45
September 2011	ToT for PIHI-comm	AZT	Trainers and supervisors	11
October 2011	PIHI-comm	AZT	CHW	33
November 2011	Supervision techniques and tools	SAO and DAGLA	CHW supervisors	28
November 2011	Supervision techniques and tools	AZT	CHW supervisors	8
December 2011	Quality Improvement	SAO	CHW in OR intervention zone	34
December 2011	Quality Improvement	SAO	Members of VHDC	90
December 2011	BCC and mutuelles	AZT	CHW supervisors	9
April 2012	BCC and mutuelles	AZT	CHW	26
May 2012	BCC and mutuelles	SAO and DAGLA	CHW	35
May 2012	BCC and mutuelles	SAO and DAGLA	CHW	49

Annex 6. Evaluation Team Members

Evaluation Team Leader: Dr. Pierre-Marie Metangmo

Field Staff Evaluation Team Members: Marthe Akogbeto
Valentin Tosse
Estelle Codo
Bio Saka Mama

Annex 7. Evaluation Assessment Methodology

Goal of the evaluation: This midterm evaluation seeks to inform and strengthen the progress, efficiency, and effectiveness of PRISE-C activities towards achieving the project's intermediate results.

Objectives of the evaluation:

The objectives of this MTE are to:

- Assess progress in implementing the DIP and OR activities within the context of the overall program implementation.
- Assess progress towards achievement of program objectives or benchmarks, with particular emphasis on;
- Levels of community engagement with the community health delivery system
- Level of engagement of Departmental and Zonal level MOH stakeholders with project activities
- Project PMP to ensure that the indicators represent the project processes and outcomes
- Assess if interventions are sufficient to reach desired outcomes;
- Identify main constraints, problems and areas requiring further attention to achieving program/OR objectives;
- Provide recommendations for integrating the community-based collaborative approach into national health plans, within the existing framework; and
- Provide recommended actions to guide the project staff through the last half of the project, particularly on the following areas:
- Collaborative cost-benefit data;
- Sustainability/Institutionalization of CHW financial incentives at the commune level;
- Sustainability of community participation in community health delivery system;
- Prepare and submit a MTE report including a Learning Brief

Evaluation methodology:

Different approaches will be used to conduct this evaluation including qualitative and quantitative methods. Data collected will be analyzed to address the evaluation objectives. The methods to be used will include:

In-brief planning meetings - between the consultant and PRISE-C/Center for Human Services (CHS) through a conference call and in-country meetings to share background, experience and expectations for the assignment and to formulate a common understanding of the assignment as well as clarify roles and responsibilities among other actions to be taken.

Document review – documents related to the project will be reviewed to get an understanding of the program goal, objectives, key indicators, progress year by year, and the overall management. This review will document the relevance and effectiveness of managerial processes, program strategies and approaches among other issues that will enhance knowledge of the project.

Key informant interviews (KII) - with project staff and key stakeholders involved in the project including the MOH community focused team members, Zonal Board members, Community Health Workers, Village Health Development Committee (VHDC) members, village leaders, staffs of partners institutions such as CEID, PISAF, Africare, and CRS, and health insurance institutions such as RAS and PROMUSAF. A semi structured interview guide will be developed to explore topics and themes and ensure that comparable information is obtained from the stakeholders.

Group discussion will be held with women groups, Village Health Development committees (VHDC) or other beneficiary groups as appropriate, to obtain first hand information regarding usefulness of the program to them, identify challenges and areas of priorities needing focus.

Field sites visits – visits will conducted to different implementation sites to observe and elicit information regarding program relevance and adequacy, efficiency and sustainability, benefits, challenges and limitations experienced in the course of program implementation. Sites to be visited will be selected using criteria for ample geographical and technical intervention coverage.

Review of data collected – qualitative and quantitative data collected will be analyzed. The statistical analysis will be done using a MS Excel database.

Mission debriefing – a power point presentation will be presented to the Mission and partners in Benin to highlight the key findings, challenges and recommendations. Comments from the Mission and partners will be incorporated into the report.

Sample Selection for interviews/group discussions:

The evaluation will target key stakeholders of the community health system, services and structure in Benin at national and local levels.

Categories of people to be met include:

- USAID: USAID/Benin Health Team Leader;
- Implementer: CHS/PRISE-C Benin
- MOH support and service providers: MOH representatives at national and district levels; MOH community focused team members (CHW supervisors, Zonal and communal focal persons for community health activities, and head nurses); Zonal Board members (community focal health person and 2-3 other zonal health team members),
- Community service providers: Community Health Workers in project intervention areas; VHDC members (Chief of the village and 2 other elders),
- Community leaders and beneficiaries (mothers of children under 5): Religious leaders; Women groups (mothers of children under 5); in the OR intervention area, members of the Quality Improvement Teams
- Partners institutions and subcontractors: CEID; PISAF; Africare; CRS
- Health Insurance: RAS; PROMUSAF

The people to be met and sites to be visited will be determined taking into consideration the list above and appointments will be made in advance by PRISE-C/CHS Benin and included in the field visit agenda under development.

Data collection tools:

Attached semi-structured interview guide for the following groups: MOH key informants, PRISE-C staffs, Subcontractors and partner implementers, CHW and VHDC members, and Beneficiaries (Religious leaders, women groups leaders and mothers of children under 5)

Semi-structured Interview Guide for MOH Key Informants

This questionnaire targets:

MOH representatives at national and district levels; MOH community focused team members (including CHW supervisors); Zonal Board members.

Introduce yourself, explain the PRISE-C project's MTE purpose and the interview process and seek respondent's consent (have respondents sign a consent form) before starting the interview.

INTRODUCTION & IDENTIFICATION

Interview date: _____

Name and address of the institution: _____

Name of the respondent: _____

Position: _____

LEVEL OF PROGRAM PERFORMANCE

This section explores progress in program implementation (process) and changes in access (quantity, quality), coverage (demand and use) overall management (leadership, coordination) and community engagement. Please request relevant documents to support findings – (digital or hard)

How is the Community Health Delivery System organized in Benin?

What is the role of your unit or division with regards to Community Health Delivery System in General and the PRISE-C project in particular?

How is your unit or division involved in increasing community engagement with the Community Health Delivery System?

How would you assess the engagement of the community in Community Health Delivery System in the country? And in your area? (note the primary geographic area that the respondent works in)

How would you assess the coverage of services provided by CHWs as a consequence of the PRISE-C project? And the quality?

How do VHDCs function in your region/district? In what ways do they support the Community Health Delivery System?

How would you assess the coverage of the PRISE-C project in term of support provided and activities conducted? And the quality?

How does your unit or division contribute to creating a conducive or supportive environment for the promotion of community child and maternal health?

How is your unit or division involved in promoting the uptake of mutuelle membership? How successful do you think your unit/divisions efforts are toward this?

What role does your unit or division play in improving supervisors (Health Workers, Commune and Zonal community health staff) functional support to CHWs?

What role does your unit or division play in reinforcing the knowledge and skills of CHWs?

What do you know do about the collaborative approach to improve performance and retention of CHWs? How is your unit involved?

What internal factors to the MOH (e.g. strategies, policies, procedures, culture) influence the effectiveness of the PRISE-C project?

What external factors (e.g. behavior, social or economic conditions, donor policies) influence the effectiveness of the PRISE-C project?

CAPACITY BUILDING

This section determines the sustainability of PRISE-C activities and establishes if capacity building activities of MOH staffs in community health delivery system have had measurable impact on project's achievements towards objectives. Please request relevant documents to support findings – (digital or hard)

How has the PRISE-C project affected your unit or division?

What have been the key benefits of PRISE-C to your unit?

Did PRISE-C reinforce your unit's strategies and activities?

How has PRISE-C strengthened the capacity of your unit?

What types of TA (training or other) have you or your colleagues received from the PRISE-C project?

What have been the major drawbacks and challenges of PRISE-C to your unit?

How has your unit had to adapt its structures, procedures, and systems due to the PRISE-C project?

What mechanism is in place to insure country ownership and sustainability of the PRISE-C project? What human capacity needs remain with regards to Community Health Delivery System?

LESSONS LEARNED, CHALLENGES AND RECOMMENDATIONS

This section probes into best practices, challenges and recommendations for improvement as the project continues.

Is there any duplication of PRISE-C activities with other partners that you know of?

Are there documented best practices and innovations in PRISE-Cs activities that you can share with us?

What have been the three most important ingredients leading to success in this project so far?

If you could improve three things about the project, what would they be?

What were/are the key benefits of the PRISE-C project?

To your unit and the MOH in general

To the beneficiaries and community served

Can you think of any critical activity or approach to strengthen the Community Health Delivery System that the PRISE-C project may have left out?

Any recommendation for future direction of PRISE-C?

Thank you for your time

Semi-structured Interview Guide for PRISE-C Subcontractors and Implementing Partners

This questionnaire targets PRISE-C project managers, subcontractors and implementing partners.

Introduce yourself, explain the PRISE-C project's MTE purpose and the interview process and, seek respondent's consent (have respondents sign a consent form) before starting the interview.

INTRODUCTION & IDENTIFICATION

Interview date: _____

Name and address of the institution: _____

Name of the respondent: _____

Position: _____

LEVEL OF PROGRAM PERFORMANCE

This section explores progress in program implementation (process) and changes in access (quantity, quality), coverage (demand and use) overall management (leadership, coordination) and community engagement. Please request relevant documents to support findings – (digital or hard)

What are your role and that of your organization (for non-PRISE-C staffs) with regards to the PRISE-C project?

What were some of the PRISE-C project activities planned for the period from the start to date that you and your organization (for non-PRISE-C staffs) were involved in? Were all of the planned activities implemented? If YES how well? If no why?

How is your unit or division involved in increasing community engagement with the Community Health Delivery System?

How would you assess the engagement of the community in Community Health Delivery System in the country? And in your area? (note the primary geographic area that the respondent works in)

How would you assess the coverage of services provided by CHWs as a consequence of the PRISE-C project? And the quality?

How do VHDCs function in your region/district? In what ways do they support the Community Health Delivery System?

How would you assess the coverage of the PRISE-C project in term of support provided and activities conducted in specific technical areas? And the quality?

How does your unit or division contribute to creating a conducive or supportive environment for the promotion of community child and maternal health?

How is your unit or division involved in promoting the uptake of mutuelle membership? How successful do you think your unit/divisions efforts are toward this?

What role does your unit or division play in improving supervisors (Health Workers, Commune and Zonal community health staff) functional support to CHWs?

What role does your unit or division play in reinforcing the knowledge and skills of CHWs?

What do you know do about the collaborative approach to improve performance and retention of CHWs? How is your unit involved?

What internal factors to the MOH (e.g. strategies, policies, procedures, culture) influence the effectiveness of the PRISE-C project?

What external factors (e.g. behavior, social or economic conditions, donor policies) influence the effectiveness of the PRISE-C project?

CAPACITY BUILDING

This section determines the sustainability of PRISE-C activities and establishes if capacity building activities of MOH staffs in community health delivery system have had measurable impact on project's achievements towards objectives. Please request relevant documents to support findings – (digital or hard)

How is the PRISE-C project affecting implementing partner organizations?

What have been the key benefits of PRISE-C to your organization?

How has PRISE-C strengthened the capacity of your organization?

What types of TA (training or other) have you or your colleagues received from the PRISE-C project?

What have been the major drawbacks and challenges of PRISE-C to your organization?

How has your organization had to adapt its structures, procedures, and systems due to the PRISE-C project?

Which type of training in general has PRISE-C conducted so far? Which training was provided to CEID staff? What is done for the follow up?

What is the supervision system in place for service providers in the Community Health System delivery in general? And how does PRISE-C support that supervision system?

What mechanism is in place to ensure country ownership and sustainability of the PRISE-C project? What human capacity needs remain with regards to Community Health Delivery System?

LESSONS LEARNED, CHALLENGES AND RECOMMENDATIONS

This section probe in to best practices, challenges and recommendation for improvement as the project continues.

Is there any duplication of PRISE-C activities with other partners or projects that you know of?

Are there documented best practices and innovations in PRISE-Cs activities that you can share with us?

What have been the three most important ingredients leading to success in this project so far?

If you could improve three things about the project, what would they be?

What were/are the key benefits of the PRISE-C project?

To you and your organization

To the beneficiaries and communities served

Can you think of any critical activity to strengthen the Community Health Delivery System in the country that the PRISE-C project may have left out?

Any recommendation for future direction of PRISE-C?

Thank you for your time

Semi-structured Interview Guide for CHWs and VHDC

This questionnaire targets CHWs and VHDCs.

Introduce yourself, explain the PRISE-C project's MTE purpose and the interview process and, seek respondent's consent (have respondents sign a consent form) before starting the interview.

INTRODUCTION & IDENTIFICATION

Interview date: _____

Name and address of the institution: _____

Geographic area: _____

Position: _____

LEVEL OF PROGRAM PERFORMANCE

This section explores progress in program implementation (process) and changes in access (quantity, quality), coverage (demand and use) and overall management (leadership, coordination). Please request relevant documents to support findings – (digital or hard)

What is your role with regards to the PRISE-C project? How long have you been in this role?

Tell us a bit about your work as CHWs in your village. (Only for CHWs)

What kind of activities have you been involved in with PRISE-C?

How does the community in your village support maternal and child health activities?

How would you assess the coverage and quality of services that you provide in your capacity as CHW? (Only for CHWs)

What is the role/function of the VHDC in your village?

How does the PRISE-C project work to improve MNCH?

How does the PRISE-C project work to support and promote the uptake of mutuelles memberships?

How does the PRISE-C project work with/support health workers, commune and zonal community health staff?

How does the PRISE-C project support/work with CHWs?

What is the collaborative approach? How do you and your community use the collaborative approach?

CAPACITY BUILDING

This section determines the sustainability of PRISE-C activities and establishes if capacity building activities of MOH staffs in community health delivery system have had measurable impact on project's achievements towards objectives. Please request relevant documents to support findings – (digital or hard)

What have been the key benefits of the PRISE-C project to you as a CHW or as members of VHDC?

Which type of training or equipment if any have you received from PRISE-C?

How often do you receive supervision? When last were you supervised? (This applies only to CHWs)

What other human capacity needs remain with regards to CHWs and VHDCs?

LESSONS LEARNED, CHALLENGES AND RECOMMENDATIONS

This section probe in to best practices, challenges and recommendation for improvement as the project continues.

Is there any duplication of activities with other partners or projects that you know of?

What have been the three most important ingredients leading to success in this project so far?

If you could improve three things about the project, what would they be?

What were/are the key benefits of the PRISE-C project to your communities?

Can you think of any other critical activity to strengthen the Community Health Delivery System?

Any recommendation for future direction of PRISE-C in the village?

Thank you for your time

Annex 8. Persons Interviewed & Contacted

USAID Benin
Beni Emile Bongo, *President's Malaria Initiative Advisor*
Michelle Kouletio, *Program Management Specialist Family Health Team*
Pamela Mandel, *Consultant*

Ministry of Health (MOH)
Dr. Agbohoui Olga, *Director of Maternal and Child Health Division*
Dr. Ogoubiyi Flore Viviane, *Medical Director of Atlantic and Littoral Region*

SAO Zone
Dr. Affoukou Cyriaque, *Medical Director (Coordinator) of SAO Zone*

Commune of SAVE
Lanmadoucelo Octave, *Communty Health Focal point, SAVE*
Daffassawa Drame, *CHW, Ouoghi Gare, SAVE*
Idrissou Sekinatou, *QIT/VHC chair, Ouoghi Gare, SAVE*
Yerina Assessa, *Village Elder Ouoghi Gare, SAVE*
Adamo Sekenat, *QIT/VHC Member*
Zoumanou Mibat, *QIT/VHC Member*
Ousena Lena, *Mother of under 5 years old child Ouoghi FGare, SAVE*

Commune of OUESSE
Adjiboye Angele, *CHW Yaoui, Ouesse*
Adama Metro, *QIT/VHC member Yaoui, Ouesse*
Mouhoumadou Maimouna, *QIT/VHC member Yaoui, Ouesse*

DAGLA Zone
Dr. Affoukou Cyriaque, *Interim Medical Director (Coordinator) of DAGLA Zone*

Commune of Dassa-Zoume
Yacoubou Ganiou, *Head Nurse and Supervisor of the communal Health Center of Dassa Zoume*
Othoun Salome, *Head Nurse of Fita health center, Fita, Kpingni, Dassa Zoume*
Nanamouwa Pierre, *CHW Ayede, Fita, Dassa Zoume*
Koba Bienvenu, *Secretary QIT/VHC Ayede, Fita, Dassa Zoume*

Commune of Glazoue
Azonhatia Leon Head Nurse of Sokponta Health Center, Sokponta, Glazoue
Degnon Ayenan Louise CHW Ibeyem, Sokponta, Glazoue
Odah Reine QIT/VHC chair Ibeyem, Sokponta, Glazoue
Sevide Francois QIT/VHC Secretary Ibeyem, Sokponta, Glazoue
Daaga Elise, QIT/VHC Treasurer Ibeyem, Sokponta, Glazoue

AZT Zone
Dr. Affoukou Cyriaque, *Medical Director (Coordinator) of AZT*
Kpatinvo Christophe, *Head Nurse of Toffo Communal Health Center; Focal point PRISE-C*

Commune of Ze
Alloze K. Guy, *Head Nurse and Supervisor of the Ze Communal Health Center*
Djede Bouraima, *CHW Goulo, Ze*
Gnonnonfoun Mathias, *QIT/VHC Treasurer Goulo, Ze*
Women group (Boko Christie, Djede Aissatou, Honzou Mariane, Djede Fatima, Zonji Cherikatou, Kpativon Antoinette, Afignang Ehigenie, Agbikou Delphine, Lisonon Sriatou, Bello Latifatou) Goulo, Ze

Commune of Toffo
Dr. Soglo Dorothee Roland, *Medical director Toffo Health Center Toffo*
Yedomononhan H. Gbedounougbo, *Head Nurse and Supervisor of the Toffo Health Center*
Houedanou Christophe, *CHW Zeko, Toffo*

Centre d'Expertise et d'Ingénierie pour le Développement Durable (CEID)
Bio Saka Mama, *Directeur General Adjoint*

Africare
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Annex 9. Project Data Form

PRISE-C's project data form was updated on October 25, 2012.

Annex 10. OR Midterm Report: Study Progress and Achievements

Operations Research Title: Using the Quality Improvement Collaborative Approach to Improve Performance and Retention of Community Health Workers in Benin

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Reporting Period: October 2010 - July 2012

Part 1: Overall Summary

PRISE-C's operations research tests the effect of implementation of a community-level quality improvement collaborative (called a Community Based Package of High Impact Interventions Collaborative (PIHI-Comm) in the PRISE-C project) on Community Health Worker performance and retention. Benin's Ministry of Health and other key stakeholders have been involved from the initial concept development, through to the current OR activities. Activities in the first half of the project have focused on development of the OR concept, formative research, introduction of the collaborative concept to the communities and supporting the collaborative activities in the intervention zone. Initial results from the first year of implementation have been disseminated in Benin and at the CORE Group Spring 2012 meeting. Key lessons learned revolve around adaptation of collaborative approaches to the community level and ensuring data quality.

Part 2: Major Activities, Process, and Progress

The PRISE-C project was awarded in September 2010. The major activities to date in the operations research (OR) component of the project are as follows.

OR protocol development and finalization

The original OR concept presented in the 2010 project proposal, to test different forms of CHW motivation, was not possible to implement due to changes in the Benin MOH's community health policy, and this led to a long concept paper development process. After discussions with in-country and USAID stakeholders, a new concept was developed focusing around assessing the effect of a community level collaborative on CHW performance and retention. The OR Concept Paper was ultimately accepted by USAID in September 2011. The protocol was presented to and approved by both URC-CHS's IRB and a committee in Benin consisting of representatives of the Ministry of Health (MOH), the Maternal and Child Health Department, the Public Health Department, and the Department of Health Research. The project received a letter signed by the Minister of Health authorizing the research.

Formative Research

The formative research phase was designed to collect data on the CHWs and their communities which would serve to guide the OR design. For example focus groups were conducted with community members and key informants to assess the ideal composition of the Quality Improvement Teams (QIT) through

identification of community members who play important roles in community health activities. The formative research was conducted in November and December 2011. The results from the formative research have been analyzed, documented and where necessary incorporated into the OR design. Results from the focus groups example noted above showed that including a youth member on the QIT was important, and so the composition of the QITs was adjusted to include a youth member.

Many of the CHW performance indicators included in the OR data collection plan have population level denominators, so ensuring the quality and availability of this information is of critical importance. CHWs and their supervisors in the intervention and control zones conducted a data collection exercise at all households in their catchment area to determine, among other indicators, the number of households and the number of children between 0-59 months in the catchment area. This exercise will be conducted annually to ensure accurate reporting of CHW performance data. The exercise revealed specifics on the best source of each indicator. The majority of the CHW performance indicators will be collected with the CHWs from their registers at the monthly group supervision meetings. Additional sociodemographic data on the CHWs was collected so that performance data at the end of the project could be controlled for variables such as age, education, other work, etc. These findings are included as Formative Research Data at the end of this Annex.

Development of an implementation manual for the community level collaborative

In order to provide a standardized implementation model for the community level collaborative activities the project staff developed an implementation manual for the collaborative work, which provides details on the overarching objectives and implementation phases, as well as details of the tools used, practical organization and monitoring systems. This manual was distributed to all the supervisors in the OR intervention zone as a reference document for the OR activities.

Orientation of CHWs and community members on quality improvement methodology

The quality improvement methodology orientation session was held in December 2011. The 31 villages in the intervention zone of SAO were divided into 4 collaboratives in order to better facilitate their work, and the initial orientation of CHWs and community members was conducted according to this division, with sessions conducted by the CHW supervisors as well as PRISE-C staff and a representative from the Community Health Office of the MOH. During this orientation the participants were introduced to quality improvement methodology as applied to community child health and to the goals and objectives of the collaborative approach. A total of 81 people participated in the different sessions, including CHWs, members of the village health committees and other village dignitaries such as village chiefs and elders. These community members then returned to their villages to select the members of the QIT and orient them on the QI methodology.

Follow-up of community activities and initiation of QIT activities in SAO

In January 2012, the PRISE-C team together with the MOH conducted follow-up visits to all 31 villages in the OR intervention area to confirm installation of the QITs and initiation of activities by the CHWs.

Key observations during these visits included:

- The communities were very interested in the OR topic itself;
- Community members recognized the work that the CHW was doing and were making themselves available to support

these activities. For example, in certain villages, the QIT members decided to help the CHW conduct education activities on sanitation, early care seeking behaviors and safe water; and

- CHWs are managing cases of malaria, cough and diarrhea according to national guidelines.
- Most CHWs are conducting routine home visits

A few areas to improve upon were also noted, including:

- Certain common errors were noted: lack of documentation of certain indicators, misunderstandings of certain portions of data collection tools, and incorrect counseling messages;
- Home visits are not systematic, for most CHWs they are being done only to follow-up on children they have treated;
- CHWs are not planning their activities in advance; and
- Not all CHWs have access to medication stock management tools.

During the follow-up visits, the visiting teams provided supportive supervision to CHWs on the aforementioned areas as well as worked with the CHW supervisors on appropriate coaching methods to use with their CHWs to help them improve their performance.

Learning Sessions in SAO

QITs come together on a quarterly basis at learning sessions to present results on their improvement indicators and the activities they have implemented in order to respond to weaknesses in those indicators. The first learning session was held in April 2012. On the first day, results were calculated and shared, with QITs plotting their results on a performance chart. In order for the performance charts to be understood by all participants, only some of whom have attended school, PRISE-C developed a visual aid using trees of varying heights to denote percentages instead of the typical line graphs. For example, a result of 10% is represented by a small tree in the early stages of development while a result of 90% is represented by a tall tree close to bearing fruit. A result of 100% was depicted with a fully grown tree bearing fruit. In all cases a fruit bearing tree is plotted as the "goal" so each QIT could see what they were working towards.

Following the development of the performance charts, each team was asked to discuss and identify the changes they introduced to address the improvement indicators. The discussion of changes/practices implemented proved to be difficult for the QIT. PRISE-C staff observed that QIT members had a hard time distinguishing between CHW routine activities and responsibilities with QIT changes/practices implemented specifically to improve on the indicators. After each team noted their actions and changes, one member of each group presented to the larger group alongside their QIT sheet, so that the results of their actions and changes could be seen on the same sheet as their performance charts.

On the second day the top 3 QIT were acknowledged, based on QIT and CHW functionality.[6] Each QIT then developed an action plan for the next quarter, which were documented and will be posted in the QIT's community.

The second learning session was held in August 2012. On the first day, results were calculated, plotted on the performance charts and shared

6 QIT functionality was determined according to the number of monthly QIT meetings held during a given quarter. CHW functionality was assessed on the following criteria: CHW with no stock outs of 4 medicines, CHW conducted at least 6 household visits and covered at least 30 households, CHW participated in at least 2 supervision visits (either individual or group) and CHW stayed at least 45 days out of the quarter in their respective catchment area.

with the group. All four of the collaboratives showed improvement on their indicators over the results from the first learning session in April.

On the second day, the groups discussed changes/practices they had introduced to address the improvement indicators. Differentiation of routine CHW activities and QIT responsibilities was observed to be easier for the QIT members at this second learning session. Additional improvement indicators were added for each collaborative to follow for the next learning session.

Data Collection

OR data have been collected throughout the implementation of OR activities. Quantitative data are collected as a part of the project monitoring plan, and are linked to individual CHWs so that they can be stratified by factors such as gender, education level, length of time as a CHW in addition to comparison of intervention and control zone. Initial qualitative data were collected in June 2012, due to some delays in identifying qualified personnel. A local consultant has been engaged for the qualitative data collection and analysis and will conduct the on-going data collection and analysis at specific points in the project. For the cost-benefit analysis portion of the OR, cost codes have been modified to include geographic codes in order to separate costs in the intervention and control zones.

Part 3: Outputs, Outcomes and Deliverables

- March & September 2011: 88 CHWs trained in community health package
- August 2011: Detailed Implementation Plan and Operations Research approved by USAID Washington
- September & November 2011: OR approved by U.S. IRB &Benin stakeholders
- October 2011: Submission of the project year 1 annual report
- November 2011: Community-level collaborative Implementation Manual developed
- December 2011: QI Training for 81 members of the community-level collaborative QITs in the intervention zone (SAO)
- April 2012: First learning session held
- May 2012: Project staff presented at CORE Spring Meeting on OR implementation
- August 2012: Second learning session held

Part 4: Discussion of Outcomes, Lessons Learned and Course Correction

The first 2 quarters of PMP results (which also include the OR CHW performance indicators) show a large jump in indicators related to CHW activities in the intervention zone-such as the proportion of newborns seen by a CHW at least 2 times in their first week of life and the proportion of planned health education sessions held. Maternal and Child Health indicators have yet to show upward trends, likely due to improved data collection between the first and second quarters.

Initial qualitative data findings showed that financial motivation was more frequently cited as a motivator for performance in the control zone, while recognition by the community, competition and training were more frequently cited as a motivator for performance in the intervention zone. A similar pattern was observed in regard to retention of CHWs. The most cited factor that influenced retention for the control zone was financial motivation, while in the intervention zone it was recognition and engagement with the community.

The project is working on improving its means for disseminating results with stakeholders. While this has been done through informal meetings with the MOH at the national, departmental and zonal levels, officials have requested that data review meetings be made more formalized. The means to fit this kind of meeting more frequently into the budget is being assessed.

There have been a few instances where the context and observations have required the project to correct its course. The first course correction occurred before the OR concept paper was even accepted. Due to changes in the MOH community health directives, the OR topic had to be adapted from what was included in the original proposal. Conferring with stakeholders in country, USAID, and MCHIP, the PRISE-C team was able to present a concept paper which responded to MOH needs and research interests and which was acceptable to USAID.

As discussed in the previous sections, there were additional course corrections related to our formative research and in anticipation of the low literacy level of the QIT members. These have been well documented.

Part 5: Dissemination and Use of OR Information

Data collected from the OR component have been utilized within the project to refine OR implementation and shared more broadly with national and international stakeholders. Examples include:

- Component members of the QITs were adapted based on the formative research results
- OR initiation process was shared at CORE Group Spring meeting in May 2012

Part 6: Contextual Issues and Challenges

In the first year of implementation, there have been certain contextual issues and challenges which have affected OR activities.

The recent initiation of the CHW financial motivation payments has resulted in PRISE-C having to lead the way in developing some of the infrastructure for this system. For example, the linkage between the performance indicators and the payments, and the system for payment through the mayors office at each commune, as detailed in the guidelines. This resulted in delays in the initiation of the payments, which are being made in all PRISE-C project zones, not only OR zones.

The qualitative component of the OR is much more time consuming than initially expected. The qualitative data plan has been modified (submitted to USAID on June 4, 2012) to reduce slightly the amount of data collected, and a consultant has been engaged to conduct this work and baseline qualitative data collection has been completed.

The requirement to adopt the new guidelines for payment of CHWs meant that from the very beginning, the project had to change the OR question from what was included in the project proposal. The process of changing the OR required a lot of work with the Benin MOH, USAID Washington, USAID Benin and MCHIP to ensure that the final OR question was something that responded to a priority need of the MOH while also fulfilling the needs of USAID and being scientifically rigorous.

The provision of medicines and supplies to CHWs was challenging and in some areas delayed the initiation of CHW activities.

The coordination of the stakeholder meeting to review the OR protocol for approval was difficult and delayed the initiation of OR activities.

Part 7: Stakeholder Engagement for Collaboration and Support

Project staff engage consistently with stakeholders including the Ministry of Health and USAID. Examples of this engagement are:

- Development of a central level committee to support overall project implementation, including the OR
- Regular discussions with MOH during OR development process
- Quarterly meetings with the USAID Mission Family Health Team Leader

Formative Research Data

Out of 88 trained CHWS in the SAO and DAGLA health zones, 79 completed the questionnaire, 43 (89.5%) from DAGLA and 36 (90%) from SAO. The remaining 9 CHWs were absent during the data collection period or had left work as a CHW.

Table 1. Sex, age and marital status of CHWs

Characteristics	Health Zone	
	SAO (%) 36 (100)	DAGLA (%) 43 (100)
Sex		
Male	17 (47.2%)	30 (69.8%)
Female	19 (52.8%)	13 (30.2%)
Marital Status		
Married	34 (94.4%)	40 (93.0%)
Single	1 (2.8%)	1 (2.3%)
No Answer	1 (2.8%)	2 (4.7%)
Age		
< 25 years	7 (19.4%)	4 (9.3%)
25-34 years	9 (25.0%)	8 (18.6%)
35-44 years	18 (50.0%)	21 (48.8%)
45-54 years	2 (5.6%)	9 (20.9%)
≥ 55 years	0 (0.0%)	0 (0.0%)
No answer	–	1 (2.3%)

Table 2. Education, primary occupation and length of service as a CHW

Characteristics	Health Zone	
	SAO (%) 36 (100)	DAGLA (%) 43 (100)
Education		
Attended school	35 (97.2%)	41 (95.4%)
Some school	1 (2.8%)	1 (2.3%)
No school	0 (0.0%)	–
Other	0 (0.0%)	1 (2.3%)
Primary Occupation		
Farmer	17 (47.2%)	28 (65.1%)
Housewife/husband	5 (13.9%)	8 (18.7%)
Sales person	9 (25.0%)	3 (7.0%)
Cattle Farmer	1 (2.8%)	–
Hair Dresser	1 (2.8%)	–
Tailor	1 (2.8%)	1 (2.3%)
Driver	1 (2.8%)	1 (2.3%)
Health Aide	–	1(2.3%)
No Answer	1 (2.8%)	1 (2.3%)
Length of Service as a CHW		
< 12 months	4 (11.1%)	19 (44.2%)
12-35 months	16 (44.4%)	8 (18.6%)
> 35 months	15 (41.7%)	15 (34.9%)
No Answer	1 (2.8%)	1 (2.3%)

Table 3. Number of children and average monthly income

Characteristics	Health Zone	
	SAO (%) 36 (100)	DAGLA (%) 43 (100)
Number of Children		
0	6 (16.7%)	3 (6.9%)
1-3	11 (30.6%)	10 (23.3%)
4-6	16 (44.4%)	15 (34.9%)
7-9	2 (5.5%)	10 (23.3%
10-12	1 (2.8%)	5 (11.6%)
Average Monthly Income		
< 10 000 CFA	8 (22.0%)	10 (23.3%)
10 000 - 29 000 CFA	11 (31.0%)	13 (30.2%)
30 000 - 50 000 CFA	13 (36.0%)	15 (34.9%)
> 50 000 CFA	4 (11.0%)	5 (11.6%)

Table 4. Number and type of trainings received

Characteristics	Health Zone	
	SAO (%) 36 (100)	DAGLA (%) 43 (100)
Number of Trainings Received		
0	3 (8.3%)	–
1-3	19 (52.8%)	35 (81.4%)
4-6	12 (33.3%)	8 (18.6%)
7 +	2 (5.6%)	–
Type of Training		
Malaria Case Management	21 (58.3%)	7 (16.3%)
Community PIHI	33 (91.7%)	43 (100.0%)
TB	2 (5.6%)	–
Immunization	1 (2.8%)	2 (4.6%)
Family Planning	2 (5.6%)	–
HIV/AIDS	1 (2.8%)	–
Guinea Worm	1 (2.8%)	–
No Answer	3 (8.3%)	–

Table 5. Distance of the CHWs village from a health facility

Characteristics	Health Zone	
	SAO (%) 36 (100)	DAGLA (%) 43 (100)
Distance from Health Facility to the Village (km)		
≤ 5	2 (5.6%)	0 (0.0%)
6-10	16 (44.4%)	7 (16.3%)
11-20	11 (30.6%)	22 (51.1%)
≥ 21	3 (8.3%)	4 (23.3%)
No Answer	4 (11.1%)	10 (37.2%)

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