CARE Nicaragua

Child Survival Project XVIII: Phase Two
October 1, 2002 to September 30, 2007

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Annexes

ABBREVIATIONS

AIN- C	Integrated Community Care for Children
AMAS	Management of Health Services Approach
AOP	Annual Operating Plan
BABIES	Perinatal Mortality Surveillance System
BCCC	Behavior change communication chain
BPCH	Baseline perinatal clinical history
CDC	Centers for Disease Control and Prevention
CAMH	Cesar Amador Molina Hospital
CR	Counter-referral
CSP	Child Survival Project
DIP	Detailed Implementation Plan
DPT	Diphtheria, pertussis and tetanus vaccine
ECACS	Community action and communication strategy
EmOC	Emergency Obstetric Care
FONMAT	Fund for Safe Motherhood and Infancy
HIV	Human Immunodeficiency Virus
IMCI	Integrated Management of Childhood Diseases
IXCHEN	Whose social reason ANFAM (Cuya Razón social ANFAM)
KPC	Knowledge, Attitudes and Practices (or Knowledge, Practice and Coverage)
LQAS	Lot Quality Assurance Sampling
MAIS	Integrated Health Services Model
MCH	Maternal Child Health
MECS	Ministry of Education, Culture and Sports
MINSA	Ministry of Health
MNC	Maternal and Newborn Care
MSH	Management Sciences for Health
NGO	Non-governmental organization
NICASALUD	NicaSalud Federation Network
NOE	Neonatal-Obstetric Emergency
OETB	Obstetric Emergency Transportation Brigade
OPV	Oral polio vaccine
ORS	Oral Rehydration Solution
PAHO	Pan-American Health Organization
PMSS	Health Sector Modernization Program
PNC	Prenatal care
PROCOSAN	Health and Nutrition Community Program
SALUMAI	Maternal – Child Health Project
SD	Standard deviation
CIS	Community Information System
SILAIS	Regional administrative unit of MINSA
SIMINSA	Health Information System
USAID	United Status Agency for International Development
UNICEF	United Nations Children's Fund

VOLCOL	Volunteer collaborators
VPCD	Surveillance and Promotion of Growth and Development
W/A	Weight / Age

A. Summary

CARE Nicaragua, in support of the activities of the local Ministry of Health, is implementing in the peri-urban and rural areas of three of the most depressed municipalities of the Matagalpa Department an extension of the Childhood Survival Project from 1998 to 2001 which will be in place between October 1, 2002 and September 30, 2007. CARE will conduct this expanded project in conjunction with the Ministry of Health of Matagalpa as the primary partner and with a local NGO, IXCHEN, which will implement the Maternal – Child Health Service Provider Model. The goal is to contribute to a maternal-child morbidity and mortality reduction of 15% in the Matagalpa Department, especially in the Matagalpa, La Dalia and Waslala municipalities, by the year 2007. The following objectives are presented to reach that goal:

1. Improve access to and quality of maternal and child health (MCH) services in the public and private sectors in Matagalpa.
2. Improve access to and quality of maternal and neonatal health services in the hospital in Matagalpa.
3. Strengthen household decision-making resulting in the practice of healthy behaviors.

The components of the Project include: Maternal/Newborn Care (50%), Nutrition (30%), Management of Pneumonia Cases (10%), and Control of Diarrhea-Related Illnesses (10%). The cross-cutting approaches include: (a) strengthening capacity, (b) community mobilization, (c) behavior change communication chain, and (d) quality assurance. In addition, work is being conducted to strengthen the municipal health committees in the three municipalities.

At the same time, the Project intends to effect changes in the area of children's rights through the implementation of an intervention plan from the Rights-Based Approach, but primarily in coordination and collaboration with other initiatives from local groups.

The beneficiary population is 58,052 women of reproductive age, 60,150 children under 5 years of age, and 56,165 newborns. It also includes 21 primary health care units and 173 communities that were organized into health networks surrounding each health post during the first phase.

The strategies to be implemented intend to strengthen the relationship between the community and the Ministry of Health (MINSA) by offering basic maternal – child health services. A Health Services Provider model is being replicated in a private clinic, IXCHEN, in Matagalpa in order to extend further the quality of care model successfully implemented in the MINSA units. In addition, an intervention of Maternal and Newborn Care (MNC) was added to the strategy of Integrated Management of Childhood Illnesses (IMCI) so that a complete package of health activities for mother and child are offered. The main focus of the project is strengthening the capacity of partners in technical and management areas.

Technical and management areas are strengthened at Matagalpa Hospital so that it has the necessary services to manage obstetric and neonatal complications, daily and 24 hours a day.

The work that community volunteers conduct with mothers and families is reinforced by strengthening the coordination of health units, trainings, and the referral and counter-referral system. Household behavior change will be promoted through counseling, negotiation and partnerships that community volunteers establish with the mothers that participate in the PROCOSAN / AIN-C[1] sessions and the mothers will participate through trainings, formation of emergency transport brigades, birth planning and others.

During the current evaluation various actors from civil society took part. A document review was conducted and qualitative techniques were applied by conducting interviews and focus groups, and the following achievements were observed:

1. Active participation of partners in the Project planning's various phases and modalities (DIP, AOP, monthly plans, reports, etc.)
2. Strengthening of the technical and management capacity of health care personnel that works in the various level of care provision, from the managers of the local health units to the directorate of the municipal level, including the Cesar Amador Molina Hospital.
3. Reorganization of maternal and neonatal healthcare provision with quality and warmth at the Cesar Amador Molina Hospital (physical, protocols, Birth Plan).
4. Ability and skill development for the management of obstetric and neonatal care for personnel working in the Hospital and for those at the primary healthcare level through internships.
5. Strengthening of community organization and its linkage to healthcare services so that it is implementing/conducting PROCOSAN/AIN-C (a Ministry of Health program for community-based growth monitoring), Birth Plan and obstetric emergency evacuations, Community Meetings, home visits, and Training/Community education, among others.
6. Technical and management strengthening of the three Municipal Health Commissions.
7. The implementation at the private clinic IXCHEN of the quality of care model from the Ministry of Health.
8. The recognition of CARE by other organizations for the work being conducted. For example, the capacity-building strategy of the Birth Plan is being taken up again by the NicaSalud network to be incorporated in the Community Mobilization for Safe Motherhood document that will be presented to the Ministry of Health for its adoption.

[1] PROCOSAN/AIN-C is the abbreviation that refers to a community-level strategy that aims to put into practice the activities that lead to the prevention and integrated management of common childhood illnesses. At this time, it is centered around a growth monitoring system at the community level with supplementary nutritional and health counseling.

Some of the activities that need to be prioritized as of this midterm evaluation are:
1. Role of the Project's technical team to promote institutional sustainability of the activities.
2. Use of information by the healthcare personnel.
3. Referral and counter-referral, in particular from the community to the Hospital.
4. Finalize the equipping of the health posts according to the needs assessment.
5. Development and functioning of the Base Houses (Casas Bases).
6. Extension of the Birth Plan and the Obstetric Emergency Transportation Brigades to more areas in the Project.
7. Training activities for the volunteer health workers and teachers.

The recommendations provided are:
1. Redefine the role of the Project's technical team so that the processes are inverted: the healthcare personnel gradually take on the activities to be conducted.
2. Train the healthcare and community personnel in the management, interpretation and utilization of information, including the utilization of statistical software packages where necessary in order to promote sustainability for the health sector.
3. Analyze, between the healthcare personnel of the primary and secondary levels, the importance of the referrals and counter-referrals that occur between the community and the Hospital, and identify activities to strengthen the use of the system.
4. Equip the health posts according to the needs assessment and establish internal auditing systems within the health units.
5. Standardize with the volunteer health workers the development and operation of the Base Houses using the Ministry of Health's plans as a reference.
6. Redefine the formation of the Obstetric Emergency Transportation Brigades in the peri-urban areas in the municipality of Matagalpa.
7. Negotiate with the Ministry of Education, Culture and Sports the transition of the activities with teachers that are stipulated in the Project.
8. Emphasize, specifically during the monthly Community Meeting trainings with the brigadiers/midwives, topics addressing the danger signs of pregnancy, labor and post-partum as well as nutrition.
9. Strengthen the internal capacities of the Project's technical team through the inclusion of processes of continuing education, internal planning, and sharing of activities carried out, among others.

B. Assessment of Progress towards Program Objectives.

B1. Technical focus

B1a. Project description

The Childhood Survival Project is a second phase of the project implemented during the 1998-2002 period in the municipality of Matagalpa. It began in October 2002 and will end in September 2007, and will continue to cover the Matagalpa municipality as well as expand to include the La Dalia and Waslala municipalities located within the Matagalpa Department.

CARE is implementing this Project in conjunction with the Ministry of Health of Matagalpa which is the principal partner and with a local NGO, IXCHEN, that implements the Maternal – Child Health Service Provider Model.

The objective is to contribute to a reduction in maternal – child mortality and morbidity of 15% in the Matagalpa Department, specifically in the Matagalpa, La Dalia and Waslala municipalities, for the year 2007. The following objectives are presented to reach that goal:

1. Improve access to and quality of maternal and child health (MCH) services in the public and private sectors in Matagalpa.

2. Improve access to and quality of maternal and neonatal health services in the hospital in Matagalpa.

3. Strengthen household decision-making resulting in the practice of healthy behaviors.

The components of the Project include: Maternal/Newborn Care (50%), Nutrition (30%), Management of Pneumonia Cases (10%), and Control of Diarrhea-Related Illnesses (10%). The cross-cutting approaches include: (a) strengthening capacity, (b) community mobilization, (c) behavior change communication chain, and (d) quality assurance. In addition, work is being conducted to strengthen the municipal health committees in the three municipalities.

The beneficiary population is 58,052 women of reproductive age, 60,150 children under 5 years of age, and 56,165 newborns. It also includes 21 primary health care units and 173 communities that were organized into health networks surrounding each health post during the first phase.

B1b. Project progress

In the year 2002-2003, baseline data was collected in the beneficiary municipalities and the following goals were established for the year 2007 (see Table 1). In 2004, the LQAS methodology was used to evaluate the status of the project. Even though the results are not comparable to the KPC methodology used at baseline, the information is included in Table 1:

	Baseline 2002-2003		**LQAS 2004**	**Goals 2007**
Indicators	Matagalpa 2002	La Dalia and Waslala 2003		
Women receiving Prenatal Care in the first trimester of pregnancy	57%	27.6%	**58.24**	**3% / 15%**
Women receiving two doses of TT before the	42%	41%	**50.38**	**60**

birth of her youngest child				
Children 0-5 months that received exclusive breastfeeding during the last 24 hours	50.8%	46.2%	**56.83**	**70**
Children 5-9 months that received breast milk and complimentary foods during the last 24 hours	65.6%	68.2%	**91.80**	**80**
Women using a modern method of family planning	53%	33.6%	**44.54**	**15**
Women who can list at least three danger signs during pregnancy	5.7%	67.2%	**19.47**	**80**
Women who can list at least three danger signs post-partum	5%	77%	**6.08**	**80**
Women who can list at least three danger signs in newborns	24%	61.3%	**7.15**	**80**
Women who can list three danger signs for pneumonia	54.4% (2sgs)	78.5%	**10.74**	**80**
Women who can list three danger signs for diarrhea	69%	77%		**80**
Children under two years with diarrhea who received ORS in the last two weeks	N/A	32.3%	**42.01**	**50**
Children under two years who received more liquids or foods during their last illness in the last two weeks	44%	69.6%	**43.63**	**70**
Children with diarrhea who received antibiotics/anti-diarrhea medication in the last two weeks	30.7%	21.5%	**38.08**	**15**
Children 12-23 months immunized for measles	N/A	71.6%	**80.48**	**80**
Children 12-23 months who received OPV-3	N/A	70%	**85.12**	**80**
Children 12-23 months who received DPT-3	N/A	64.2%	**83.88**	**80**
Abandonment rate DPT-1/DPT-3	N/A	2.5%		**2.5**
Children 12-23 months fully immunized	N/A	70.1%	**76.15**	**80**
Children under two years with low weight (<2SD W/A)	5.7%	7.2%	**-**	**5**
Children whose births were attended by trained health personnel	80%	29.7%	**67.54**	**12**
Mothers who wash their hands with soap or ashes before preparing food, before feeding a child, after defecating and after cleaning a child who has defecated	N/A	NA	**19.99**	**50**
Mothers with children under two who can list at least two known ways for reducing the risk for HIV infection	N/A	NA	**29.77**	**60**

Although the LQAS method is not comparable with the baseline KPC (and taking into account that a few indicators were calculated differently for each evaluation—for example, the LQAS asked about receiving tetanus toxoid only during the last

pregnancy), it can be said that the project is progressing positively towards the established goals. In particular, it is probable that the goal addressing the practice of complimentary feeding between 6 and 9 months and the goals for childhood immunizations will be reached.

The Project has various cross-cutting activities to reach the established goals:

- Increase Access: the DIP laid out the use of mobile units, alternative sources of healthcare through clinics from the private sector, organizing healthcare services and community houses. In the current midterm evaluation it was confirmed that "integral outings" and "health fairs" have been implemented as part of the mobile units in which health and community personnel participate which allows the health system to reach farther into the population.

  The IXCHEN clinic has adopted the Health Service model of the MINSA, broadening their services to children with very good results up to this point.

  In the organization of health services, the improvement of the Cesar Amador Molina Hospital is very evident as the infrastructure, the organization and personnel functioning in the "critical route" for the pregnant woman and the neonate in order to reduce maternal and perinatal mortality have been updated.

  The community houses labeled "Base Houses" have been increasing during this period guaranteeing, to a certain degree, that they will be equipped by the Ministry of Health. *Since other organizations exist that conduct projects in the community, it is necessary to unify the development and operation of the Base House between the brigadiers/midwives and the general population*.

- Quality of care: the DIP sets out the implementation of a maternal – child health services provider model, accredit, train, supervise, conduct exchange visits and implement IMCI. The health service provider model is the one conducted by the MINSA with current activities focused on technical and managerial strengthening, an aspect which has been evident in the various interviews and focus groups conducted in the midterm evaluation.

  Currently the accreditation is centered in the "Ten Steps for a Safe Delivery" which including the recognition of the Units Friendly to Women and Children established by UNICEF.

  Training has been conducted on topics relating to management, maternal-child and others. In addition, supervision activities are conducted using previously designed formats. One of the achievements is the collection of information through the established instruments, however *weaknesses exist in relation to the analysis of the information for decision-making, this being one of the areas to be focused on in the future. An element that affects the quality of care is the frequent turnover of*

healthcare personnel, therefore the reinforcement of activities in personnel that is more stable, including the community, should be considered.

- Positive Behaviors: the DIP includes community networks, teacher participation and the use of BCC. The Project has strengthened the community networks through trainings and support of the Municipal Health Committees, Community Meetings, PROCOSAN/AIN-C (the Ministry of Health program for the integrated care and growth monitoring of children in the community by volunteer health workers), implementation of the Birth Plan, training in the Community Information System (CIS), among others. *In addition, the healthcare personnel has limitations in the utilization of the data (analysis and interpretation) making it necessary to take it over for the rest of the project period.*

  The participation of the MECS has been positive but limited compared to the expectations at the outset. *It is suggested that the Project keep its most significant efforts for the activities directed towards the project goals and in association with the MINSA, and limit its efforts in this area which is different from the other target group (children under 6 years of age). It would be better to negotiate the "adoption" of the activities (training and replication to parents) by MECS.*

  The use of Behavior Change Chain is an effective strategy since it identifies restrictive or facilitating factors as well as the intervention to be conducted. The Project has developed a Plan in which waterfall training activities are considered for the target population.

B1c. New tools or approaches

The Birth Plan is a strategy in which the pregnant woman, the couple and the family prepare in advance the conditions under which the woman will deliver, supported by healthcare personnel and the organized community. It is based on the strengthening of Ministry of Health regulations directed towards prenatal care, high-risk deliveries and post-partum. In reality, the Birth Plan methodology is being taken up again by the NicaSalud network to be incorporated into the Community Mobilization for Safe Motherhood document that will be presented to the Ministry of Health for its institutionalization.

The steps for implementation are:

- Coordination and sensitization: with the healthcare personnel to define the mechanisms, channels and procedures for implementation; to establish selection criteria for communities; to validate instruments and organize the volunteers in the communities.
- Training and information: for healthcare personnel about maternal and perinatal mortality which in turn was replicated with community personnel and the presentation and promotion of the Birth Plan with educational materials prepared for that purpose.

- Strategy implementation: with the participation of the health volunteers through: collecting and updating census data, education/invitation/follow-up and reference of the pregnant woman, development of maps, home visits, support of the mothers' Clubs and development of a monthly report. The healthcare personnel participates through the health services and counseling that are provided, filled in from the Plan chart and supporting/complementing all of the activities that the health volunteers conduct.

Indicators that allow the implementation to be monitored are available:
- Percentage of pregnant women with a Birth Plan.
- Percentage of pregnant women with a Birth Plan who delivered at the health unit.
- Percentage of pregnant women with a Birth Plan who attend PNC

The project's support in continuing the Quality Assurance methodology—introduced by Management Sciences for Health during a previous coordination with the Ministry of Health in Matagalpa—has contributed to the sustainability of this new technique, even though there were various changes in the healthcare personnel in the Technical Teams. The surveys of clients' opinions, conducted by students and community leaders, and the assessment of the teamwork status has changed the culture associated with service provision and has generated new expectations on behalf of the community and the personnel.

B.2. Cross-roads of the intervention

B.2.a. Community Mobilization

The Child Survival Project has implemented at the community level various activities that have favored participation by community health workers (brigadiers/midwives/health leaders).

According to the quarterly report for April – June 2003, the results of the community self-assessment conducted in the healthcare units indicate that a network of volunteers exists with 385 persons in them. 260 are currently active in them making up 68% and 125 are inactive for another 38%. These volunteers participate as brigadiers (308), Base House manager (112), Support Group counselors (137), midwives (40), VOLCOL (32), AIN-C promoters (138 distributed in 61 communities). It should be noted that one person may have more than one duty therefore the groups do not add up to 385.

The activities that the community network conducts include:

A. PROCOSAN/AIN-C: At first, the Project implemented the IMCI strategy, which is the basis to improve the quality of healthcare by giving value to the child in a holistic manner, avoiding lost opportunities (immunizations, growth monitoring), reinforcing equity in health by increasing access to information and health services. Afterwards, this strategy became AIN-C and later under the name of the PROCOSAN initiative. The aggregated value of the AIN-C/PROCOSAN strategy compared to IMCI is in the

community action that is centered around monthly weighing of children by the promoters ("monitors") of AIN-C/PROCOSAN. Whether the child "is malnourished or not" is not analyzed on the basis of his/her growth drawn on growth monitoring chart—the focus is on the healthy child and keeping him/her healthy, analyzing if the weight has increased by the expected amount in a month. This way the first lapse in proper growth is detected and the proper counseling is provided. In addition, the focus is to foresee the future food necessities of the healthy and growing child—this way, each mother receives individual counseling to observe her child's feeding. The AIN-C/PROCOSAN promoters have been trained in the use of various counseling tools based on the age and situation of the child. The project contributed to the earlier validation of these tools.

According to the quarterly report for April – June 2004, 61 communities in the three municipalities were implementing the AIN-C/PROCOSAN strategy, starting it in 16 new communities in Waslala. Thus, by the end of 2004, in the quarterly reports the total number of communities was 118 with 50 in Matagalpa, 40 in La Dalia and 28 in Waslala. This has allowed the community health worker to develop skills and abilities in the weighing of children and counseling. In the interviews with 16 community health workers that were conducted for the mid-term evaluation, it was found that all of them conduct activities with mothers in the communities with PROCOSAN/AIN-C activities being mentioned by 10 of them.

B. CIS: the Community Information System, community data that contribute to the computerized information in the healthcare unit constitutes a Community Epidemiological Surveillance system. The implementation process was started in the three municipalities in the October – December 2003 trimester with the coordination of the Project with the National MINSA in the La Dalia and Matagalpa municipalities since in the municipality of Waslala it was taken up by FONMAT (Fund for Safe Motherhood and Childhood) of the Ministry of Health. Training was provided for three members of the healthcare personnel from each municipality, starting the implementation in the three health posts, so that in the April – June 2004 trimester, the health post personnel trained community personnel who were given the appropriate formats.

According to the January – March 2005 quarterly report, the established indicators were met in the following way:

- The number of communities with a functioning CIS in La Dalia were 33 out of 57 planned and in Waslala 23 out of 52 planned.
- The number of health units with a functioning CIS in La Dalia were 5 out of 5 planned and in Waslala 4 out of 4 planned.

The implementation of CIS has allowed the information collected in the community to be organized, *making it necessary to reinforce the analysis skills for community personnel for decision-making*.

C. Birth Plan: is a strategy in which the pregnant woman, the couple and the family prepare in advance the conditions under which the woman will deliver, supported by healthcare personnel and the organized community. It is based on the strengthening of

Ministry of Health regulations directed towards prenatal care, high-risk deliveries and post-partum.

In the January – March 2004 trimester, the birth plan chart was designed, validated and developed in a conceptual framework establishing the flow of implementation:

- Training of healthcare and community personnel
- Census of pregnant women
- Completing chart on pregnant women
- Feedback on the chart completion at community meetings

The Birth Plan strategy was just introduced as a pilot last year. According to the April – June 2004 quarterly report, 73 women were participating in the Birth Plan. However, in the January – March 2005 trimester, monitoring in one healthcare unit in each municipality[2] was conducted, selecting 31 communities of which 19 had had the census and 22 had a current sketch of the area. Of the 36 pregnant women found, 33 were in the Birth Plan and with respective follow-up. In the interviews conducted with the 16 volunteer health workers for the mid-term evaluation, 5 were found to have completed a Birth Plan and 3 had conducted a census of pregnant women.

D. Obstetric Emergency Transportation Brigade (OETB): it is a strategy executed by the volunteers in the community and constitutes one of the elements of the Birth Plan since they form the support group in the community for the transfer of the pregnant/ post-partum woman or newborn to the health unit in case that any danger signs appear.

According to the last quarterly report[3] prepared by the Project, the indicator of communities with an established OETB by municipality is La Dalia with 37 out of 42 and Waslala with 45 out of 47 communities.

E. Referral and counter-referral: According to the General Law of Health and Regulation[4] this is a "collection of mechanisms through which the different establishments that provide health services that form the network of services are articulated in order to guarantee that each patient receives care in accordance with the complexity of his/her health problem at the level of resolution that is appropriate." This mechanism is implemented by brigadiers/midwives as well as the health personnel that works at the different levels of care, using for this purpose a "referral" sheet that is given to the interested party to be presented at the appropriate healthcare unit.

> "…with the referral we are seen faster, we don't have to wait as long or until our turn is up…"
>
> Focus group with mothers

In the interviews conducted with 16 volunteer health workers for the mid-term evaluation, it was found that all of them conduct activities with mothers in the

[2] Matazano Health Center in Matagalpa, La Tronca in La Dalia and Kubalí in Waslala.
[3] January – March 2005 quarterly report. Child Survival Project CARE – Matagalpa
[4] Nicaragua, Ministry of Health. General Law of Health, 2003, p.57.

community, including 9 respondents who mentioned referrals, which is particularly done for programs that offering care for women and children (CPN, VPCD, immunization).

The 9 focus groups that were conducted with mothers for the mid-term evaluation asked "If you were to suffer from a health problem related to your pregnancy or your child, who would you look for in your community for help or support?" All mentioned the brigadier followed by the health center or health post.

> "Because the brigadier has to give her a referral so that they go to the health center and are seen faster"
>
> "Because they trust the brigadier more and they take us directly"
>
> "The brigadier is the one that comes when we are sick, she comes to give us medication and to vaccinate us"
>
> Focus group with mothers

The Project has strengthened the referral that brigadiers/midwives were giving for the health units, however weaknesses exist with the counter-referral and therefore in the quarterly report for January – March 2005, the pre-determined indicators did not collect data about:

- Percentage of counter-referrals sent to the secondary level and,
- Percentage of counter-referrals sent from the primary level to the volunteer network.

In sequence, from the healthcare unit directorate to the local unit and the refresher opportunities for the brigadiers, it would be useful to revisit the subject of the use and benefit of the referral and counter-referral system.

F. Home Visits: are conducted with a pregnant woman or mother in order to provide counseling about home care, explain and work together with the family, the pregnant woman and the couple. It has contributed to spreading the messages about institutional delivery and the danger signs. In the interviews conducted with 16 volunteer health workers for the mid-term evaluation, it was found that all had conducted activities with mothers in the community with the home visit mentioned by 13 interviewees, 15 indicated that they conduct counseling, and 11 indicated that they have education activities.

G. Base Houses: constitute the first healthcare contact through the brigadier/midwife that has been trained by the Ministry of Health. According to the National Health Plan[5], it is a "type of community organizing whose purpose is to propel health self-care, implementing permanent prevention, promotion and basic care activities for the primary health problems through community volunteers and in coordination with the local health units."

[5] Nicaragua, Ministry of Health. National Health Plan 2004, p. 142.

The number of these has increased during this period guaranteeing, to some degree, their equipping by the Ministry of Health, however the concept of Base House and its operation are not in accordance with what has been established by the Ministry because other organizations that conduct Projects in the community and that also establish "Base Houses" whose operation and equipping differs, having been confirmed in the focus groups conducted with mothers where they expressed multiple uses for these, therefore it is necessary *to unify the concept and operation of the Base House between brigadiers/midwives and the population in general*.

> "…the base house works for seminars, trainings, distribute food from PAININ, bring bleach, pills, oral solution, give care for family planning, immunization campaigns, receive care in case of injuries…"
>
> Focus groups with mothers

The sub-director of Matagalpa SILAIS expressed in the interview conducted that "the materials that a Base House should have has not been defined yet, and the problem is the flow of medications since sometimes the brigadiers gets them from the health post and other times they wait until the medications are taken to them."

In the interviews conducted for the mid-term evaluation, the 13 managers of the Base Houses indicated that they have referral and counter-referral cards (12), oral rehydration salts (11), counseling illustrations (10), scale and sketch of the community (9 respectively), daily register of CIS and birth plans (8 respectively), register of children under 2 years of age (7), census of pregnant women and list of community health volunteers (6 respectively). As far as the institution that supplies them, the MINSA was primarily the one mentioned.

The **participation spaces** for the community health workers are:

1. Community meetings: the community workers of the different localities that correspond to the area of influence of the health post meet here, are conducted monthly and directed by the manager of the health post. They constitute a coordination and planning space between community leaders and the MINSA as well as an exchange of information (data verification, delivery of forms, among others) and of training on health topics.

The role of the Project team has been of accompaniment and technical assistance in the design of agendas, the strengthening of meeting periodicity, improvement of the conduction, methodological design and material preparation for the educational sessions of the meeting.

In the mid-term evaluation, the 16 volunteer health workers that were interviewed indicated that they participate in the community meetings where they conduct the following activities: planning, delivery of forms, and training (14 respectively), orientations (11) and analysis of information (8). Other activities that are conducted in coordination with the health unit is the referral/counter-referral (12), delivery of forms

(11), PROCOSAN (10), trainings (9), CIS and planning (8), visits to the health unit (6), birth plan (5), meetings (4) and evaluations (3). On the other hand, 7 of those interviewees expressed that they are organized in the Community Health Association of the municipality.

2. Community Health Associations: exist in the three municipalities and constitute a participation forum for the community health workers. They were formed as a result of the experience with the Child Survival Project phase I where groups of brigadiers remained organized by health post.

This process, in this Project, started with the identification of the judicial arguments for the formation of Associations, finding a legal basis in the political Constitution of the country, the MAIS, the Law of citizen participation and Law of municipalities. It follows the model of Reform of the health sector: strengthening demand, participation of civil society and improving quality of care.

The strengthening of demand included a social audit of the care processes, which is why initially a consultation with community leaders about their role was developed with the conclusion that the level and quality of their participation needs to be elevated, conducting for this purpose municipal assemblies with health volunteers, constituting each municipal group as an association of persons with a board of directors which was named "Community Health Association" which according to the Law of citizen participation, was registered in the respective municipal government and accrediting them at the respective municipal Councils.

They, in turn, participated in the Broadened Technical Councils that are conducted by the health units where they share ideas for improving the state of health in the community and the municipal Health Councils according to the rights established in the General Law of Health and its Regulation.

> "…the community participating in the Technical Councils is a good example of how to put a national law into practice…"
>
> Interview with UNICEF staff

3. The Municipal Health Councils and the Broadened Technical Councils constitute participation spaces for the local associations. These institutions have been strengthened with the participation of representatives of government institutions and local non-governmental institutions, of organizations among them being community leaders.

In this sense, the Project supported the development of a strategic plan for the Councils, accompanied the 12 sessions in the three municipalities during the April – June 2004 trimester. In the particular case of the Municipal Health Councils, the Project has supported the development of the quarterly plan in each municipality as well as conducting monthly meetings.

4. Integral outings: constitute a Ministry of Health strategy to bring health services to the community. They are planned by the MINSA with the community leader guaranteeing the participation of the population, organizing the activities in the community as well as the promotion activities. One of the aspects to be strengthened is the role of the leaders that should be more active in relation to programming.

According to the January – March 2003 quarterly report, taking as a reference the productivity (cost/benefit) of the same, the integral outing was redefined towards mother and child since it initially responded to spontaneous demand with no impact on coverage of care for this pair, thus observing an increase in total consultations offered even though the total number of planned integral outings for 2004 had not been completed.

5. Health fairs: is conducted in the neighborhoods where there have been major health problems with one of the activities being to offer medical care directly to the population. In this mid-term evaluation, the members of the Municipal Health Council of Waslala indicated that one is planned for June of this year in the Claudia Chamorro Barrio between 9:00am and 4:00pm. The role of the leaders is the most active since they organize the community, define the agenda of the fair, coordinate with other institutions or organizations.

Regarding the perception that volunteer health workers have about participation of mothers in their community in the health activities it is significant when referring to "following advice they are given", "in the breastfeeding counseling they comply since their child gets sick less often", however the majority feels that it is partial when referring to the involvement in activities since "some support the weighing."

Some limitations to conducting activities as health volunteers that are faced in the community refer to the following aspects:

- personal such as "having time", "family problems", "she can't because she is by herself, she doesn't have anyone to take care of her children and her husband doesn't let her go out very much because of the child", "chores around the house", "my illnesses";
- economic "problems with transportation", "does not have the economic resources", "when I go to the trainings I have to pay someone to help me at home", "my personal work, this day that I dedicate, I already lost it and nobody can replace it for me", "I don't always have the fare to go to trainings";
- access "the distance between houses";
- institutional since "they do not possess work materials", "there are personnel absences in the MINSA", "lack of coordination between the brigadiers", "lack of materials for the control of children", "lack of medications in the base house".

B2b. Behavior Change Communication

To promote behavior change the Project used the BEHAVE framework or Stages of Change to plan activities for changes in behavior in such a way that each segment is linked to the next and it used to analyze behaviors that need be changed to identify key messages to address those behaviors. Behavioral terms were established for each change objective.

The Ministry of Health personnel in conjunction with Project personnel developed a Behavior Change Communication Plan which includes the following components: general training, development of communication materials, advocacy, improvement of work conducted and community action, and mass communication for health.

Has prioritized indicators in the maternal – child area, which are focused on the correct practice of health activities and are the following:

- Percentage of pregnant women from the municipalities that have their delivery attended in the health unit.
- Percentage of pregnant women who attend prenatal care in the first trimester of their pregnancy.
- Percentage of mothers who go to the health unit for control of post-partum.
- Percentage of women of reproductive age who use a family planning method.
- Percentage of children with acute diarrhea who receive ORS.

Some advances in the monitoring and evaluation indicators of the project (see Table 1 at the beginning of document) indicate that these goals will be met, taking into consideration that the Project is in its intermediate phase of implementation. In contrast, aside from expecting a change in behavior (positive attitude towards the services being offered), there are activities that focus on a modification in the quality of care in the health units in such a way that facilitates the demand of health services.

The education messages that the Project promotes correspond with those established by the Ministry of Health in the areas of nutrition, pregnancy, delivery and post-partum care, pediatric illnesses in a way that both health personnel as well community workers use the educational materials designed by the Ministry, in particular in the activities related to PROCOSAN where educational illustrations are available for use with the population.

Some of the media used for the dissemination of messages was the development of a **Calendar and Annual Planner** designed by CARE in 2004 where the messages, along with colorful drawings, are emphasized every month. Some examples include:

Months	2004
December – January	Danger signs in the mother after delivery (quarantine or post-partum): **Bleeding with strong odor** **Hemorrhaging does not stop after delivery** Upon onset of this danger sign, I made an urgent referral to the health unit. 2005

February – March	Danger signs in the newborn: **Does not want to suck** **Born very thin, purplish, born flaccid** Upon onset of this danger sign, I made an urgent referral to the health unit. 2005
April – July	Danger signs during pregnancy: **Strong headache** **Convulsions or attacks** **Hemorrhaging during pregnancy** **Inflammation of feet, strong headache and "chisperio" during pregnancy** Upon onset of this danger sign, I made an urgent referral to the health unit.
August – November	Danger signs during delivery: **Malpresentation of the child** **Bleeding during delivery** **Delivery of cord before the birth of the child** **After delivery placenta will not deliver** Upon onset of this danger sign, I made an urgent referral to the health unit.

In the prescription books used by the health units the following messages were printed at the bottom:

- I attended your pregnancy care from the first three months.
- If during pregnancy, delivery or post-partum we develop any danger sign, like bleeding or headache, we will immediately go to the nearest health unit.
- In the first six months of life, our children will only be breastfed.

In the specific case of the municipality of Waslala, a **radio program** called "In touch with health" is available, which is a half hour long in the morning, where health personnel from the MINSA deals with topics such as delivery, care during pregnancy and of the child, prenatal care.

The **education messages** that are promoted by the Project correspond to those established by the Ministry of Health in the areas of nutrition, pregnancy, delivery and post-partum care, pediatric illnesses in a way that both health personnel as well community workers use the educational materials designed by the Ministry, in particular in the activities related to PROCOSAN/AIN-C where educational illustrations are available for use with the population. The education activities that are conducted by the brigadiers/midwives with the mothers are diverse (including community mobilization for emergency evacuations and community education in groups), but the largest part of their efforts is directed at:

- home visits where topics related to the home situation are addressed,
- weighing (PROCOSAN/AIN-C), which is a monthly activity where nutritional aspects in particular are addressed.

In the current mid-term evaluation, brigadiers/midwives were asked to mention the message that they use most frequently with mothers and it was found that there was uniformity in the topics referred:

- breastfeeding, the primary message is referred to the practice of exclusive breastfeeding;
- pregnancy and post-partum, the messages are centered around going to the health unit in case of onset of danger signs and;
- delivery, the recommendation is to go to the health unit (institutional delivery)

Regarding the messages that are offered on topics of nutrition, newborn care, micronutrients it was observed that diverse or limited information exists making it necessary to reinforce/clarify them in the time that remains of the Project implementation.

In addition, the 9 focus groups conducted with mothers were asked "What message about health care for pregnant women and children have you heard?" and similarities were found with the messages indicated by the brigadiers/midwives:

- giving only breast milk
- going to prenatal care
- keeping children clean
- if the child is ill, taking him/her to a health center

However, in both population groups the details referring to danger signs in pregnancy, delivery or post-partum were infrequently mentioned. In the mid-term evaluation, 9 focus groups were conducted with mothers where they were asked "What messages about health care during pregnancy have you heard?" and it was found that only in one were danger signs mentioned, such as headache and feet and hand inflammation. According to the perception of brigadiers/midwives interviewed in the current mid-term evaluation, the majority of mothers "meet with the orientations that are offered", in particular those relating to exclusive breastfeeding.

It is necessary to reinforce the information about danger signs at all levels since the primary goal is that the mother identifies them early and goes immediately to a health unit.

B2c. Capacity building approach

B2c1. CARE personnel strengthening

The technical team that works on the Project includes qualified personnel who have experience in the implementation of child survival activities. The technical skills of the working group are evidence in the reorganization capacity and/or self-support in the tasks that each one conducts as well as the systematization of quarterly and annual information.

The recognition that the Ministry of Health expresses towards the CARE Project's technical team is evident at all levels (Central MINSA, SILAIS and municipal), such that they have become leaders for the implementation of health activities.

> "CARE has given integral care, values the main problems, makes an assessment and intervenes…it's like a doctor…there's been quality and warmth"
>
> "The Project has allowed for a reflection about the monitoring results…we don't see it as an intrusion but as a guide…"
>
> Focus group with Quality Standards Monitoring Sub-Commission
> Cesar Amador Molina Hospital

The opportunities for capacity-building for the team have been diverse, including training in Technical Report Writing in CARE El Salvador; Self-evaluation of Competencies – internal at CARE Nicaragua, Human Resources; Training in the General Law of Health, Behavior Change Communication during the Annual CARE Workshop for Child Survival, use of Epi-Nut by NicaSalud, Total Quality Management CARE-CDC, Initiative for Health (CCHI), Leadership and Management, national facilitator trained by MSH, Certificate in Public Health Management – CDC and support in free time to finish a Master's in Public Health.

Added to these activities are the visits conducted to other countries with the purpose of sharing experiences such as the trip to Peru to learn the hospital dynamic for care of a safe delivery, to Atlanta to present the Health Fair, which received second prize, among others. In addition, two persons from the team annually attend the CARE Child Survival Workshop, rotating every year, to share experiences with all of CARE's Child Survival projects and to refresh or update their skills.

According to the interviews conducted with team members, internal mechanisms that allow socialization of acquired knowledge have not been determined therefore in this mid-term evaluation *it is suggested that one day be set aside to implement continuing education in order to share with the other members of the team the skills acquired during individual opportunities, thus strengthening the work done as a team that has been successfully developed thus far.*

B2c2. Local partner organization strengthening

- **LOCAL PARTNERS**

The primary partner of the Project is the Ministry of Health both at the level of SILAIS as well as municipal (see section B2c3, Health Institution Activity Strengthening for more information).

The work in partnership, in sub-agreement, with the local NGO—IXCHEN—constitutes one of the innovative elements of the current Project. The IXCHEN clinic applied the

Integrated Care for Women and Children model that is implemented by the Ministry of Health with the purpose of strengthening the healthcare system for improved care, increasing coverage and offering institutional support. It counts with the technical support of the team of CARE Matagalpa and of the personnel that works in the local Ministry of Health so that they have been trained in the rules of ICWC (Integrated Care for Women and Children), IMCI, low-risk delivery, post-partum, among others.

The adoption, on part of IXCHEN, of the MINSA's care model has included:

a. adapting and optimizing the physical structures to the new model of care;
b. modifying the profile of care, offering the new prenatal care services, promotion of breastfeeding, growth and development monitoring of children until five years of age;
c. utilizing the formats and paperwork established by the Ministry of Health such as immunization, family planning and prenatal care cards;
d. implementing home visits to no-show users of the programs;
e. promoting immunization in children under five years of age by providing them during office visits or during immunization campaigns, this being the first year in which IXCHEN functioned as an immunization site;
f. participating as educators or assistants in the activities conducted by the MINSA, the municipal government, Sí Mujer, among others.
g. Implementing a computerized system for the control of income and expenditures as well as the behavior of demand.

CARE's experience as an organization that works with and supports a service provider, such as IXCHEN, is limited. The results up to this point with IXCHEN have been very positive and fruitful in showing an example for the future. The Project has plans to document this case in the last year in order to share the lessons learned internally with CARE and externally with other NGOs and Child Survival Projects or maternal – child health collaborators.

While the Ministry of Education, Culture and Sports participates on a smaller scale, an agreement was signed in order to institutionalize the inclusion of health topics in the didactic planning in school centers of the three municipalities. At this point, teams of facilitator teachers have been organized in each municipality, which were trained on topics relating to safe motherhood and child health and who have duplicated the training to the remaining teachers in the schools, and are currently training students and parents of families in the different school centers. According to the initial plans, these activities have not reached as far as they should have by this point. Taking into consideration that the main focus of the project are children under 5 years of age and the recommendations of this evaluation to strengthen towards sustainability of the main activities of the project, *it is suggested that the CARE Project personnel propose that the directors of the MECS team take on the activities of duplication and follow-up, and that the project invest a minimal effort in promoting this strategy.*

- **NATIONAL/INTERNATIONAL PARTNERS AND COLLABORATORS**

In the current Project, alliances have been established with other agencies, which has allowed resources to be optimized, such as the case of UNICEF and PAHO with whom work is being done on the Safe Delivery or Essential Obstetric Care strategy; with UNICEF, work was done with MECS on the Quality Assurance Project, which has shared the activities appropriate to the quality standards and others; with the NicaSalud network through meetings that are conducted and a space has developed to exchange experiences; the Ministry of Health with the ECACS.

In contrast, CARE has integrated itself in other arenas such as those indicated by the UNICEF staff interviewed for the mid-term evaluation who stated "that CARE forms part of a working group that supports the political and normative processes of the Ministry in conjunction with UNFPA, PAHO, PMSS and UNICEF".

In addition, the Quality Assurance Project indicated that CARE Matagalpa forms part of the team that is conducting the professional competency investigation in 20 hospitals located in 13 SILAIS.

National recognition of the work of CARE Matagalpa took place in May 2004 when the International Meeting on Emergency Obstetric Care was held in the country, with the presence of seven countries who visited the communities serviced by CARE to see the experience of the Obstetric Emergency Transportation Brigades, which was highly regarded.

The products of this exchanges are evidenced in the CARE document "Birth plan strategy, health personnel manual" where health personnel of SILAIS Matagalpa participated in the development and the validation of the manual with the personnel that works at Cesar Amador Molina Hospital, in the health units of Matagalpa, La Dalia and Waslala, and in the joint development of a recall calendar including messages about danger signs during pregnancy with the efforts of Project HOPE in Jinotega.

B2c3. Strengthening of the Ministry of Health partnership

The main partner of the Project is the Ministry of Health both at the SILAIS and municipal levels. They have participated in all of the phases of the Project since CARE has had the ability/care to involve them in the development, implementation and evaluation of it.

The relationship established by the CARE Project and the Ministry of Health has been of respect and collaboration, thus contributing to the strengthening of the activities that the Ministry conducts per se. In contrast, the prior presence of CARE through SALUMAI, whose results were positive, consolidated the working relationship.

> "…CARE doesn't say: we need to implement the strategy because it's what we want, but instead it adheres to the local health problems and that way give technical and financial support…the activities are in accordance with what has been programmed by the MINSA…"
>
> Interview with the Manager of Integral Care for Women and Children – Central MINSA

The local health personnel participates in an active way in the activities delineated in the Detailed Implementation Plan since they form part of the daily activities, therefore the Project is not perceived as something foreign or external to the Ministry. Specifically, partners of the CARE project have been offered:

- Training in management tools (Steering Teams and Chiefs of Services or programs in the Hospital/Municipalities).
- Training in leadership of health institution modules.
- Technical support for the facilitation of organization and functioning of the Steering and Broadened Technical Councils.
- Training and technical assistance in evaluation of the organization and services offered both at the hospital as well as the primary level of care.
- Technical assistance for the working sessions with the managers of programs at the municipalities and hospital.

In the focus groups conducted with the Steering teams for the mid-term evaluation, the following joint activities have been mentioned as important: training on the topics of the Birth Plan, PROCOSAN/AIN-C, management; conducting the Community Meetings; their presence in the Health Commission, Health Fair, Steering Technical Council and Broadened Technical Council, among others. The perception of the Project's technical team in relation to the change of the organizational capacity of the local partners is expressed in the:

- Ability to run the Steering and Broadened Technical Councils in the hospital and primary level of care.
- Reorganization of supply and demand of health services based on the analysis of the results from the study of services offered (waiting time and contacts).
- Reorganization and operation of the maternal/neonatal critical route services at the Cesar Amador Molina Hospital, with the development and implementation of organizational norms.
- Standardization of the management of the main obstetric pathologies that influence maternal morbidity and mortality in Cesar Amador Molina Hospital in Matagalpa through the development of 16 treatment guides in Ob-Gyn service.
- Formation and operation of the work groups through different Quality Committees for the monitoring of the quality of maternal/neonatal processes.
- Improvement of relations between the Hospital and the primary level of care (internships, referral and counter-referral system, joint analysis of the maternal and perinatal mortality cases in an atmosphere of mutual respect and support, etc).

In the April – June 2004 trimester, the personnel from the three municipalities and the Hospital participated in the Regional Conference on Maternal Mortality Reduction Initiatives with countries from Central American and Ecuador in attendance. The Hospital presented its experience in training through internships and the community emergency obstetric transportation strategy. In addition, Ministry of Health personnel, accompanied by CARE's technical group, has traveled abroad, such as the case of one doctor from the hospital that visited Peru; the Director of the Waslala Health Center who received management training in Mexico; and one nursing staff from the Policlinico who traveled to Atlanta to present at the Health Fair, among others.

The internships constitute a new experience in which the medical and nursing staffs of the primary and secondary levels of care are involved, in other words the hospital and the health centers/posts. The objective is to improve the abilities and skills of the medical and nursing personnel from the health units of the department in the hospital's obstetric and neonatal care. It is training in service and standardizing in the management of the emergency obstetric protocol.

"…the internships have helped the referral and counter-referral, there is more trust, more contact with specialists on call…"

Focus group with Steering Team of Cesar Amador Molina Hospital

In October 2003, the second internship on Basic Obstetric and Neonatal Care was conducted with the participation of 10 staff from the 3 municipalities included in the Project and from Matiguas, Sebaco, Rancho Grande and Rio Blanco. The internship experience has served as a model for other hospitals in the country and in the October – December 2003 trimester, the Steering teams from SILAIS and the Chinandega and Jinotega hospitals visited the Matagalpa hospital to share their experience and feedback on the process.

The assessment expressed by the members of the Steering team about the changes experienced in the organization of the work has been very positive since the Project's interventions have been complementary: equipping/training/implementation of activities. The "new and/or improved activities" mentioned by the health workers that are conducted in the health units and that have allowed for an improved organization of the work are:

- Planning: Annual Operating Plan, definition of roles in the working group.
- External coordination: meetings with the Municipal Health Council, Broadened Technical Councils.
- Internal quality: Rapid Cycles for decisions; Quality Circles, Consumer Satisfaction Surveys; Periodic analysis of the Community Information System.
- Community mobilization: community meetings; integral outings.

"…the relationship between the MINSA and the community has strengthened, the flow of information has improved…the decisions that are made now are timely…the inter-relationship is more fraternal, before the Technical Council was tense, tired, now there is conflict resolution…"

Focus group with Steering Team from Waslala Health Center

The Hospital's capacity has been strengthened in the area of quality maternal and neonatal care that is offered. The project rehabilitated and equipped the delivery room. CARE and hospital personnel, in partnership, designed and developed protocols for the management of obstetric and neonatal emergencies as well as organizational norms for critical care of mothers and newborns. The Safe Delivery initiative was adopted and implemented, however its complete implementation is still pending since the hospital

does not have “safe blood”. It is important to note that this hospital’s evaluation regarding meeting the established steps for a “Safe Delivery” are conducted jointly between CARE, UNICEF and hospital personnel.

On of the limitations expressed by the Steering team members is the high turnover of health personnel, specifically doctors most of whom are meeting their social service [requirement] which lasts one year and a few of whom are hired by the Social Fund (Fondo Social). This has hindered the advancement of some activities such that, in the specific case of trainings, which have to be conducted more than once in light of staff changes. *Taking into consideration that the nursing staff is the most stable one in the health units, particularly in the health posts, greater agreements should be made with that personnel in order to guarantee the implementation and continuity of the activities*.

B2c4. Strengthening of health personnel performance

The Project jointly with the Ministry of Health has developed instruments that facilitate the monitoring of activities, which are applied—in the specific case of the hospital—through established sub-committees. Some of these form part of the Ministry’s information system and others have been designed specifically to register data that relates to the Project.

The instruments used for monitoring and that belong to the Ministry of Health are listed below, noting a few examples of those which provide information for the Child Survival Project:

- Observation and management of cases (AIM supervision) of prenatal care for children 2 months to 4 years of age.
- AIN/IMCI monitoring instrument in the health unit.
- Monitoring of Clinical History (AIN basic section), results by areas.
- Monitoring of Clinical History (AIN follow-up sheet), results by areas.
- Health unit supervision guides.
- Organizational climate study.
- Consumer satisfaction survey.
- Consumer registry form.
- Consumer consolidated flow.

According to the data collected, following a monitoring activity, an improvement plan is developed applying the rapid cycle improvement methodology. The operation of the Quality Sub-committees has allowed the identification of needs and the presentation of solutions. During the January – March 2003 trimester, the hospital’s monitoring sub-committee applied delivery observation guides that facilitated the identification of deficient practices such as hand washing, early latching on and routine aspiration of the newborn. It also identified the need to develop instruments for the monitoring of indicators, review of clinical charts and observation guides.

In the current mid-term evaluation, the focus group with the Steering Team from the La Dalia Health Center indicated that they utilize the guide for Management of Health

Services Approach (AMAS) bi-monthly with the purpose of monitoring all of the activities, verifying diagnoses, among others.

The consumer satisfaction surveys have helped identify the quality of services offered. In this way, in the April – June 2004 trimester, it was implemented in the three municipalities and it was found, among other things, the short duration of the consulta and a long waiting time, low satisfaction due to lack of medications and mistreatment by admissions and nursing staff. These results allowed interventions to be conducted such as training of health personnel such that in the January – March 2005 quarterly report, improvements were found in the areas mentioned: time in the consulta increased by 10 minutes or more, improvements in the hygiene (cleanliness) of the services. However, there are areas that still need improvement. In the specific case of the Hospital, the consumers expressed satisfaction with the care received by classifying it as "good" and the majority would "return again to receive care". In similar fashion, there is satisfaction with the availability of medications, the reduction in wait times and the improvement of cleanliness.

B2c5. Training

The Project implemented trickle-down training so that CARE's technical group or other trained personnel, trains the Ministry's health personnel who in turn duplicate it with the rest of the staff. They repeat it later with the community health workers (specifically during the monthly Community Meetings) who are the ones who finally train the mothers in the community. This strategy benefits, according to the DIP, 274 health personnel, 160 teachers and 1,481 community health volunteers. Some examples of the topics and participants in the training are described below.

According to the Cesar Amador Molina Hospital's 2nd Annual Report, personnel were trained according to an assessment. In the October – December 2002 trimester, a "Total Quality Management" workshop was conducted with ob-gyn and pediatrics. In the April – June 2003 trimester, the health personnel was trained on the BABIES methodology for the analysis of perinatal mortality.

Members of the Steering Team were trained on Management, specifically the Health Directors at the municipal level. The health personnel from the three municipalities and the volunteer network of Matagalpa were trained on the Birth Plan strategy; in La Dalia and Waslala, where work is done 112 communities, it is in the process. In PROCOSAN/AIN-C, the volunteer personnel were trained on the management of "Growth Monitoring and Nutritional Counseling".

Municipal-level personnel were trained in the management of the Community Information System (CIS) which includes the development of census, maps, registry books and reference tools. They, in turn, duplicated it with the Health Posts' managers who then trained 100% of the Community Network of the communities serviced by the Project.

In the 16 interviews conducted with community network personnel for the mid-term evaluation, participants were asked about the activities that are conducted in the Community Meeting. Fourteen mentioned the training, with the following topics in order of frequency; post-partum and breastfeeding (12), pregnancy and acute diarrhea (11), PROCOSAN/AIN-C (10), acute respiratory infections (10), delivery, obstetric emergencies and newborn (9), CIS and Birth Plan (5), immunization and referral/counter-referral (4), obstetric emergency transportation brigades (3), and counseling (2). In general, these trainings have facilitated the involvement of health personnel and community health workers in the education activities such that a greater number of the target population has been reached.

Regarding the teachers, teams of facilitator teachers were reorganized in each municipality who were trained on topics of safe pregnancy and child health. They duplicated the training with the other teachers in the schools, who then currently trained the students and parents of families in the different school centers.

It should be noted that for any training strategy, it is important to monitor the quality of trainings and information retention, the exchange of abilities and experiences between various equals or participants.

B2d. Sustainability Strategy

Sustainability constitutes one of the challenges to any health project. One of the elements of this Child Survival Project that has the potential to contribute to sustainability is the strengthening of the relationship between the Ministry of Health and the community organizations being promoted by the Project through the operation of the Municipal Health Council. The empowerment that the brigadiers, community leaders, midwives and other social actors now possess is evident as far as their ability to participate in the social control of health activities. The participation of representatives from other institutions and civil society organizations—such as the mayor's office, police, maternal houses and teachers, among others—also favors the permanence of the health interventions promoted up to this point.

The trainings conducted by the Project on topics of maternal – child health, management, quality and others strengthens capacity in a way that is sustainable by the partners in technical and management areas. The equipping of health units, the development and implementation of care protocols, and the involvement of medical and paramedical personnel that works in positions of direction or who provide care to consumers in the primary and secondary level health units guarantee improved quality of care that is sustainable in the short and medium term, at least.

In the focus groups conducted with the various social actors for the current mid-term evaluation, a few activities were highlighted because they point toward sustainability, such as:

- Community Meetings, which are considered a strategy that will favor the continuity of activities since it is through these that lost opportunities are diminished, information

is obtained and the number of referrals is known (Focus group with Hospital's Steering Team).
- Municipal Health Councils are a strategy to negotiate and coordinate (Focus group with Hospital's Steering Team).
- Development of a joint plan between SILAIS and the hospital in which all levels of care participate (Focus Group with Hospital's Steering Team).

C. Program Administration

C1. Planning

The groups involved in the planning of the Project have been primarily CARE's technical team and Ministry of Health personnel. Planning began with the development of the Project's Evaluation Framework, followed by the development of the Detailed Implementation Plan (DIP) where the Steering teams of all three municipalities and SILAIS participated. With the DIP as a starting point and the Project's technical support, each Steering team from the three municipalities and the hospital developed an AOP for the first year.

In the specific case of the Project's technical team, each of the members develops a monthly work plan that is based on the activities defined in the Annual Operating Plan and jointly with partners in order to define the activities to be conducted.

In the various qualitative activities conducted for the current mid-term evaluation, participants were asked the following, "What do you know about CARE – MINSA's Child Survival Project and its objectives?" It was found that, in general, at the level of health personnel who hold positions or responsibilities, there is a clear knowledge and concept of the Project. In general, the activities programmed in the DIP have been met, some before the established timeline and some after. The factors that limit meeting the Project's activities depend, primarily, on the dynamics and means of working at the Ministry of Health, therefore the efforts of CARE's Project personnel are centered around giving more attention to the human resources involved.

The current project is considered an extension of a Child Survival Project 1998-2002. In addition to increasing coverage to include two more municipalities (La Dalia and Waslala), the main change was that the implementation strategy changed a great deal—from implementation at the community level with various "extensionistas" visiting communities directly and continuously to facilitation with the MINSA personnel. The CARE team now has 4 technical specialists and the Project Manager. With the reduction in staff and change to facilitation, CARE has not identified underlining its role at the community level. The mid-term evaluation found that at the community level there is no clarity or homogeneity on the perception or recognition of CARE's role in relation to project activities.

C2. Team training

(See section B2c1, CARE personnel strengthening). CARE's personnel were hired based on their technical capacity and professional training. However, CARE USA and CARE Nicaragua have coordinated opportunities each year for staff to refresh and increase their knowledge and capacities.

C3. Program team supervision

The relationship that is established between the Project's four areas of technical advising are complementary. The monitoring area is a cross-cutting axis in the development of the project; training and institutional strengthening are areas that are intimately related as well as organization and community participation. The internal supervision of the team's work is based on the quarterly and annual analysis of the accomplishments and delays according to the annual plan. The team uses CARE International's protocol for operational personnel planning with evaluation according to the established goals.

Aside from its contribution to the monitoring systems, the Project has not designed any supervision system for the work of health personnel. The CARE team members accompany health personnel on their supervision visits based on the Ministry of Health's recognized system.

It is recommended that the accompaniment of the Steering team during visits to the health units and communities be increased in this last project period as a contribution to sustainability of community-level activities.

C4. Human Resources and Administrative Personnel

In the current project, CARE has highly trained resources such that the working group is formed by personnel who fit the required profile for the Project's implementation. One of the five team members was hired once the Project began, which did not hinder in its development, moreover it strengthened the work. In the mid-term evaluation, interviews were conducted with UNICEF, Quality Assurance Project and central MINSA personnel that found that there is an excellent perception of the working group regarding technical and human capacity.

"…they offer fraternal advising in the field work. They are human, honest, transparent, with very positive human qualities…"

Interview with Quality Assurance Project staff

"…when it was proposed to share the strategy at the national level they accepted, were negotiators, gave documents, that helped the efforts…"

Interview with NicaSalud Network Federation staff

In previous years, the annual work evaluation has been linked to an economic recognition of the worker. Considering the re-structuring process of the CARE country offices in Central America to being a Central American unit with uniform processes, this practice was suspended, which according to the interviews conducted with the technical team, have been viewed negatively since it was a strategy that promoted healthy competition.

Although a minimum of one team member has the following skills, in the interviews conducted with the technical team it was found that the remaining members want to be trained on topics such as advances and challenges in reforming the health sector and/or management of software packages for data processing.

C5. Financial administration

All of the Project's financial procedures meet with USAID CSHGP requirements. The Project's finances are registered and monitored through CARE's computerized system (SCALA). A Financial Analyst from CARE USA's Health Unit dedicates 5% of his/her time to preparing and presenting quarterly reports comparing the pattern of expenditure with the implementation period ("burn rate") for each sub-category of the budget (HQ and in-country offices; USAID CSHGP, and OPV contribution match). In addition, the Financial Analyst, with the support of CARE USA's Finance Unit, prepares the annual SF-269 report.

In the CARE sub-office in Matagalpa, a small administrative team assists in purchases of less than US$500, assuring that the procedures and forms established by CARE Nicaragua's Financial Unit are completed on behalf of all of the projects based out of the sub-office. CARE Nicaragua's Financial Unit is responsible for registering and monitoring the Project's finances using the SCALA system. The Child Survival Project Manager meets regularly with the manager of Finances and receives financial reports that are updated quarterly. The Project's team prepares annual budgets based on the Project's budget. The Project's team projects and informs the central office at the beginning of the year of any purchasing needs greater than US$500.

C6. Logistics

As far as the logistical requirements, the Project has three four-wheel drive vehicles and two drivers. Portable computer availability has facilitated the technical team's work along with the desktop computers. A few areas that need to be strengthened have been identified such as training with the acquisition of audiovisual materials since the current ones are in bad shape.

The Project gave equipment and materials to the health units during the first year of implementation, which has been recognized and valued by the various social actors involved in the implementation of the Project since they contribute to achievement of goals.

"…they supported with computing equipment, materials for the spaces and health posts in order to have Completely Functioning Health Units…"

Focus group with Steering Team from Waslala Health Center

In the second year of implementation, there was an evaluation of the team's needs and another equipment purchase. Since a few weaknesses were found in the annual check-up of the equipment that had been previously donated, the last purchase has not been delivered yet. It is recommended that the Project clearly review the situation in the Health Director Teams, reach an agreement and make a decision about the delivery of the purchased equipment.

C7. Information management

Internally in the Project, each technical advisor develops a report which is consolidated quarterly and annually, taking this last period from October to September of the following year, this being the report sent to CARE headquarters.

The information obtained by the Project at the community level is collected by the brigadiers/midwives in the various activities they conduct. In the communities were PROCOSAN/AIN-C and the CIS have been implemented, the information is registered in the format established by the Ministry of Health, making note of the main promotion, prevention and care activities that volunteers promote in the community. This information is analyzed monthly in the Community Meetings that are conducted at the Health Posts with the participation of health personnel and members of the community network.

According to the interviews conducted with the brigadiers/midwives in the current mid-term evaluation, this information serves, primarily, to confirm the work that they conduct and maintain a check to give information to the Ministry of Health. *It is necessary to reinforce data interpretation and analysis at this level*.

At the municipal level, the Steering Teams from the Waslala, La Dalia and Matagalpa Health Centers expressed that they frequently conduct quality circles and monthly meetings to analyze problems and suggest solutions.

"…the health center sees 30 – 40 deliveries, take charts at random and review them. The delivery one is reviewed monthly and clinical IMCI every three months…"

Steering Team from La Dalia Health Center

"…there are goals in spaces and health posts, achievements and the goals from last year are valued. Decisions are made, activities and new pledges. The goals allow us to make a periodic analysis monthly and quarterly…"

Steering Team from Waslala Health Center

In the specific case of the sub-committees formed at the hospital, they conducted the monthly monitoring of standards by using the "at random" methodology, reviewing 20 charts in order to identify the meeting of established steps. Regarding the Birth Plan ("partograma"), in the hospital the sub-committee reviews 40 of them taking into consideration the number of deliveries that month, also the Steering Team since this is considered to be a very sensitive indicator of quality. With the data collected, problems are identified and opportune interventions are implemented, with the majority of this activity advised and conducted by the Project's technical personnel, which makes it necessary for them to decrease the time they invest and that health personnel develop/strengthen their abilities and skills.

According to the interviews conducted with the Project's technical personnel, it is necessary to temporarily hire a programmatic resource specialist that can help partners solidify skills for database development and information analysis.

C8. Technical and Administrative Support

The Child Survival Project's has the support and interest of the supervisors of PVO projects of USAID Nicaragua. For the development of the Detailed Implementation Plan, the support of Dr. Elena McEwan, who was a Technical Advisor in CARE USA until August 2004, was available and she visited and accompanied the Project frequently. Later, Dr. McEwan continued supporting the Project in her role of Interim Director of CARE Nicaragua until July 2005. The work session on the BABIES methodology was facilitated by Irma Ramos of CARE Peru on March 29, 2004. Joan Jennings, MPH, Technical Advisor on Health from CARE USA, participated in the current mid-term evaluation. For detailed activities, the Project has mainly identified and hired national consultants with support in their selection from the central office in Managua.

D. Other issues identified by the team

No other issue of importance was identified by the team or the partners.

E. Conclusions and Recommendations

According to the information collected through the qualitative techniques, the document review and the visits and interviews with the health unit personnel, we conclude that the Project is being implemented in accordance with what was initially programmed and established in the DIP.

Among the achievements observed were:

- The active participation of partners during Project planning in its various phases and modalities (DIP, AOP, monthly plans, reports, etc).
- The strengthening of technical and management capacity of health personnel that works in the various levels of care, including the Cesar Amador Molina Hospital, to which the Project has contributed.

- The reorganization of maternal and neonatal health care provision with quality and warmth in the Cesar Amador Molina Hospital (physical, protocols, birth plan), in accordance with the national protocols and norms.
- The development of abilities and skills for the management of obstetric and neonatal care in personnel who work at the Hospital and the primary level of care through the internships.
- The strengthening of community organization and its linkage to health services so that concrete activities are being implemented, including the PROCOSAN/AIN-C strategy (a program from the Ministry of Health for community-based growth monitoring with joint nutritional and health counseling), the Birth Plan and obstetric emergency evacuation, the monthly Community Meetings between health personnel and the volunteer network with training refreshers for the volunteers, and community education through PROCOSAN/AIN-C and the home visits, among others.
- The technical and management strengthening of the Municipal Health Commission through timely escorts and consultations.
- The contribution to implementing a quality of care model from the Ministry of Health in the private clinic, IXCHEN.
- The recognition of CARE from other organizations for the work completed. For example, the Birth Plan training strategy is being taken up again by the NicaSalud network to be incorporated in the Community Mobilization for Safe Motherhood document that will be presented to the Ministry of Health for its institutionalization.

Some of the activities that should be prioritized from this evaluation on are:

1. Role of the Project's technical team in order to promote institutional sustainability of the activities: Redefine the role of the Project's technical team such that the processes are inverted and health personnel gradually take on the activities to be conducted; and see the exchange of responsibilities and support between CARE team members in order to offer more support to the health units in the field.

2. Use of information by health personnel: Train health and community personnel in the handling, interpretation and utilization of information, including the use of electronic statistical packages in cases where it is necessary to promote sustainability for the health sector.

3. Referral and counter-referral from the community to the hospital: Analyze, with health personnel from the primary and secondary level of care, the importance of referrals and counter-referrals that are made from the community to the hospital and identify activities to strengthen the use of the system.

4. Equip the health posts according to the needs assessment and establish internal auditing mechanisms for the health units.

5. Concept and operation of the Base Houses: Standardize with the volunteer health workers the concept and operation of the Base Houses, taking as a reference what has been established by the Ministry of Health.

6. Continue and promote the extension of the Birth Plan and the Obstetric Emergency Transportation Brigades: Redefine the formation of the Obstetric Emergency Transportation Brigades in peri-urban areas of the Matagalpa municipality.

7. Negotiate with the Ministry of Education, Culture and Sports the transition of the activities stipulated in the Project with the teachers.

8. Make the most of the Community Meeting spaces: Emphasize, specifically during the monthly Community Meeting trainings with the volunteer network (brigadiers and midwives), the topics related to danger signs in pregnancy, delivery and post-partum as well as nutrition.

9. Strengthen the internal training of the Project's technical team by including continuing education processes, internal planning and disclosure of activities conducted, among others.

F. Results Highlight

In El Matasanos clinic, the nurse is always in. The clinic takes its name from the community Matasanos, which is Spanish for "quack doctor." Interpreted literally, it means "healthy person killer." This unfortunate name speaks to the fact that many years ago the region was infamous for disreputable health practitioners. Today, however, nine communities comprising approximately 6,000 people turn with increasing confidence to the clinic's sole nurse, part-time personnel, and community health volunteers to meet their health needs.

A worried Angela Flores took her baby to the clinic when she was ill. Born prematurely and weighing only three pounds, 17-day old Francisca had a respiratory infection. Fortunately, Angela was a part of the Child Survival Project implemented by CARE and its community partners, along with the Ministry of Health. She had been visited regularly by trained Community Health Volunteers who had educated her on the importance of pre-natal checkups, maternal and child nutrition, immunization, good hygiene practices to prevent diarrhea and how to treat it when it did occur, and the importance of exclusive breastfeeding for the first six months of a child's life. She had been told by the volunteers that she could differentiate a simple cold from pneumonia by whether or not the child's ribcage would sink in as they child struggled to breathe. And she had been cautioned not to wait too long before seeking medical attention if the child was ill. So she quickly made the 20-minute trek from her community to the clinic.

A glossy-haired child with bright eyes, the now three-year-old Francisca looks around quizzically from her perch on her mother's knee. Angela explains that after health personnel successfully treated what was in fact pneumonia, she continued to participate in the program by taking in her baby to be weighed and receiving regular counseling from health volunteers. In the past year or so, community volunteers have been trained to monitor child growth in the community. Angela is pleased as she now finds it even

easier to have Francisca weighed and checked regularly. She notes that her three kids have diarrhea very seldom and are generally healthy.

The local health clinic still struggles to serve the needs of its clients. Space is at a premium and many women and children wait outside on benches for long periods to see the sole nurse. Every other week, medical personnel from the city of Matagalpa come for a day to help out. Medicines and supplies are in short supply and there simply isn't enough to go around, particularly for chronic conditions. But children are healthier and this reduces some of the stress on limited resources. As one of the Community Health Volunteers who visits mothers like Angela, Melba Luquez would know. "I don't come across too many cases of diarrhea or pneumonia anymore," she says.

G. Action Plan in Response to EMT Recommendations

Following the mid-term evaluation process and in accordance with the recommendations provided by the evaluation team, sessions were held with the CARE team and the steering teams of the Project's three target municipalities and the Cesar Amador Molina Hospital.

The methodology implemented was as follows:

a. Each of the six EMT recommendations was presented by CARE personnel.
b. Each point was discussed in depth and steps to follow over the next two years were defined.
c. A timeline of activities for each municipality was developed.

Recommendation 1: Redefine the role of the CARE technical team such that the processes are inverted: health personnel gradually take on the activities to be conducted:

Action: CARE personnel, composed of four advisors and the project manager, will continue providing technical assistance to the steering team sessions where supervisions are programmed, indicators are evaluated and strategic decisions are made, and will be combined with accompaniment to the supervision visits to each health unit, Community Meetings and communities. The MINSA technical team visits will be planned at the beginning of each month and personnel CARE will be linked to the visits. Eight health units, eight community meetings and four communities will be visited each month, thus reaching the 21 health units and the hospital once per quarter, at minimum.

Recommendation 2: Train health and community personnel in the handling, interpretation and utilization of information, including the use of electronic statistical packages in cases where it is necessary, to promote sustainability for the health sector.

Action: CARE's monitoring and evaluation advisor will conduct an assessment of all of the existing databases and those used in the health units and the hospital and of the personnel's abilities in handling them. In accordance with the assessment, a workshop

will be prepared where database management, utilization of available data and effective presentation of data will be addressed. This aspect will be a priority for the advisor in the continuous accompaniment of the monitoring teams of the municipalities, the hospital and the personnel that manages the databases.

With financial support from the Project, the possibility of computing courses at the technical level will be offered to one or two of the steering team members that manage the databases so that they have the ability to handle data and resolve technical problems.

Recommendation 3: Analyze, between health personnel from the primary and secondary level of care, the importance of referrals that are made from the community to the hospital and identify activities to strengthen the use of the system.

Action: It was decided to take up again the bimonthly analysis meetings between municipalities and the Hospital, and analysis of the referred cases once a month in each health unit, using the existing the quantitative and qualitative reporting forms.

At the community level, analysis of the system will be included in the monthly meetings of health volunteers with the health post managers, motivating the health volunteers to make referrals of cases that they cannot resolve at the health unit and giving follow-up to the counter-referrals they receive.

Recommendation 4: Equip the health posts according to the needs assessment and establish internal auditing mechanisms for the health units.

Action: The Project has already purchased and delivered equipment to the Cesar Amador Molina Hospital and the head Health Unit in the Matagalpa municipality. For the La Dalia and Waslala municipalities, part of the equipment has been purchased but has not been delivered due to difficulties in the MINSA's management of inventory. A visit by the Project's team was conducted identifying the goods delivered by CARE during previous projects and programming the delivery of the already purchased equipment for the upcoming two months.

In order to complete purchasing the equipment, the equipment assessment conducted in the health units by the monitoring teams in June 2005 will be used as a reference point. According to that, price quotes and purchasing will be done according to budgeting, giving priority to the head health units and then the health posts. If the health units complete the assessment in June, the price quote and purchase will be conducted from August to November with subsequent delivery.

Recommendation 5: Standardize with the volunteer health workers the concept and operation of the Base Houses.

Action: The standardization of the concept of Base Houses was decided based on the MINSA manual: Organization and Operation of the Base Houses, since some of the emergency programs in the country have conceptualized it as an infrastructure that projects need to build in the communities and that would work as a health unit.

The process to follow will begin with a training for the managers of health posts and delivery of the MINSA manual. They, in turn, will training the community health volunteers and at the same time will conduct an update on the assessment of existing and operating Base Houses. It will then become the duty of community leaders to promote the BH in community assemblies and home visits.

Recommendation 6: Redefine the formation of the Obstetric Emergency Transportation Brigades in peri-urban areas of the Matagalpa municipality.

Action: An initial selection of the farthest health posts will be conducted with the health post managers. Once selected, the health post's manager accompanied by CARE personnel will select communities that due to their distance from the municipality's head require an OETB.

Following this, the communities selected will:

a. Identify the current members of the OETBs.
b. Meeting of the Health Post managers with the OETB members and development of a small plan for activities, monitoring and reporting.
c. Training of the OETB members using the Birth Plan Manual, the OETB units.

Recommendation 7: Negotiate with the Ministry of Education, Culture and Sports the transition of the activities stipulated in the Project with the teachers.

Action: In the Matagalpa municipality, follow-up of activities conducted by teachers in schools will be the responsibility of the Ministry of Health who will make the most of the different coordinating spaces available in the municipality where the MINSA and the MECS participate, such as the Municipal Health Council, MECS Technical Councils, Basins Program.

In the La Dalia municipality, the planned training program will be completed, which, along with follow-up, will be the responsibility of two people at the MINSA. In the Waslala municipality, the MINSA pledges to negotiate to sign an agreement of collaboration with the MECS. If the latter is in disposition to comply, CARE personnel will collaborate on the fulfillment of the agreement but the follow-up will be under the MINSA's responsibility.

This follow-up modality will reduced the amount of time CARE personnel has to dedicate, thus allowing them to direct more time to other interventions and areas more sensitive to the achievement of the goal and sustainability of the project.

Recommendation 8: Emphasize, specifically during the monthly Community Meeting trainings with the volunteer network (brigadiers and midwives), the topics related to danger signs in pregnancy, delivery and post-partum as well as nutrition.

CARE personnel will prepare a proposal for leading the Community Meetings for the health personnel, which will be shared with the steering teams and followed by its implementation in the Community Meetings. In addition, a refresher of the indicated topics has been programmed jointly with the MINSA.

The MINSA, in coordination with CARE, will establish coordination of the Maternal Houses in La Dalia and Waslala in order to reinforce these training topics with the trained birth attendants by the MINSA.

The rest of the health personnel will reinforce the topics of Counseling and Educational Techniques with the communities.

Recommendation 9: Strengthen the internal training of the Project's technical team by including continuing education processes, internal planning and disclosure of activities conducted, among others.

Action: Training of the technical team will be accomplished through the Continuing Education modality, conducted monthly and delivered by one of the team members with greater specialization in the defined topic. In addition, the training opportunities offered by other organizations will be made the most of. It is important to note that spaces currently exist in CARE Nicaragua, such as Social Learning, Organizational Operation, where team members have participation and are opportunities for professional growth.

The team reaffirmed the twice-monthly planning of team meetings where the following are covered: evaluation of individual timelines and AOP of the project as well as exchanging information and discussion on the advance of the project. Regular dispatches between manager and advisors have also been planned. The delivery of a monthly activity plan and quarterly report by each of the team members has been kept.

Once consolidated by the manager, the quarterly reports are delivered to the CARE country office. CARE Nicaragua's website and country office monthly bulletins will be used to for each member to send articles each month.

ANNEXES

Annex A. Information from Detailed Implementation Plan (DIP)

Since the approval and implementation of the DIP, there have not been substantial changes in fulfilling what was planned in the Project.

Annex B. Evaluation Team Members

Evaluation Teams

External Evaluators

1. Joan Jennings	CARE Atlanta
2. Margarita Pérez López	Loca Consultant

Internal Evaluators

1. Ivette Arauz	CARE Matagalpa
2. Erasmo Jarquín	CARE Matagalpa
3. Annie Rivera	CARE Matagalpa
4. Harold Rugama	CARE Matagalpa
5. Daysi	CARE Matagalpa
6. Adalgisa Dávila	MINSA Central / Atención Integral a la Mujer
7. Ena Barillas	MINSA Central / Dirección de hospitales
8. Elba Urbina	IXCHEN Matagalpa
9. Rafael Huelva	Hospital / Vigilancia Epidemiológica
10. Lourdes Haslam	Policlínico Matagalpa
11. Alma	Centro de Salud La Dalia
12. Agustín	Educador Centro de Salud La Dalia
13. José Angel Mejía	Líder Comunitario
14. William	Centro de Salud Waslala /Auxiliar de Enfermería

Annex C. Midterm Evaluation Methodology

This mid-term evaluation was very enriching since social actors from different areas and institutions were brought together, and made up multidisciplinary evaluation teams. This diversity allowed adjustments to be made to the guides developed, to approximate reality, strengthen the interpersonal and inter-institutional relations and cause the appropriation of the Project activities.

The methodology was participative; four evaluation teams were organized; made up of members of CARE, MINSA (SILAIS and central level), community leaders and partners, designating themselves as responsible from each team to the two external consultants, an employee of MINSA Central and a member from CARE Nicaragua.

Once the teams were formed the evaluation process was planned, which included qualitative techniques and document review. The activities carried out included:

a. Design and validation of the interview guides, focus groups and verification list of the existing materials by the evaluating team (in the Base Houses),
b. Selection of communities to visit as well as the key actors to involve (benficiaries and executors of the the Project among whom were officials from MECD, MINSA Central / SILAIS and municipal, USAID, CARE Nicaragua, member of Municipal Health Councils, community health volunteers). In addition to the municipal head, three communities were selected from each one of the municipalities benefited by the Project: Matagalpa, La Dalia and Waslala, totaling nine locations visited.
c. Formation of the work groups and creation of the logical route. With the goal of guaranteeing the work within the time defined, CARE provided four vehicles which were used for the field work.
d. Training session for the evaluation team addressing the theoretical and practical aspects of the interview techniques and focus group. Both techniques were supported by tape recordings that were then transcribed.
e. Review by the external consultants of the DIP, the AOP, reports and other documents created by the Project.
f. Field work: the three communities selected in each municipality were visited the same day, which permitted the evaluation teams could move simultaneously and that the field work was accomplished in the time planned. (5 days) The focus groups carried out in homes and other available spaces in the communities.

The communities visited and the activities carried out in each one of them were the following:

Municipality	Community	Focus Group Mothers	Interviews Community Health Volunteers	Interviews - responsable for Heatlh Positions	Others
Waslala					Teacher Management team Municipal Health Council
	Los Mangos	✓	✓	✓	
	Guayabo	✓	✓	✓	
	El Cipres	✓	✓	✓	
La Dalia					Community association Management Team
	La Ceiba Bull Bull	✓	✓	✓	
	San Luis Caratera	✓	✓	✓	
	Piedra Luna	✓	✓	✓	
Matagalpa					Hospital Management team Municipal Health Council Delegate MECD IXCHEN
	Llano Grande	✓	✓	✓	
	Las Mesas	✓	✓	✓	
	2 de marzo	✓	✓	✓	

g. Systematization of the information with participation of the members of evaluation team
h. Presentation of preliminary results to the partners to get feedback on the same. Personnel from the central level of MINSA, SILAIS and municipal (first and second levels), member of the community network, IXCHEN, USAID, CARE Nicaragua, invited NGOs (HOPE, Red NicaSalud), evaluating team. .
i. Development of report

Annex D. List of Interviewees

WASLALA

Municipal Health Committee

Nombre	**Responsabilidad**
1. Edilberto Tinoco Arauz	Jefe de sector
2. José Miguel Espino López	PAININ
3. Omar Pau	PAININ
4. Noel Reyes	Director Radio
5. Antonia	Jurídica Casa Materna
6. Claribel Fornos	Programa integral en salud
7. Teofilo Martínez	Líder de salud
8. Ileana Castro	Mujeres con discapacidad
9. Luis Gutiérrez	Alcalde
10. Dr. Javier Oviedo	Director / Waslala
11. Dr. Jorge Blandino	Sub director Centro de Salud
12. Alba Mairena	Responsable Materno Infantil
13. José González	Comité de Salud
14. Jesús García Zeledón	
15. Sulma Herrera	
16. Graciela Hernández Silva	

Management team from Health Center Waslala

Name	**Responsibilidad**
1. Javier Oviedo	Director
2. Jorge Blandino	Subdirector
3. Alba Nubia Mairena	Responsable Materno Infantil /SICO/ PROCOSAN
4. Jenny González	Responsable de Enfermería
5. Rigoberto Rayo	Responsable de Malaria
6. Jacqueline Lazo	Responsable de Estadística
7. Teresa Muñoz González	

LA DALIA

MATAGALPA

Interviews of personnel of SILAIS Matagalpa

1. Dr. Henry Dávila G	Subdirector
2. Dra. Judith Wong	

Meeting with Hospital Management team

Name	Responsibility
1. Dr. Tomás Aldana	Director
2. Dr. Santos Calder	Subdirector Médico
3. Dra. Maura Mairena	Jefe de Gineco obstetricia
4. Dr. Denis González	Responsable de Planificación
5. Lic. Ruth García	Jefe del Departamento de Enfermería
6. Lic. Sorayda Chavarría	Sub jefe Departamento de Enfermería
7. Dra. Iris Mora	Responsable de Epidemiología
8. Lic. Judith Figueroa	Responsable Insumos Médicos
9. Lic. Cela Gutiérrez	Trabajadora Social

Reunión con el Subcomité de monitoreo de estándar de calidad

Name	Responsibility
1. Dr. Carlos Zúñiga	Responsable del subcomité
2. Dr. Denis González	Monitorea Emergencias Obstétricas
3. Lic. Indiana Seas	Monitorea signos vitales/involución uterina/loquios
4. Lic. Johana Martínez	Monitorea Atención recién nacido
5. Dra. Ileana García	Monitorea partograma
6. Dr. Samuel Ruiz	Monitorea uso de oxitocina

IXCHEN

Name	Responsibility
1. Lic. Elba Urbina	Directora
2. Lic. Marcia Leiva	Educadora

MANAGUA

UNICEF
1. Dra. Ivette Sandino

Quality Guarantee Project
1. Dr. Oscar Nuñez
2. Dr. Luis Urbina

Ministry of Health
1. Dr. Wilmer Beteta

CSHGP Project Data Sheet (Sub Form 1 of 7)

Project: CARE - Nicaragua (2002 - 2007) - Cost XT Project

[Do Not Use the Back Button on Your Web Browser while filling out this form]

General Project Information: <Help>

Cooperative Agreement Number:	FAO-00-98--00076--01
CARE HQ Backstop Person:	Joan Jennings
Project Grant Cycle #:	18
Project Start Date:	9/30/2002
Project End Date:	9/29/2007
USAID Mission Contact Person:	Ivan Tercero

Project Field Contact Information:

Field Program Manager :

Name:	
Title:	
Email:	
Telephone:	
Additional Project Address Information	
Address:	
City:	
State:	
Country:	Nicaragua
Fax:	

Alternate Field Contact

First Name: Ivette

Last Name: Arauz

Title:

Email: saludat@care.org

Address1: PO Box 3084

Address2:

City: Managua

State:

Zip Code:

Country: Nicaragua

Telephone: 505267839

Fax:

Project Web Site:

Grant Funding Information:

USAID Funding:*(US $)* $2,243,251

PVO Match:*(US $)* $749,559

Project Description:

The goal of the project is to contribute to the reduction of infant and maternal mortality and morbidity.

Main project components are maternal and newborn care, nutrition, ARI, and diarrheal disease control. This extension project will expand proven strategies to a larger beneficiary population by scaling up its partnership with the Ministry of Health (MOH) and municipal authorities in implementing integrated maternal and child health services in two additional municipalities.

Strategies to implement these interventions include IMCI, BCC, community empowerment including social control and getting legal status for communities health networks, and working with a local NGO.

Project Location:

173 communities and barrios from Matagalpa, La Dalia and Waslala Municipalities located at north center of Nicaragua.

Project: CARE - Nicaragua (2002 - 2007) - Cost XT Project

Partner Information:

Partner Name:

1.

Partner Type:

Select the Partner Type

Project: CARE - Nicaragua (2002 - 2007) - Cost XT Project

Project Location / Subareas:

Does this project collect, monitor and report on Rapid CATCH data for different *geographic* project subareas ?

Yes No

If this is true, click *Yes* and enter each distinct subarea name:
If this is false, click *No*.

Project: CARE - Nicaragua (2002 - 2007) - Cost XT Project

Strategies:

The following 3 boxes list different kinds of general strategies, assessment tools and BCC strategies that could be implemented during the life of this CSHGP project.
Please check those boxes that are planned for this project.

General Strategies:	
Microenterprise ☐	**Social Marketing** ☑
Private Sector Involvement ☑	**Advocacy on Health Policy** ☑

Strengthen Decentralized Health System ☑	Information System Technologies ☑
	Use Sustainability Framework (CSSA) ☐

M&E Assessment Strategies:	
KPC survey ☑	Health Facility Assessment ☑
Organizational Capacity Assessment with Local partners ☑	Organizational Capacity Assessment for your own PVO ☑
Participatory Rapid Appraisal ☐	Participatory Learning in Action ☐
Lot Quality Assurance Sampling ☑	Appreciative Inquiry-based strategy ☐
Community-based Monitoring Techniques ☑	Participatory Evaluation Techniques(for mid-term or final evaluation) ☑
Use of Pocket PCs or Palm PDA Devices ☐	TB Cohort Analysis ☐

Behavior Change & Communication (BCC) Strategies:	
Social Marketing ☑	Mass Media ☑
Interpersonal Communication ☑	Peer Communication ☑
Support Groups ☑	Use of BEHAVE Framework ☐

Capacity Building: <Help>				
Please check the box next to each capacity building area or group that is targeted for institutional strengthening during the life of this CSHGP project:				
PVO	Non-Govt Partners	Private Sector	Govt	Community

US HQ (General) ☐ US HQ (CS Unit) ☐ Field Office HQ ☑ CS Project Team ☑	PVOs (Int'l./US) ☐ Local NGO ☑ Networked Group ☐ Multilateral ☐	Pharmacists or Drug Vendors ☐ Business ☐ Traditional Healers ☑ Private Providers ☑	National MOH ☐ Dist. Health System ☑ Health Facility Staff ☑ Other National Ministry ☐	Health CBOs ☑ Other CBOs ☐ CHWs ☑ FBOs ☐

Project Interventions & Components: <Help>

Enter a percentage representing the amount of funds your project is targeting towards each intervention. If you are not implementing a particular intervention then leave the box blank. On the same line as the intervention percentage, check the boxes indicating whether or not this intervention is part of an overall IMCI strategy and also check the kinds of training (CHW or HF)envisioned for this particular intervention. For each intervention implemented, check the specific intervention components that are planned.

Immunizations ____ %	IMCI Integration ☐	CHW Training ☐	HF Training ☐
Polio ☐	Classic 6 Vaccines ☐	Vitamin A ☐	Surveillance ☐
Cold Chain Strengthening ☐	New Vaccines ☐	Injection Safety ☐	Mobilization ☐
Measles Campaigns ☐	Community Registers ☐		
Nutrition 20 %	IMCI Integration ☑	CHW Training ☑	HF Training ☑
ENA ☐	Gardens ☐	Comp. Feed. from 6 mos. ☑	Hearth ☐
Cont. BF up to 24 mos. ☐	Growth Monitoring ☑	Maternal Nutrition ☐	
Vitamin A ____ %	IMCI	CHW Training	HF Training

	Integration ☐	☐	☐
Supplementation ☐	Post Partum ☐	Integrated with EPI ☐	Gardens ☐
Micronutrients ☐ %		CHW Training ☐	HF Training ☐
Iodized Salt ☐	Iron Folate in Pregnancy ☐	Zinc (Preventive) ☐	Food Fortification
Pneumonia 10 %	IMCI Integration ☑	CHW Training ☑	HF Training ☑
Pneum. Case Mngmnt. ☑	Case Mngmnt. Counseling ☑	Access to Providers Antibiotics ☐	Recognition of Pneumonia Danger Signs ☑
Zinc ☐	Community based treatment with antibiotics ☐		
Control of Diarrheal Diseases 10 %	IMCI Integration ☑	CHW Training ☑	HF Training ☑
Water/Sanitation ☐	Hand Washing ☑	ORS/Home Fluids ☑	Feeding/Breastfeeding ☑
Care Seeking ☑	Case Mngmnt./Counseling ☑	POU Treatment of water ☐	Zinc ☐
Malaria ☐ %	IMCI Integration ☐	CHW Training ☐	HF Training ☐
Training in Malaria CM ☐	Adequate Supply of Malarial Drug ☐	Access to providers and drugs ☐	Antenatal Prevention Treatment ☐
ITN (Bednets) ☐	ITN (Curtains and Other) ☐	Care Seeking, Recog.,	IPT ☐

		Compliance ☐	
Community Treatment of Malaria ☐	ACT ☐	Drug Resistance ☐	Environmental Control
Maternal & Newborn Care 50 %	IMCI Integration ☑	CHW Training ☑	HF Training ☑
Emerg. Obstet. Care ☑	Neonatal Tetanus ☑	Recog. of Danger signs ☑	Newborn Care ☑
Post partum Care ☑	Delay 1st preg Child Spacing ☑	Integr. with Iron & Folate ☑	Normal Delivery Care ☑
Birth Plans ☑	STI Treat. with Antenat. Visit ☐	Home Based LSS ☐	Control of post-partum bleeding ☑
PMTCT of HIV ☐	Emergency Transport ☑		

Child Spacing %	IMCI Integration ☐	CHW Training ☐	HF Training ☐
Child Spacing Promotion ☐	Pre/Post Natal Serv. Integration ☐		

Breastfeeding 10 %	IMCI Integration ☑	CHW Training ☑	HF Training ☐
Promote Excl. BF to 6 Months ☑	Intro. or promotion of LAM ☐	Support baby friendly hospital ☑	PMTCT of HIV ☐

HIV/AIDS %		CHW Training ☐	HF Training ☐
OVC ☐	Treatment of STIs ☐	Behavior Change Strategy ☐	Access/Use of Condoms ☐
STI Treat. with Antenat. Visit ☐	ABC ☐	PMTCT ☐	Nutrition ☐

Home based care ☐	PLWHA ☐	ARVs ☐	HIV Testing ☐
Family Planning & Reproductive Health ☐ %	IMCI Integration ☐	CHW Training ☐	HF Training ☐
Knowledge / Interest ☐	FP Logistics ☐	Community-Based Distribtuion ☐	Social Marketing ☐
Male Reproductive Health ☐	Youth FP Promotion ☐	Quality Care ☐	Human Capacity Development ☐
FP / HIV integration ☐	Maternal / Neonatal Integration ☐	Cost Recovery Schemes ☐	Community Involvment ☐
Access to Methods ☐	Policy ☐		
Tuberculosis ☐ %	IMCI Integration ☐	CHW Training ☐	HF Training ☐
Facility based treatment / DOT ☐	Microscopy ☐	Monitoring / Supervision Surveillance ☐	Community IEC ☐
Drug managment ☐	Advocacy / Policy ☐	Linkages with HIV services ☐	Community based care / DOT ☐
Pediatric TB ☐			

Project: CARE - Nicaragua (2002 - 2007) - Cost XT Project

Target Beneficiaries:	
Infants < 12 months:	56,165
Children 12-23 months:	55,927

Children 0-23 months:	
Children 24-59 months:	51,942
Women 15-49 years:	58,052
Population of Target Area:	

Project: CARE - Nicaragua (2002 - 2007) - Cost XT Project

Rapid CATCH Data:

Click on the Red link (under the 'Stage' column) to view / access / update Rapid Catch data for that phase of the project.

If data has already been entered for a particular phase, the date of first entry will appear under the 'Date' column and an 'X' will appear under the 'Entered' column.

Date	Stage	Entered
30-Apr-03	DIP	X
13-May-05	Mid Term	X
	Final Evaluation	