



The Nicaragua *Mother and Baby* Friendly Health Units Initiative

Factors Influencing its Success and Sustainability



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OPERATIONS RESEARCH RESULTS

**THE NICARAGUA MOTHER AND
BABY FRIENDLY HEALTH
UNITS INITIATIVE:
FACTORS INFLUENCING ITS
SUCCESS AND
SUSTAINABILITY**

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Quality Assurance Project
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EXECUTIVE SUMMARY

Introduction

The Baby Friendly Hospital Initiative launched by United Nations Children's Fund (UNICEF) and the World Health Organization (WHO) in 1993 has become the world's largest focused accreditation program, with over 19,000 hospitals in 150 countries certified as having complied with the "Ten Steps to Successful Breastfeeding." Yet, for all its success, the initiative is having problems with sustainability. Too frequently, well-trained staff move on, hospitals lose their initial enthusiasm and commitment, and hospitals that once met certification standards no longer do so.

However, the Mother and Baby Friendly Health Units Initiative (MBFHI) in Nicaragua, a program of the Ministry of Health in cooperation with UNICEF, appears to be the exception. A 1999 study documented its growth and increasing impact. The present study by the Quality Assurance Project and UNICEF/Nicaragua sought answers to the following questions:

- Have the positive trends documented in 1999 been sustained?
- Has the program continued to grow to additional health centers, posts, and municipalities?
- What factors contributed to MBFHI's success?

Methods

To carry out this study, semi-structured, key informant interviews, group interviews and focus groups were held in a stratified random sample of hospitals, health centers, health posts, and government health offices throughout the country. Documents were reviewed and some re-interviewing was also done. In all, 30 interviews were performed.

Findings

Growth and impact: The study found that after the initial institutionalization, the initiative has continued to grow and to have a positive impact on breastfeeding practices. The initial institutionalization occurred in several stages:

- During the decade or so prior to MBFHI, minimally organized activities to promote breastfeeding created the basic conditions necessary for the initiative's early success. During this period, an informal network formed of knowledgeable health professionals committed to breastfeeding.
- During initiation of MBFHI, the Ministry of Health led activities that raised awareness of the benefits of breastfeeding. From the start, Nicaragua called its initiative the *Mother and Baby Initiative*, reflecting the belief that the mother-baby relationship is indivisible, with both mother and baby requiring special attention and receiving the benefits.
- In the early years of MBFHI, a favorable environment was created through new laws, government strategies, institutional leadership, shared values, involvement of universities, and intersectoral participation. Meanwhile, certification proceeded steadily, with three hospitals certified at first and then extended one-by-one to hospitals nationwide.
- After a few years, the initiative was broadened to include health centers and then primary care units, including departmental health systems, municipal health activities, and health posts. Its name was changed to the Mother and Baby Friendly *Health Units Initiative*. This broadening brought about an up-swelling of visible community activities related to breastfeeding and further expanded the network of committed health professionals.
- As the initiative matured, other agencies and social sectors developed supporting activities. One notable example is the Mother and Baby Friendly Community Children's Feeding Centers,

organized in rural areas by the Ministry of the Family. Another is the expanding public education, including large-scale media campaigns, newspaper articles, local breastfeeding fairs, and a national fair with private enterprise.

This history of continual expansion indicates the initiative's growth, as does the number of certified units. At the time of the study, the number of certified units was 17 of the 22 hospitals offering maternal and infant services, 129 of 154 health centers, 644 of 1048 health posts, and 11 of 17 Local Integrated Health Systems (SILAIS), the administrative areas under which health services delivery is organized.

The impact of MBFHI on breastfeeding practices has also grown. Three national health surveys found strong upward trends in breastfeeding practice:

Prevalence (%) of Breastfeeding Practices in Nicaragua			
Indicators	Year of National Survey		
	1993	1998	2001
Exclusive breastfeeding 0–3.9 months	11.0	30.0	40.0
Exclusive breastfeeding 0–5.9 months	NA	19.0	31.1
Children under five breastfed at least once	92.0	92.0	94.5
Babies breastfed during the first hour after birth	41.0	79.5	76.3
Average months of any breastfeeding	12	15	17.6
Average months of exclusive breastfeeding	0.6	2.1	2.5

General factors influencing success and sustainability: Several factors noted above helped get the initiative off to a fast start and are still crucial to the program's continued success. These include:

- *National laws* that support breastfeeding, such as an early law establishing the National Breastfeeding Commission and a more recent one called the “Law to Promote, Protect and Maintain Breastfeeding and Regulate the Commercialization of Breast Milk Substitutes”;
- Strong commitment of and leadership by the *Ministry of Health*;
- The growing cadre of *health professionals* from different organizations and regions who believe in the initiative's principles and have fought for its survival and success;
- The expansion beyond hospitals to *all health units*, especially at the primary-care level: Vital to maintaining upward momentum of good breastfeeding practices nationally, expansion also generated many additional knowledgeable and committed supporters of the initiative among health professionals and local authorities, provided lactation management training to all health providers (not just providers of maternal and child care), and fostered community activities;
- Involvement of *universities* helped to undergird the perceived value of breastfeeding and of lactation management skills by health professionals. The Mother and Baby Friendly Universities Initiative fosters the inclusion of breastfeeding as a topic in the medical curriculum and the establishment of breastfeeding rooms for teachers and students.
- Constant national and local *publicity* and educational activities.

Importance of attention to quality assurance: Many quality assurance (QA) principles and approaches contributed to the success and sustainability of the initiative, including steps to define, measure, and improve the quality of services needed to make a facility mother and baby friendly.

Use of evidence-based standards: The international criteria for certification, which are clear and strongly evidence based, have been a bedrock of the initiative. For example, Nicaraguan hospitals that became certified after working hard to meet the criteria saw breastfeeding practices in their hospitals improve and newborn diarrhea decrease. This relationship of the certification standards to breastfeeding practices and health outcomes helped to demonstrate to health care providers the effectiveness of the criteria and foster sustainability.

External quality assessment and certification: Certification uses rigorous, quantitative measurements by a multi-disciplinary team of external experts selected by UNICEF/Nicaragua and the Ministry of Health. The certification criteria differ for different types of health units, appropriately so. Direct care units (hospitals, health centers, and health posts) must meet the 10 (or 11) steps for successful breastfeeding, while health systems (SILAIS and municipalities) must have a minimum percentage of the health units in their jurisdiction certified.

The certification process is initiated by the health unit itself and may take a year or more, but during that time, the health unit discovers its shortcomings and corrects them; learns to carry out and appreciate the value of good standards and rigorous measurements; and generally develops a culture that supports measurement, planning, and improvement. The long certification process is usually intense and emotionally charged. The greatest learning usually occurs during the self-assessment and improvement phase that precedes the official certification visit.

Re-certification: The Ministry’s original intent was to re-certify hospitals and other health units periodically and fairly frequently using an external, rigorous process. However, funding and other problems have caused re-certification to be irregular. Nevertheless, the possibility of a re-certification (or less rigorous but external re-evaluation) has helped motivate some units to carry out their own self-assessments and corrective actions with more vigor. When re-certifications are scheduled, health units take it very seriously and prepare carefully. To date, only one (of 18) hospitals has failed re-certification.

Self-assessment and improvement: All certified hospitals and many other health units have incorporated self-assessment as a periodic activity of their mother and baby friendly program. Self-assessment is seen as a process of discovering problems, developing and taking corrective action, and confirming whether or not the action worked. The methods used vary widely across the different health units, but usually are some combination of systematic measurements and non-quantitative group judgments about the problems and corrective actions. The self-assessment process has led to the discovery and solution of many important problems related to breastfeeding. It is also low cost. It both reflects and helps to sustain health professionals’ knowledge and commitment to the MBFHI principles. It is a vital factor in the success and sustainability of the initiative.

Cost: The estimated cost of certifying one typical municipality, based on average certification costs incurred by the Ministry of Health in the past year, is:

Estimated cost to certify a hypothetical municipality with one health center and five health posts	
Training	
Providers (100 for 3 days)	US\$ 1,608
Counselors (60 for 5 days)	1,608
160 manuals	143
Evaluation	
Evaluators’ time (3 for 3 days) & costs	402
Certification	
Plaques (municipal and health posts)	691
Celebration and banner	234
Total	US\$ 8,406

Conclusions and Challenges

The study draws the following general conclusions:

- The initiative has continued to grow and impact breastfeeding practices to the present day, as shown by the increasing number of certified health units of different types and especially at the national level by the improvement of appropriate breastfeeding practices.

- The initiative has been implemented in Nicaragua in a very dynamic way. It has not been rigidly organized or implemented in a lineal way, but rather has been implemented through various channels in addition to the Ministry of Health, including the community, municipal governments, universities, and the social security and private sectors.
- Nicaragua's adoption of a well-conceived and evidenced-based model in a spirit of solidarity and respect for human rights, rather than a formula of specific steps to follow, has proven successful. This includes its focus on human rights, its understanding of how to integrate breastfeeding in different care processes, and its participatory approach.
- The promotion of breastfeeding has been structurally and philosophically integrated into the structure and operations of all the health care systems aimed at women and children, an indicator of true institutionalization.
- Defining, measuring, and improving quality have helped achieve substantially better results.
- The implementation of the initiative has been effectively incorporated into the practices and structures of health organizations, government institutions, and community activities.

The study also identifies some near-term challenges confronting the initiative, including decentralization and associated monitoring and follow-up by the Ministry of Health; integrating the initiative with other movements toward more comprehensive health care for women, children, and adolescents; development of individual and collective incentives; and more active involvement of communities and service users within the framework of the Citizen Participation Law.

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ABBREVIATIONS

CICO	Community Children’s Feeding Centers
ENDESA	Nicaragua Demographic and Health Survey
IBFAN	International Baby Food Action Network
INCAP	Nutrition Institute for Central America and Panama
INEC	National Statistics and Census Institute
MBFHI	Mother and Baby Friendly Health Units Initiative
MINSA	Ministry of Health
MSH	Management Sciences for Health
NGO	Nongovernmental organization
PAHO	Pan American Health Organization
PL 480	Public Law 480 (United States)
QAP	Quality Assurance Project
SILAIS	Local Integrated Health Systems
SIVIN	Integrated Nutritional Surveillance System (Sistema Integrado Vigilancia Nacional)
UNICEF	United Nations Children’s Fund
URC	University Research Co., LLC
USAID	United States Agency for International Development
WHO	World Health Organization

THE NICARAGUA MOTHER AND BABY FRIENDLY HEALTH UNITS INITIATIVE: FACTORS INFLUENCING ITS SUCCESS AND SUSTAINABILITY

I. INTRODUCTION

The reasons why breast milk is the ideal food for newborn infants and why breastfeeding is beneficial to the mother have been demonstrated through studies and evidence collected worldwide. It has also been found, however, that until recently, there was an alarming decrease in the practice of breastfeeding in most countries due to social, cultural, and economic factors, to the detriment of the mother's and child's health. In response, global society has carried out coordinated actions involving heads of state as well as associations and organizations active in global health, especially women's and children's health. Many countries have committed themselves to promote, protect, support, and encourage breastfeeding in order to improve morbidity, mortality, and malnutrition indicators and create a better future.

In 1992 and in light of these commitments, the United Nations Children's Fund (UNICEF) and the World Health Organization (WHO) launched the Baby Friendly Hospitals Initiative. By April 2004, some 19,000 hospitals in 150 countries had been certified as baby friendly. The initiative has helped improve the quality of infants' diets, as revealed by a recent UNICEF survey of case studies of successful baby friendly hospital programs, which found that the situation has improved in several countries since the initiative was launched.¹

Experience has shown that recovering the practice of breastfeeding requires not only laws to regulate the marketing of breastmilk substitutes but also, and more importantly, the political will to carry out actions to effectively promote, protect, and support breastfeeding, with the accompanying surveillance mechanisms.²⁻³ These actions include the formation of multi-sectoral committees; actions to reform the health sector and organize support in the communities; the definition of laws to protect women's rights to breastfeed; the development, implementation, monitoring, and evaluation of nutrition and food policies for women and children; and counseling that encourages exclusive breastfeeding up to the age of six months and continued breastfeeding with complementary foods up to two years of age, in all of the institutions and organizations that promote these programs.

Nicaragua began its first efforts to promote breastfeeding over 24 years ago as part of these global efforts. It made the necessary commitments at the legislative and institutional levels, in the institutions involved in maternal and child health. It established strategic alliances with international and nongovernmental organizations, and worked intensively with organized civil society. Over the past 12 years, the Nicaraguan Ministry of Health has taken the lead in implementing the Mother and Baby Friendly Health Units Initiative (MBFHI),⁴ with the support of UNICEF. The initiative has developed and been sustained in many ways: more health units, more kinds of units (not just hospitals), supporting laws, public education, and numerous quality assurance and other techniques that improve management and compliance with good practice.

At a global level, the baby friendly hospitals strategy has run into problems related to supervision and sustainability. Some countries have fallen backwards after achieving certification, unable to ensure that

¹ UNICEF, *Baby Friendly Hospital Initiative*, 2004.

² Quinn et al., *Improving Breastfeeding Practices*, 2005.

³ WHO, *Global Strategy*, 2003.

⁴ In Nicaragua, the Baby Friendly Hospital Initiative is called the "Mother and Baby Friendly Health Units Initiative" to reflect the broader scope of this program.

the ten steps to successful breastfeeding continue to be successfully practiced. A review of the initiative's certification process concluded that the norms and criteria required for certification—the ten steps—are based on sound evidence, are easily met, do not require substantial financial investment, and have been strongly advocated.⁵ However, a mechanism that ensures their continuing fulfillment has not yet been tested and widely adopted. In response, UNICEF has stepped up its efforts to identify successful experiences and lessons learned, and has developed and launched new sustainability guidelines for the initiative.

Funded by the U.S. Agency for International Development (USAID), the Quality Assurance Project (QAP) in Nicaragua, in cooperation with the Ministry of Health and UNICEF, proposed the present study to document the extent of the continued growth and sustainability of the initiative and to identify how quality assurance principles have contributed to its implementation, constraints, and the factors that have contributed to its success. In other words, this study sought to document the characteristics that make this experience an international model to emulate.

II. BACKGROUND

A. Nicaragua's Early Support for Breastfeeding

Breastfeeding has been officially supported in Nicaragua since 1980, when the first steps were taken to promote the practice. Several commitments were made at the time, at the legislative and institutional levels, to promote maternal and child health. Strategic alliances were established with international and nongovernmental organizations (NGOs) that work with organized civil society, so that the culture of breastfeeding—as a symbol of health, love, and harmony with nature—would once again be adopted by Nicaraguan society. Decree 912 to promote breastfeeding was issued in 1981; it declared the promotion of breastfeeding to be a matter of public interest and created the National Breastfeeding Commission.

In 1988, in the context of the Campaign to Defend the Life of the Child, the Ministry of Health drafted the first National Breastfeeding Plan. The Ministry's Nutrition Office began to carry out the plan with the support of several government institutions, but could not fully implement it because of the country's difficult political situation.

In 1990, with the change in and restructuring of the government, the institutions responsible for carrying out the Decree 912 were abolished. Previously, because of the economic blockade imposed against the country, formula was extremely scarce, but this situation began to change as soon as the blockade was lifted. In response to these changes, a social-legislative committee to support breastfeeding was established, charged with reviewing the decree and proposing new legislation on the subject, which would once again take up the provisions of the International Code of Marketing of Breastmilk Substitutes.

In 1991, organized civil society also stepped up its efforts to support breastfeeding. The Woman and Family Center decided to make breastfeeding the focus of its actions. It carried out community health projects and supported institutional efforts, and by 1997 had trained counselors in 23 communities in the departments of Carazo, Granada, and Masaya.

Stimulated by these actions, the Ministry of Health with the support of UNICEF, the Pan American Health Organization (PAHO), and the Nutrition Institute for Central America and Panama (INCAP) convened a national forum on breastfeeding in 1992 and participated in a national women's meeting. One of the recommendations that came out of these meetings was to reactivate the National Breastfeeding

⁵ Cadwell and Turner-Maffei, "Focused Accreditation of Services, 2000."

Commission, with the participation of relevant government ministries, universities, professional associations, the National Assembly, and civil society organizations.

B. The Initiative Worldwide

In 1992, the United Nations Children’s Fund and the World Health Organization launched the Baby Friendly Hospital Initiative at a global level. Its main objective was to change all the practices in the hospitals that interfere with breastfeeding, in order to improve the quality of care.

For a hospital to be certified as baby friendly, it must put in practice the “Ten Steps to Successful Breastfeeding” set out in the joint WHO/UNICEF statement of 1989 (see Appendix A).

C. The Initiative in Nicaragua

The Nicaraguan Ministry of Health adopted the initiative in 1993 with UNICEF’s initial and continuing support. In doing so, the Ministry renamed the initiative the Mother and Baby Friendly Hospitals Initiative in order to encompass the mother-child pair. From the very start, the vision was a forward-looking one, as people were aware that other quality standards, in addition to those related to breastfeeding, would have to be included in order to continue to improve the quality of care provided to women and children.

In putting the initiative into practice, several actions were taken and modifications made that would make it possible to develop the initiative in accord with the progress made in public health in the country. One of the first of these, as noted above, was to conceptually include the mother-child pair. It was also decided that the steps would be followed not only in the maternity and newborn wards but also in all pediatric services, and not only by the personnel directly involved in care for mothers and children, but also by administrative personnel, including support staff.

Another change was made in keeping with the structure of the country’s service network. Women typically go to a hospital for care during childbirth and remain just a few hours. Their prenatal care is provided at the primary care level, at health centers, and health care providers at this level have far more contact with them than hospital personnel. For this reason, it was determined that the primary care units should also be included in the initiative. Furthermore, health centers have opportunities to prepare women for breastfeeding during prenatal care.

Thus, the national inter-institutional, inter-agency technical team responsible for promoting the initiative modified the criteria by adding an eleventh step that targets the primary care level.

D. Building Support for the Initiative

The National Commission to Promote Breastfeeding includes a number of civil society organizations and other institutions, so the work of promoting breastfeeding is carried out not only in the health sector, but also in the sectors covered by the various organizations involved. This required the identification of the roles and responsibilities of each of the participating actors and resulted in a wide range of actions. For example, legislation on breastfeeding and the relevant provisions of the Labor Code were revised. Steps were taken to raise awareness among Ministry of Health personnel and the population in general on the benefits of breastfeeding. National workshops were organized, and representatives participated in international meetings, forums, and other scientific events. Events were organized in the communities, such as poetry and song contests on the topic of breastfeeding. Banners were strung across highways, posters and radio spots were produced, and training manuals were prepared for health brigade members and community promoters. All of this generated a great deal of enthusiasm across the country to participate in promoting, protecting, and supporting breastfeeding.

In 1993 the Ministry of Health, with the support of PAHO/INCAP and UNICEF, carried out a study on health personnel's knowledge of breastfeeding, entitled "Hospital Practices That Interfere with or Favor Breastfeeding."⁶ The study results provided the starting point for the Mother and Baby Friendly Hospitals Initiative. During this same period and during the celebration of World Breastfeeding Week, three hospitals with favorable conditions made the commitment to implement the hospital-related ten steps: the José Nieborowsky Hospital in Boaco, the San Juan de Dios Hospital in Granada, and the Fernando Vélez Páiz Hospital in Managua. One of the first actions was to train staff using the initiative's basic, 18-hour course, with an emphasis on the gaps in knowledge identified in the study.

In 1994, the Ministry of Health, with the support of Wellstart International and USAID, carried out a study on breastfeeding practices and promotion in Nicaragua.⁷ As a result of this study, five health areas were identified to be prioritized in a national plan: 1) support for the Mother and Baby Friendly Health Units Initiative; 2) the review and updating of information on breastfeeding in the general education programs; 3) the establishment of breastfeeding support groups in the community; 4) the consolidation of a legal framework to favor breastfeeding; and 5) the development of a social communication strategy.

In 1996, the country's Labor Code was revised, and proposals were introduced to ensure greater support for working mothers who breastfeed. Unfortunately, however, these proposals were not approved. In the wake of this defeat, the Ministry of Health decided to make the necessary provisions for its own workers and issued Ministerial Resolution N° 54-94 to support breastfeeding. Although it covers only health personnel, the resolution has served as a model for other state and private institutions that have adopted it as their own. It has been ratified by each new Minister of Health.

In 1998, the members of the National Breastfeeding Commission signed a document that outlined agreements and commitments, defined various institutions' functions in support of the commission's work, and called for the fulfillment of Law N° 295, the Law to Promote, Protect, and Maintain Breastfeeding and Regulate the Commercialization of Breastmilk Substitutes.

A strategic national plan was formulated with the participation of the Ministries of Health, Education, and Government (which presides over the National Police and the penitentiary system). It defined each Ministry's roles and responsibilities. The activities outlined in the plan were evaluated every six months. A representative of the Women's Institute on the commission commented at the time that "Women's groups in other countries are asking us, how did you do that?" The answer was that the plan was established on the basis of:

- A common, shared vision of the initiative among agencies,
- The institutional reorganization not only of the Ministry of Health, but also of other ministries in accord with the initiative, and
- A generalized sense of ownership for the initiative.

One factor that has facilitated implementation of the initiative is the organization of civil society. The National Pro-Breastfeeding Alliance was created with the participation of several nongovernmental organizations that implement projects in maternal and child health and nutrition. These organizations are represented on the National Breastfeeding Commission through a delegate who serves as coordinator. They have played an important role in supporting and promoting breastfeeding, particularly in terms of community organization and political advocacy.

The commission's coordinator has been a very enthusiastic participant ever since the movement began over 17 years ago. She says her greatest frustration is not having the same economic resources as the transnational companies, resources that would enable her to respond with matching vigor to their

⁶ Cruz and Navas, *Prácticas hospitalarias*, 1993.

⁷ Navas et al., *Assessment of Breastfeeding*, 1994.

campaigns promoting the use of breastmilk substitutes and would ensure that the law regulating this matter is effectively implemented: *We haven't been able to reach an agreement with the advertising agencies, to make them aware of the ways they are violating Law N° 295.* (X.S.)

The Social Security Law contains provisions to promote breastfeeding among women covered by the program. It establishes that breastmilk substitutes can be covered only if prescribed by a doctor to mothers who for any reason cannot breastfeed. It accepts prescriptions from doctors in the private sector, however, who tend to be less informed and thus more likely than public providers to recommend breastmilk substitutes. The National Breastfeeding Commission has been trying to change this situation, but has not yet been able to formulate a proposal acceptable to program users.

The Ministry of Education, as a member of the National Breastfeeding Commission, has been working to promote breastfeeding, encouraging students to participate in the celebration of World Breastfeeding Week and International Women's Day and organizing essays, murals, songs, poems, and other activities on the topic. It has also encouraged high school students to write their senior theses on the topic, resulting in a constant flow of students to the Ministry of Health in search of information.

III. STUDY OBJECTIVES

A 1999 assessment indicated that the Nicaragua mother and baby friendly program was the likely cause of substantial improvements in infant feeding practices in Nicaragua.⁸ A comparison made of national demographic and health survey data (ENDESA) in 1993, when the program was launched, and in 1998 showed over a three-fold increase in average duration of exclusive breastfeeding (from 0.6 to 2.1 months), a 25% increase in average duration of any breastfeeding (from 12 months to 15 months), a nearly two-fold increase in percent initiating breastfeeding within 30 minutes of birth (from 41% to 79%), and a near tripling of the percent of infants under four months exclusively breastfeeding (from 11% to 30+%).

The present study sought to determine if the positive trends documented in the 1999 evaluation have been sustained and whether the program has continued to grow to additional health centers, posts, and municipalities. The study also aimed to identify the factors that have contributed to MBFHI's success.

The specific objectives of this study were to:

- Identify how attention to quality and quality assurance principles has contributed to the implementation of MBFHI;
- Identify other determining factors that have contributed to the initiative's success;
- Identify the constraints, the successful experiences, and the lessons learned;
- Systematize the steps that lead to certification and recertification;
- Identify actions aimed at achieving sustainability;
- Determine how expanding the concept to include both mother and child has contributed to the initiative; and
- Identify costs and sources of financing.

IV. METHODOLOGY

A. Type of Study

This is an assessment of an ongoing national program based on both qualitative and quantitative information. Data collection methods included focus groups, in-depth interviews with key informants involved in the initiation and implementation of the Mother and Baby Friendly Health Units Initiative,

⁸ Sandino and Wallace, Building Capacity, 1999.

and a literature review. To gather quantitative information, several forms were designed to collect statistics from the Ministry of Health's departmental offices, health centers, and hospitals.

B. Universe and Sample

Given the nature of the study, the universe to be analyzed comprised the various population groups involved in some way or another in the initiative. The geographic distribution was the national territory of Nicaragua. These include the Local Integrated Health Systems (SILAIS), which are 17 Ministry of Health structures at the departmental level and that are located in departmental capitals.

Nicaragua is divided into 17 departments, each of which is further divided into municipalities (*municipios*). Within the Ministry of Health's structure, each department constitutes a Local Integrated Health System (SILAIS). Each SILAIS has at least one hospital (Managua has four, and Carazo and Estelí each have two), a health center in each municipality, and numerous health posts.

At the secondary care level are the hospitals, which are also located in the departmental capitals; 22 hospitals offer maternal-child services and were thus targeted for certification through the initiative. The primary care units are health centers and posts. Located in the municipio capitals, the country's 154 health centers tend to have more highly trained staff. Located in the most distant, rural areas, health posts focus especially on prevention.

The population groups of interest to this study are those associated with health units (i.e., hospitals, health centers, and health posts) that have been certified as mother and baby friendly or have tried but not yet succeeded in achieving certification. These include:

- Users of "hospital maternal homes," lodgings affiliated with hospitals where breastfeeding mothers can stay while their infants are hospitalized;
- Members of the breastfeeding committees in the health units;
- Members of the breastfeeding support groups;
- Representatives of cooperating agencies and civil society organizations and managers of projects involved in the initiative; and
- High-level decision makers in the Ministry of Health's central offices, including the Nutrition Office, SILAIS directors, coordinators of the Integrated Child Health Program, and the initiative's founders.

C. Sample Design

A simple random sample design was used, stratified by clusters according to the Ministry of Health's administrative structure. Using purposeful criteria, seven SILAIS were selected to balance accessibility and regional representation. Within the seven SILAIS, the study sample included the SILAIS hospital plus a randomly selected health center and its associated municipalities. Selection was limited to facilities engaged in some MBFHI activity, regardless of certification status. This sample represented 41% of SILAIS (7 out of 17) and 36% of hospitals (8 out of 22) that provide maternal and child health services, including all the departmental hospitals in the selected SILAIS and seven health centers with their associated municipalities. The study visited the selected SILAIS and health facilities to collect data.

The study interviewed informants in the selected health units and external informants involved in the MBFHI implementation. Information on self-assessment was obtained from a special round of interviews with key informants from 19 health units that had interesting self-assessment experiences. Key informants were selected based on the following criteria: member of breastfeeding committee, member of an MBFHI evaluation team, or coordinator of a project that supported the MBFHI.

D. Data Collection Methods

Interviews were conducted and records reviewed in the selected SILAIS and facilities. The coordinators of each unit's breastfeeding committee were interviewed. In three SILAIS, interviews were also carried out with the coordinators of the Integrated Comprehensive Women's, Children's, and Adolescent Health Care Program and the SILAIS director.

Focus groups were organized in three hospitals, with their associated maternal homes, and seven health centers. Two of these sessions were not productive and thus excluded from this report.

For the key informant interviews, a selection was made of people who had been suggested by the investigating team and who had been or are involved with the initiative. Thirty key informants were interviewed, more than initially planned because of the diverse range of participants involved at each stage of the initiative's implementation (see Table 1). Responses of key informants are woven into the findings of this report and presented in italics.

	Hospitals	Health Centers	SILAIS	Other	TOTAL
Focus groups	3	7	-	-	10
Key informant interviews	9	8	3	10*	30
Self-assessment interviews	7	7	4	1	19
TOTAL	19	22	7	11	59

* Other key informant interviews were held with individuals, such as financial supporters, members of the National Commission for Breastfeeding, and directors of projects collaborating with MBFHI.

The first topic, organizational structure, had three categories of information: structural and functional organization, planning, and coordination, with several relevant indicators in each category.

E. Collection of Managerial Information

Eight data collection instruments were designed to gather information; they were validated at the health center in Ticuantepe in Managua. The forms guided interviews with health unit breastfeeding committees in both certified and uncertified facilities, with key informants of different types, and focus groups of breastfeeding counselors (trained community volunteers who lead mother support groups) and mothers of hospitalized children. Two types of information were addressed by many of the forms: organizational structure and financial aspects.

Organizational structure had three categories of information with several relevant indicators in each:

- Structural and functional organization indicators:
 - Whether the functions of the breastfeeding committee are defined,
 - Whether the functions of the quality/certification circles are defined,
 - Initial and current number of support groups,
 - List of members of the support groups, by community,
 - Initial and current number of other actors involved, and
 - Total number of health personnel (by positions).
- Planning indicators:
 - Contained in the annual operating plan,
 - Incorporated in strategic plans,
 - Incorporated in management commitments,
 - Improvements have been implemented,
 - Personnel are informed of actions carried out by the breastfeeding committee,
 - The breastfeeding committee's commitments and results,

- Training plans,
- Total number of people trained in the breastfeeding course, and
- Results of self-assessments broken down by steps and years, after certification.
- Coordination indicators:
 - Commitments made by the breastfeeding committee and the results of these commitments,
 - Agreements made with other institutions, and
 - List of collaborators and the agreements made with them and/or guidelines provided to them.

Financial aspects: Various types of subjective information related to financial aspects were collected in the interviews, including such topics as training and human resources, management, NGOs that received funds, and funding sources. This information was used to corroborate and interpret financial data obtained from reports and other records.

A technical team formed to coordinate the study and included the official in charge of the Breastfeeding Program in the Ministry of Health's central offices, UNICEF's Health and Nutrition Officer, the coordinator of USAID/QAP in Nicaragua, and the QAP director of research. The team discussed the preliminary and final results of the study and contributed to the final report.

In addition, a preliminary draft of the report was distributed to each of the key informants for their review, and they were invited to a meeting held to obtain their comments and suggestions. At the end of the meeting, consensus was reached on several important observations, which are included in this report.

V. FINDINGS

Since the 1993 start of Nicaragua's MBFHI, the number of certified hospitals and other health units has grown to a large proportion of the health units in the country. Thus far, 11 (out of 17) SILAIS, 17 (out of 22) maternal-child hospitals, 129 (out of 154) health centers, and 644 (out of 1048) health posts have been certified as Mother and Baby Friendly. This section addresses the questions: Has this growth been accompanied by sustainable health unit practices and by improvement in breastfeeding practices? If so, what factors have caused this success?

A. Development of the Initiative

The initiative incorporated many elements of quality assurance in its development. First, it explicitly defined what "mother and baby friendly" means in terms of quality: selecting the steps or standards providers and health units must meet, and then defining quality indicators related to inputs, processes, and results. The initiative created explicit processes for training providers, self-assessment, external evaluation, and certification, and provided the resources necessary to carry out the certification process.

To measure and improve quality, breastfeeding committees were established in each health unit. They are responsible for monitoring fulfillment of the 11 steps. They also collect data to use in decision-making and in identifying opportunities for improvement and are responsible for taking actions to improve quality.

The initiative also relies on many principles of quality assurance: focus on the client, team work, making improvements to processes, and using data to identify opportunities for improvement. This section illustrates how these principles and methods have been put into practice.

1. Stages of Institutionalization

Beginning in the 1980s, favorable conditions were created for the initiative through the implementation of various isolated, minimally organized activities. Among the actions that would be most important for the following stage was the establishment of hospital maternal homes where women could stay before and after childbirth.

The following stage included actions by the leadership of the Ministry of Health, the lead institution for health policies, to raise awareness in society. These actions were carried out both internally, within the ministry, and externally, in civil society, the universities and other training institutions, and other ministries in the social sector.

It was in this context that the Mother and Baby Friendly Hospitals Initiative was adopted and implemented in three hospitals, which committed themselves to following the ten steps to successful breastfeeding. The initiative was also presented to the remaining 19 maternal-infant hospitals, which soon assumed the challenge as well, thus expanding the initiative to the national level. Although this initial commitment was an immediate and spontaneous one, the process of achieving certification was slow, for two reasons. First, the MOH was determined to ensure that the steps were rigorously followed. Second, based on the situation and experience in the country, it was decided that the steps originally defined by WHO/UNICEF would have to be modified to include both mother and infant (discussed below). Later, the initiative was expanded to the primary care units, to involve the entire health service network. A systems approach was used to define steps or criteria for the primary, secondary, and SILAIS levels, with community participation. The initiative was implemented through the formation of institutional policies and procedures, as well as a Ministry of Health resolution. It was incorporated into the health units' management commitments, and included in monitoring instruments, such as the Guide to Improve Health Care, in strategies to prevent malnutrition, and most recently in the National Health Plan. The ultimate form of institutionalization is the internalization of the initiative by the health workers in every unit. This qualitative leap means that despite the changes in ministers and turnover in personnel that occur continuously, the new personnel quickly assume their role in defending the policies and practices related to breastfeeding. The participation of civil society and the community is another key part of efforts to defend the right of women and babies to breastfeed.

It is important to emphasize that a favorable external environment for the initiative was created through the approval of supportive laws, institutional leadership values, and complementary strategies (such as the Mother and Baby Friendly Universities Initiative discussed in the Findings Section under External Context,) and intersectoral participation in the initiative, which has benefited from human and financial resources from various national and international funding sources.

From a political and administrative point of view, a decisive factor in the successful launching of the initiative was the support of the then Health Minister. She understood the importance and benefits of breastfeeding and supported the National Breastfeeding Commission in terms of laws and public policies as well as other matters: *In one hospital, the staff didn't pay much attention to us at first, so we asked for her help. She came and pulled a poster off the wall and read the ten steps from it. We were surprised to see that once the doctors learned she was there, the room was packed. She made a speech describing the steps and it was excellent.* (Member of the National Breastfeeding Commission)

The current head of the Breastfeeding Program has been in her post since 1997 and has always worked hand in hand with UNICEF. She has taken up the task of continuing to adapt, implement, and monitor the initiative nationwide, following up on implementation of the steps at both the primary and secondary care levels. One key informant said of her work: *She's in love with breastfeeding... she's the best, number one, totally committed to the initiative.* (Coordinator of the Breastfeeding Committee, Bertha Calderón Hospital). Another commented, *We've gone through a process of becoming passionate about this, of learning about the benefits, because you can't love what you don't know, and you can't defend it in ignorance.* (M.A. Urbina, Member of the National Breastfeeding Commission)

The determination and commitment of the Ministry of Health's technical staff motivated people in the health units to participate. This was not merely initial enthusiasm but rather enthusiasm that has continued. It has also been an important factor in the support received from international cooperation agencies, NGOs, and civil society, and has made it possible for everyone to work according to the same criteria. *It's hard to imagine going back. Progress has been slow but steady, sometimes painful, other*

times emotional. This has also played a part in the continuing support that some agencies have provided to the country in this wonderful project. (Dr. G. Navas, PAHO/INCAP Representative, Nicaragua)

Many projects, programs, and initiatives function well within an institutional environment, but few become as anchored in the daily work of the people involved, no matter their profession or field, as has this initiative. The director of a donor organization commented, *The initiative has been successful because of its integrating approach; people have never had such a full, rich experience with a project.*

Dr. W. Aguilar, a national evaluator discussed what had happened in his hospital, one of the first to be certified: *We had the support of UNICEF's Nutrition Department, of Dr. Sandino. The initiative was just getting underway at the time, and we didn't know where to turn for support, apart from them.* At the start, the huge task fell on the shoulders of a handful of people and demanded all the enthusiasm and support they could muster in the effort to get more people involved in organizing and implementing the initiative.

As facilities and personnel joined the initiative, they took visible steps to demonstrate their commitment. The hospital in Rivas made a particularly dramatic demonstration of its decision not to have *pachas* (in Nicaragua, *pachas* include bottles and nipple-shaped devices) in the hospital and of its determination to do whatever was necessary to get rid of them. A nurse gathered everyone together in the hospital parking lot and made a huge bonfire out of *pachas*, to the enthusiastic applause of the public, showing its repudiation of the practice of bottle feeding.

2. The Role of Values, Social Awareness, Solidarity, and the Mother-Child Pair

Dr. D. Bermúdez, Director Madriz SILAIS, who had advocated for expanding the initiative to the primary care level reported, *We were concerned because we couldn't figure out how to ensure food security to very young children, . . . but the benefits of exclusive breastfeeding were quickly proven through impact studies that demonstrated the results.* He had initially resisted the initiative: *I thought these policies were designed to cover up the truth of what was happening, given our political, cultural, and socio-economic situation . . . but after listening for a while and reading about what was happening in other countries, I began to see the light.*

One SILAIS director, in discussing his initial motivation, spoke both about his love for his country and about his bewilderment over the fact that bottle-fed children of women in a stable economic situation were suffering from the same kinds of illnesses that frequently affect poor children. He felt the focus should be on the economic benefits of breastfeeding, more than the socio-cultural ones. *We didn't understand what was happening, why these children were so sick, and we realized that breastfeeding is a biological inheritance and that babies who breastfeed grow up better. We discussed it with all the pediatricians, until I became fanatical about breastfeeding.*

In the markets of Managua, merchants adorned their stands not with traditional calendars but rather with posters and leaflets about the benefits of breastfeeding. In such ways, society as a whole began to organize to achieve this great social mission. The work being done by the Ministry of Health's technical staff was supported by a strong corps of community volunteers: *Mothers take their children to the markets and spend the day at the fruit and vegetable stands, and where they used to have a bottle in the mouth, sometimes covered with flies, now they've got a warm breast full of milk and love.* (Member of the National Breastfeeding Commission)

From the very start, the municipal governments, churches of all denominations, the private sector, and the population in general have shared in the emotion and the success of health personnel when their facilities are certified. They have participated in and presided over the official events, and have felt pride in the recognition given to their municipality. They have contributed in other ways as well: by providing logistical support, preparing the sites for events, and putting up decorations to celebrate the common achievement.

A great deal of work has been done with the country's birth attendants because of their role in working with pregnant women in the most distant and poorest parts of the countryside and in the least developed neighborhoods and because of their influence on the practices and customs of breastfeeding. One informant described how they used to recommend the use of *pachas* and formula, a situation that had to be changed, since the practice was *depriving our children of a wealth of health*. (Member of the National Breastfeeding Commission)

One national evaluator described the basis of the initiative's success in these terms: *This humanity, this commitment, is another thing that's been promoted over the years; our staff have a vocation and a social conscience that few other health ministries in the world can count on... it's a vocation to work on behalf of the people, and I don't say this lightly. It's also something that the older personnel, who've been working with us for a long time, help to inculcate among new staff*. (Dr. R. Cisnero)

3. Initiative Progress in Hospitals and Other Health Units

In 1995, the first hospital in the country was certified in Boaco SILAIS, in an event that aroused great expectations and demands not only in the Ministry of Health, but also in society in general. Shortly thereafter, the first primary care health unit was certified, the Pedro Altamirano Health Center in Managua SILAIS. Boaco SILAIS then became the first to achieve the certification of 100% of its primary care units as well as the departmental hospital.

Certification of Boaco SILAIS was the first departmental level certification in Latin America. This caused a great deal of excitement, and people began asking themselves, what's next? Certify the Ministry of Health as an institution? Certify NGOs, the private sector, universities? Certify the entire country?

The benefits of breastfeeding for both the community and the country in terms of maternal and child health and economic savings rapidly became apparent in the certified units, which was very helpful in promoting the program. When they saw the results, personnel who had previously been hesitant about the initiative would challenge themselves and colleagues to join in, in a positive competition: *Being breastfeeding friendly was seen as a prize, and this encouraged the health units to commit themselves and to take pride in participating in the initiative*. (Dr. G. Navas, PAHO/INCAP Representative in Nicaragua)

Another promoter of the initiative explained, *The staff make their efforts known and publish the results of cost-benefit analyses when they are certified, or of the impact of exclusive breastfeeding on children's health*. (Dr. I. Sandino, UNICEF Health and Nutrition Officer). The staffs of certified health units have contributed in innumerable ways to the efforts to encourage others to become the next to be certified as Mother and Baby Friendly.

B. Differences in the Initiative in Nicaragua

Why mother and child? The mother-child relationship is indivisible. Both need care: women, from the beginning of pregnancy and through pregnancy, childbirth, and the post-partum period; and children, from conception through birth and into infancy. The mother needs appropriate and timely advice on how to feed her baby and ongoing support through each of these early stages.

The concept of Mother and Baby Friendly Health Units grew out of the indivisibility of the mother-child relationship; both have needs, not only related to the pregnancy. . . . When children are in the womb, when they're born and grow, they require other kinds of care, so to be complete and sustainable, it has to cover all aspects of care. (Dr. G. Navas, PAHO/INCAP Representative in Nicaragua)

Why train all the personnel? In Nicaragua, training is provided not only to personnel in the maternal-child area, but to 100% of the personnel in all areas, including medical specialists and other professional staff as well as administrative and support staff. Each worker has some kind of contact with a mother when she comes in for care—the driver who picks her up, the receptionist who admits her—and this

contact provides opportunities to offer advice and support, from the moment she comes in until she is released. The decision to involve all the personnel was motivated by the vision of breastfeeding as a right, which requires people to go beyond the traditional view of breastfeeding as an issue to be addressed solely in the direct provision of care and to see it as something related to all aspects of the practice of health care personnel.

Having knowledgeable, skilled personnel has become a high-quality input that helps ensure the correct application of breastfeeding program norms, which is essential to the process of implementing the steps. Its immediate result is that 95% of women begin breastfeeding. Its medium-term result is the certification of the health unit.

Why are pachas restricted throughout the health unit? The restriction on the use of *pachas* is another difference in the implementation of the initiative in Nicaragua. In other countries, this restriction is limited to the newborn ward, but here it applies to all areas of the health unit, including the pediatric and oral rehydration units, in accord with Ministerial Resolution 106-2000. The decision to apply this norm throughout the health unit was based on evidence indicating that no baby should receive a bottle. Also, since diarrhea is a main cause of morbidity in the country and *pachas* are vehicles for transmitting the disease, the decision was made not to encourage the use of *pachas* among any age group. No certified health units allow bottles, pacifiers, or salespeople from formula companies to enter their facilities.

The role of the community network: Nicaragua carried out an inter-institutional grassroots health education campaign to train and organize thousands of citizens. A widespread network of volunteer collaborators was created, including grassroots health brigade members, volunteers in the malaria program, and birth attendants who previously had no formal training but were trained in providing care during childbirth and to newborns. Approximately 3,000 counselors specializing in breastfeeding and the feeding of children under two were also trained through this program. The network forms the basis for the Ministry of Health and NGOs to implement their programs in communities all over the country. The volunteers are committed to their communities and aware of their rights and obligations to promote health and encourage people to take good care of themselves. The network guarantees that women can receive counseling in their communities on the benefits and techniques of breastfeeding, take advantage of community-based nutritional surveillance, and have any problems identified for referral.

Extension to the primary care level: Nicaragua's decision to extend the initiative to the primary care level was another important difference between it and other countries in terms of strategy. *The process was a very dynamic one; at the start, a lot of decisions were made during the course of implementation, as we identified a need for changes in the initiative conceived at the global level.* (Dr. I. Sandino, UNICEF Health and Nutrition Officer)

To implement the initiative at this level, substantial changes were made to national policies and norms and to the steps to certification. It was a slow process that used validation and consensus among all the actors who worked in the area of breastfeeding.

When hospital personnel were trained, they recommended that primary care staff also be included, to ensure continuity in the support provided to mothers. Work with hospital support groups involved in these programs became vital to the initiative's continuing success.

Similarly, when they saw the changes in the health of breastfed children, staff in the Madriz SILAIS became especially enthusiastic and asked the Ministry of Health to extend the initiative to the primary care level. In response, technical discussions were undertaken to plan the expansion and adapt the ten steps that had been defined for the hospitals. A total of eleven steps was established: the last relates to ensuring compliance with the country's Breastfeeding Law. The Ministry of Health developed this proposal with UNICEF's support and then officially presented it to UNICEF's regional offices. It was approved as the Mother and Baby Friendly Health Units Initiative.

A nurse who is a member of the breastfeeding committee at the Mántica Health Center, in León SILAIS, made the following comments in explaining why it is important for the hospitals and health centers to work closely together on the initiative: *The mother should be with her child for early stimulation and to start the flow of milk. We make sure they're breastfeeding when they leave the hospital, especially the mothers who've had caesarians, who stay for two days, so that when they get home on the third day, there's enough milk. By the time they come in to the health center for their post-partum checkup, the importance of breastfeeding has already been instilled in them through the education they've received during their prenatal checkups and through their own experience during those first few days. And as they see the benefits, their motivation increases so that they'll continue breastfeeding up to the age of six months. Once they finish their post-partum checkups, the children come in for checkups in the Growth Monitoring/Promotion Program, where the mothers continue to be encouraged and see the benefits in terms of the decrease in diarrhea and respiratory problems. And they're convinced and continue to do it. And once a woman has had six months of these good, positive experiences, she becomes someone who's going to transmit this to the next generation, to the rest of her community, and this creates a virtuous circle that leads to an increasing number of people working to promote breastfeeding.*

C. Implementing the Initiative at the Facility Level

The initiative is nationwide, setting policy that everyone is supposed to follow. Nevertheless, local health authorities and personnel have to make the decision to take on the task of seeking certification and assuming the responsibility it implies.

Health care personnel see it as a challenge that sometimes even involves some healthy competition. Dr. R Cisneros, an evaluator described the competition among the SILAIS as follows: *Everyone wanted to be the first to be certified, before the other SILAIS, because there's a certain prestige, a certain level of recognition, to be certified as mother and baby friendly before the others in your area. . . . It's something to be proud of. The personnel have been the ones really pushing it. The SILAIS directors listened, found out what it was all about, and when the staff heard what other people were doing, they were envious and wanted to get involved.*

1. Establishing the Breastfeeding Committee

An important part of organizing the implementation process is deciding how the various tasks and responsibilities will be distributed. To do this, once units have chosen to participate, the first step is to establish a breastfeeding committee in the unit, a team responsible for providing support, supervision, and monitoring to ensure that the criteria for each step to successful breastfeeding are met.

When the initiative was launched, it was decided that these committees should be organized according to the situation and needs of each unit. They fall under the authority of the hospital or health facility management team. They typically include the heads of services and wards in the hospitals or of the different areas in the health centers; they are usually led by the unit's director. In hospitals with a food and nutrition department, it is recommended that this department coordinate the committee, but not all hospitals have nutritionists.

Once personnel have taken the breastfeeding course and understand the initiative's mission, they begin to carry out the multiple tasks involved in ensuring that the steps are followed. In guiding this work, the committees have taken on a range of functions, which have evolved over the years.

One national evaluator who helped found the committee in his hospital said, *The committee plays a fundamental role in the hospital; it's a pillar. Successful hospitals, like those in Somoto and Boaco, are set on the solid foundations of a good committee.*

A member of a hospital committee described the process of forming the committee as follows: *When we were trained, we were told to form a committee, and it was recommended that the director serve as*

coordinator, the deputy director as vice coordinator, and the professional staff divide up the functions, but none of this was written down.

In virtually all the units assessed for this report, the staff believe that the committee's role should be one of constant supervision: to ensure that all tasks are being carried out, to call meetings to follow up on planned activities, to celebrate breastfeeding week, to represent the health unit in monitoring and/or supervision visits, to keep the public notice boards attractive and up-to-date, to organize talks and motivate staff to carry out the plan, to handle the difficult task of training personnel in the municipality's various health facilities, which sometimes number ten or more and might be located at a considerable distance, to organize the breastfeeding support groups, to train the counselors, and to coordinate with local organizations for their support, which is one of the most complicated tasks. The committees also represent the units during the external evaluation, a critical moment when the committees are responsible for organizing everything required for certification and planning the event to celebrate it, and are anxious to ensure that everything turns out well. One of the most important roles of the breastfeeding committee is to undertake self-assessments of health units in which data are collected, problems uncovered and investigated, and possible corrective actions implemented.

People have been enormously creative in implementing the steps and explaining them in an appealing way to users: with graphic designs in the shape of ten or eleven feet, or flowers, hearts, or the numbers on a clock, on colored paper and adorning the facilities' walls.

Functions are currently defined in only 36% (4 of 11) of these committees. When asked about this during the study, many committee members recognized it as a potential weakness. One consequence is that they often spoke not according to a single set of commonly shared criteria, but rather as the heads of the various services. This is more evident in the hospitals, where there is a stronger need for clearer definition than in the health centers.

One challenge regarding committees' operations is to define new goals and functions, since ideally, the committees channel the entire unit's desire to continually improve the implementation and monitoring of the ten or eleven steps to successful breastfeeding and so should be dynamic and proactive.

Some 45% (5 of 11) of committees report that they keep the rest of the personnel informed about their work, and 64% (7 of 11) say that they do innovative things to keep up the motivation and the spirit of competition, such as beauty contests to select the breastfeeding queen each year, where the basic requirement is that contestants are breastfeeding.

The committees have also been involved in formulating annual operating plans in their units. When considering the initiative's sustainability from a management perspective, it is vital to include team work as a crosscutting component in everything related to the quality of care. The study was encouraged to find that from 1995 to 2005, 82% (9 of 11) of the committees interviewed participated in the planning process. And 83% of units include the initiative and the challenge of either achieving certification or maintaining it among their management commitments, a management tool introduced by the Ministry of Health about three years ago.

Several of those interviewed commented on the importance of management's support for the breastfeeding committee. One explained, *When the committee doesn't feel it has the director's support, it pulls back a bit. It has to be very strong to be able to overcome the lack of attention. This is one of the factors that can make the committees lose ground when they try to carry out their activities and find that the management isn't supportive. There was a time when we joked that all the directors would have to be members of the breastfeeding committees.* (Dr. W. Aguilar, National evaluator)

The Boaco hospital was the first to be certified, a source of pride reflected in the words of committee members. The coordinator explained, *Boaco has some very special characteristics. There's very little turnover among the staff. We've been working together for so many years that we see ourselves as a family, and this helped a lot—we formed a very solid team that's still together, and this helped us set the*

goal and achieve the objectives. There was a lot of enthusiasm about what we were doing because we saw that it was worth it, that it was going to benefit us in a lot of ways. (Dr. B. Fonseca, National evaluator)

The following excerpts from interviews reveal some of the committees' strengths:

The first to be trained were the doctors who work with women and children, the management, the educator, the teacher, and of course the head nurse. . . . We took the lead in the initiative and began to talk about what we were going to do and what was included in each step. We decided to give talks to the staff, with everyone using the same language. Then we started working with the health posts, went out as a group and gave the same talks to them. We made posters for the daily talks in the waiting rooms, the lab, the admissions area, everywhere. (Member of the hospital committee in Rivas)

We frequently monitor the implementation of the eleven steps, so we can intervene wherever we find weak points. (C.S.)

We're aware of whatever happens, we see what's going on in the maternal home, we try to find financing. (Member of the hospital committee in Matagalpa, who mentioned that the committee is trying to do its job as best it can although it feels somewhat overlooked by the hospital's director.)

The director of one SILAIS, talking about the importance of support for the committees, said, *The initiative should be given a higher priority than has been the case up until now, by everyone from the president on down.* (Dr. D. Bermudez, Director of Madriz SILAIS)

Other people interviewed talked about the factors that contribute to the quality of their work: *We had the techniques, a plan of action, an organizational plan, and above all, a wide field in which to work.* (Dr. B. Fonseca, coordinator of the hospital committee in Boaco)

This sampling of comments suggests the importance of the committees in the view of staff. When the committees are not well structured or do not have strong leadership, the initiative runs the risk of falling apart or becoming a routine that omits important aspects, which makes it hard to keep up the quality of the work or to maintain certification. Several people mentioned that they need the support of their leaders to carry out their functions. Some suggested that each health unit should analyze its operations and restructure them if need be.

The following statements reflect some of the constraints the committees face:

The coordinator of the Integrated Women's, Children's, and Adolescent Health Program in one SILAIS commented on her two stints as a committee member: *I didn't hear about any specific guidelines. I was working in a health center when we were certified, and we were told to form the committees, but there was no follow up. . . . Currently, each committee decides when to meet and what to do, and there's no monitoring of their internal organization, just training plans and personnel's knowledge of breastfeeding.*

The committee has changed with the turnover in personnel, now we rarely meet, and everything falls on three of us nurses who work because we're passionate about this. (Member of the hospital committee in Masaya)

We don't function as a committee in the hospital's planning process. The tasks we do aren't planned, and the initiative isn't included in the annual operating plan. (Member of a hospital committee)

2. Training

Guidelines were established for the implementation of the initiative's second step, according to Lic. N. Cruz, Coordinator of the International Baby Food Action Network (IBFAN). For the first time, and in contrast to other training activities carried the Ministry of Health, MBFHI training covered all staff. The tools for training both the health care personnel and the breastfeeding counselors had to be developed quickly.

In the case of health care personnel, training sessions were designed for three groups: doctors and nurses; doctors, nurses, and nurses' aides; and administrative staff. A basic 18-hour course designed by WHO and UNICEF was provided to all personnel, including doctors, nurses, nurses' aides, social workers, psychologists, and others. An additional course on skills in managing breastfeeding, aimed at doctors and nurses, and a training session aimed at administrative staff not directly involved in care provision were developed. The Primary Care Breastfeeding Manual, aimed at personnel in health centers and posts, was produced to use as a basis for training. Some 10,000 copies were distributed nationwide, enough so that virtually everyone could have one. One of the most important topics covered in the manual was interpersonal communication, to develop people's counseling skills.

For the training sessions, a national team was prepared first, followed by local teams. The training sessions were not done in cascade form, in order to ensure the quality of the information provided and local capacity development.

More recently, with the collaboration of the Ministry of Health and several other organizations, an independent study module on breastfeeding was designed, with four units for facilitators and participants. It is designed to be used in updating and refreshing people's knowledge. This makes it possible to train a large number of personnel at the same time, without spending a great deal of money on meetings.

Nursing personnel took the lead in the workshops, as both students and facilitators. Those interviewed commented that they did not see it as hard. The health workers approached the training as a collective challenge; the ones who did not know how to read asked for help in understanding the material and listened to others read aloud, so they could learn and be the first to respond in the evaluation. This made it possible for everyone to learn. People were extremely enthusiastic and did not want to be left out.

The director of Integrated Child Health Care in one SILAIS explained, *Training the staff is hard work that costs us in terms of time, but we felt like it was easy, since when you want to achieve something, you're very satisfied when you reach your goal.*

In some health units, it took a year or two to train all staff. A committee member in a Managua health center explained, *We held study circles every week and everyone participated, like in the National Literacy Campaign in the 1980s. People went around carrying dolls and doing demonstrations on breastfeeding positions and techniques.*

A staff person from another health center said, *Difficulties? I don't recall any. We had so much dedication and enthusiasm that it didn't matter how much time it took. I'd go to bed at midnight, I was always studying, and there was a kind of competition among the staff to see who knew more.*

The topic of breastfeeding is included each year in the health units' training plans, with a priority on new personnel. Older staff, especially medical specialists, are less likely to attend, believing they already know the material. The topic is also included in continuing education plans, and the various units are facilitated by different people to help keep it interesting. Doctors who have already taken the basic course say that what they want now are new, updated units and bibliographic information to help them keep up-to-date.

To train the breastfeeding counselors, a guide for facilitators on establishing support groups was produced with technical assistance from the La Leche League in Guatemala. Their approach includes participatory activities for each of the topics covered. Topics were selected based on the results of research into the knowledge, attitudes, and practices of mothers. Effective interpersonal communication was also covered.

During the workshops, the breastfeeding counselors' motivation was most apparent. One of the topics most highly rated by both health personnel and counselors was a reflection on the feelings women experience during pregnancy and breastfeeding.

3. Organization and Functioning of Breastfeeding Support Groups

The initiative's tenth and hardest step requires the establishment of breastfeeding support groups and referral of mothers to them upon discharge. For hospitals it means working at the community level, where the culture and environment are quite different from what hospital staff are accustomed to. One knowledgeable source noted, *In this kind of community work, the hospital staff often feel like fish out of water.* (Dr. I. Sandino, UNICEF Health and Nutrition Officer)

For hospitals, the main constraint in organizing support groups lay in their weak link to the primary care level and even weaker link to the community. One strategy for overcoming this problem was for the hospital staff themselves to act as counselors, providing support in their own neighborhoods and communities. Also, given the obvious structural limitations hospitals faced in establishing support groups, NGOs and other civil society groups were identified to serve as allies in the task, along with the primary care units. This approach has helped strengthen the links between the two levels of care and between the hospitals and the community.

The responsibility for ensuring that hospitals refer mothers to the support groups has largely been assumed by nursing staff. They keep a list of counselors' names and addresses so they can refer each new mother to the counselor closest to her home. Alternatively, they can direct her to the local health center if necessary.

The Ministry of Health also recommended designating in the attending physician's report to the mother a line where the referral can be noted. To monitor this, mothers are asked when they leave the hospital whether their counselor's name and address are in the report. Mothers report whether it was done in each case in their user satisfaction interviews.

One doctor who works in a hospital described the process: *We had a lot of trouble at first, because the hospital serves a huge area. We've got patients who come in and then never come back, and we don't see them again. This has been solved since the primary care units have become involved; they help facilitate things, so we don't duplicate efforts. We rely on their support groups, and where the groups aren't well organized, we can refer people to the closest health unit, so the mother can go there.* (Dr. B. Fonseca, National evaluator)

A member of the committee in the Somoto hospital described a different mechanism: *It's centralized in our SILAIS. SILAIS staff have the list of all the counselors and groups, they're the ones who keep the list for each community, and we simply use the list to refer mothers who are having trouble.*

While there are different ways to organize support groups, the variation may also be related to some of the difficulties people are facing in implementing the initiative. Only 78% of the health units assessed have functioning support groups, while only 61% have lists of mothers by community. These figures confirm that even after certification, the staff still face challenges in ensuring that the steps to successful breastfeeding are being followed. This is an issue that must be addressed in the very short term.

In one hospital that has not yet been certified, a member of the committee said, *At the start, in coordination with the SILAIS headquarters, we set up support groups organized by neighborhood for the mothers who gave birth here, but we lost contact with all of them. We used to coordinate well with the primary care units, but we didn't keep up on this. . . we'd just make verbal referrals. The system worked for about five years, but doesn't exist now. . . . We don't have contact with anyone; we're working all alone.* (Committee member, Granada hospital)

In an uncertified health center in Nandaime in Granada SILAIS, a committee member said, *We formed the support groups two years ago during a five-day workshop. The problem has been the funding—we never got materials to use for referrals, not even the notebooks. They were going to send the material, but we're still waiting. They came for the workshop, but then we never saw them again. . . . Also, a lot of these women live very far away and we don't have money for their transportation or expenses.* (Committee member, Nandaime health center)

Another doctor also commented on distance: *Among the problems people have mentioned to me in various parts of the country is the lack of attention to the needs of people from the communities who have to travel long distances in order to participate. Sometimes people are called to meetings and the staff can't even offer them something to drink. . . . These are often people who don't have a dime in their pocket and they're putting their heart into it and get nothing in return, but they need some consideration.* (Dr. W. Aguilar, National evaluator)

Despite these problems, there are many examples of successfully organized support groups. A member of the committee in one certified hospital said, *The SILAIS organized the support groups and they're consolidated now. Two years ago we held a meeting with all the counselors, where they were given awards. They're very enthusiastic.* (Committee member, Rivas hospital)

This kind of recognition has also been used in other places as a way to strengthen the community networks. Municipalities in Boaco and Matagalpa have made special recognition of the communities whose neighborhood committee members have participated in the health education training and assumed their tasks and responsibilities, according to Dr. B. Smith, Management Sciences for Health (MSH)/USAID.

The success of the support groups ultimately depends on the mothers who have been trained as counselors, and their motivation has been an inspiration. The exercises they have done in raising self-awareness and reflecting on the feelings of pregnant and breastfeeding women have helped them to convey their knowledge and experiences with an enormous amount of feeling.

One counselor described her task as *making it easy for other mothers and helping them understand and experience the benefits of breastfeeding. That's why we're in each community, as leaders, to tell them about our experiences. We invite them to meetings each month so they can tell us about their problems. . . . We've been doing this for three years now. . . . When there are problems with their pregnancies such as a risk of miscarriage, we refer them to the health center, so they're seen more quickly, that's one of the advantages. . . . There's never before been this kind of communication with the health center. Now they don't have to go house to house, they simply stop by the leaders' houses and ask us to help them find women who haven't come in for their prenatal checkups, and we go find them.* (Support group counselor, Monimbó Health Center)

One counselor notes, *We start to see them in the second month of pregnancy. We keep lists of women in each community and invite them to meetings. . . . In my community we've got 36 pregnant women participating in these meetings and 44 in breastfeeding support groups. We have an agenda, every month we plan out what we're going to talk about at the meeting, so we can coordinate our ideas and aren't always telling them the same thing, since the idea is for them to learn more. We do role plays with dolls, teach them breastfeeding positions, give talks on everything from self-esteem and reproductive health to environmental clean-up and mosquito breeding sites.* (Support group counselor, Monimbó Health Center)

When the groups are organized and the health care personnel follow up with them and provide support, the mothers all agree that they are doing good and important work, and when the mothers feel accompanied and supported, everything goes well.

4. Hospital Maternal Homes

Hospital maternal homes are part of the hospital and provide support for as much as two or three months to mothers, ensuring breastfeeding and facilitating constant contact between mother and child. They provide housing to mothers whose babies are in the hospital but who live far away and would not otherwise be available to breastfeed on demand. Responsibility for setting up these homes lies with hospital nursing and/or nutrition personnel, who also serve on the breastfeeding committees.

Mothers are told the advantages of breastfeeding while they reside in these homes and are experts by the time they leave. The members of the hospital committee in Masaya mentioned that after mothers have this experience, they are ready to become breastfeeding counselors. The hospital maternal home staff explain to mothers how they can start a support group in their communities. Their long stays in the home help them develop an awareness of the importance of exclusive breastfeeding, so they become ready to take on this effort.

The following comments on hospital maternal homes were gathered during the assessment:

The mothers of the babies in the intermediate care nursery have a place to stay, there are beds, they're given meals and can breastfeed on demand. There are 20 children in the nursery and there's room for 10 mothers in the home. It's been operating for 10 years, financed by the hospital for the most part. (Member of the hospital committee in León)

There was no place for the mothers to stay when the child had to stay in the neonatal nursery; we had to go fetch the mothers at home to come and give milk. . . . In 2000 the mothers slept on the floor, on sheets of cardboard, waiting for news of their children. . . . Now they have a room to stay in, though it doesn't have much ventilation. (Member of the hospital committee in Masaya)

The person in charge of the hospital maternal home is on the committee. They [staff] give talks to the mothers on breastfeeding and nutrition when they give milk, so that while their babies are in the hospital, they're being educated. Women with children in intensive or neonatal care can stay at the home. . . . When the mother is released from her ward, and the child has to stay, she's transferred to the home. It was donated by a project. (Member of the hospital committee in Matagalpa)

Mothers who were staying in these homes said:

I'm feeling very good, and I'm grateful that they're taking good care of my baby and he's getting better. I'm happy because they take care of us here, it's not like being at home, the nurses see him frequently and I'm thankful for that.

My baby was born prematurely. . . and I'm very worried, so to make sure that nothing happens to him, it's better that I'm here close by.

A friend of someone in one of these homes said:

When you visit one of these homes, you can see that it's a good place for the mothers. Not all hospitals have these homes, but here there's unity, solidarity, companionship, and you get a good impression of the staff—they're very friendly. The mothers can't complain. We're going to talk about this back home.

D. The Process of Mother and Baby Friendly Certification

Despite the fact that there is a Ministerial Resolution that states that all health units should implement the steps to successful breastfeeding, the process begins with the decision by the authorities of the respective health center, hospital, or SILAIS to join the initiative. The health facilities themselves define the date when they will become part of the initiative and actually sign a letter of intent in a public ceremony.

1. The Initial Self-assessment

Once this commitment has been made, the units carry out a self-assessment that consists of identifying their baseline level of compliance with the initiative's standards. To conduct the self-assessment, a committee is formed, usually including the deputy director of the facility and the chiefs of pediatrics, gynecology, nursing, and nutrition, if this position exists. Nevertheless, membership in these committees is flexible and can be adapted to the level of resources available in the respective facility. The self-assessment exercise is generally guided by a trained external advisor from the national level or UNICEF and involves the application of an instrument designed by UNICEF. Once gaps in performance have been

identified, a work plan is developed to address them and must be ratified by the facility director. Each unit defines the timeline for implementation of this plan; it usually involves a period of a year, but occasionally is accomplished in less time.

The main gaps that are generally found in these self-assessments have to do with policies, training, and support groups, the latter being the most difficult challenge for most facilities. In the work plan, specific tasks and responsibilities are defined; for example, the teaching unit will be responsible for training. All personnel are informed about the work plan to encourage their participation and reinforce the point that all human resources in the facility have a role to play in achieving certification. This process stimulates team work and helps to make all personnel—including drivers, guards, support personnel, and administrators—feel part of the initiative and responsible for helping to achieve certification, not only the clinical staff.

To implement its plan, a health facility gets support from national experts. The committee assumes the role of a quality team, giving ongoing monitoring to the implementation of the plan and identifying solutions to any problems encountered. Here again, there are no recipes, and facilities show a lot of creativity in finding ways to achieve their goal.

The staff views self-evaluations as a way to prepare for the “big moment,” the time for the national evaluation. These self-evaluations are typically comprised of tests they give themselves on their knowledge of breastfeeding, in accord with what they have learned in the courses. Some units do this by forming study circles or holding contests among teams to see who can best answer the questions. Sometimes different service areas compete against each other, or nurses compete against doctors, to see who knows the most.

One nurse described how committee members would spend whole days going around the unit, using dolls to demonstrate breastfeeding skills so no one would forget how to do it. The men especially enjoyed this practice; they would place the doll against their chest as if to breastfeed in a very loving way, eliciting gales of laughter from their colleagues.

At each stage in the process of achieving certification, health units can call on the support of the Women’s, Children’s, and Adolescent Health Care Office in the SILAIS, which provides advice and logistical support and intercedes with other organizations. At the local level, a unit’s breastfeeding committee and the rest of its staff play a fundamental role in fulfilling the steps in the initiative. The staff’s commitment and dedication are essential, as is coordination with the community and civil society. At the community level, the support groups must be organized and functioning, with active volunteers.

During this period, the mothers who run the support groups often come in to the health unit to study, so they can feel sure of their role. The staff has to ensure that there are no *pachas* in the unit and that none get past them. An evaluator told us, *Everyone set the goal for themselves; it was like winning a prize, getting a top score, and they also wanted to be the first.*

When the committee decides that compliance with the initiative standards has been achieved, they carry out a second self-assessment, this time involving more personnel and the facility director.

2. The Request for an External Evaluation

Once this broader self-assessment has been completed and the facility considers itself ready, the SILAIS director sends a letter to Ministry of Health authorities with a copy to UNICEF, formally requesting an evaluation of the facilities that have prepared themselves and proposing a date. The time it takes to schedule an evaluation depends on the current demand from other SILAIS and the availability of the evaluators, who may be on duty at their hospitals or have other pressing work.

At this point, the anguish begins, as people worry about whether they will come out all right. While they wait for the evaluation, they take advantage of the chance to pour over their manuals and review the norms and policies until they have learned them by heart. They stay up late and anxiously ask each other

questions to confirm that they are indeed ready; if a sign tears they repair it quickly, so that everything is in order.

3. The National Evaluators

To conduct the facility evaluations, there is a multidisciplinary team of national evaluators who have been certified by the Ministry of Health and UNICEF. They have been standardized in the assessment process and receive ongoing training. Three have been certified by UNICEF as international evaluators, and five completed the Wellstart International Course. Two of the evaluators participated in the World Breastfeeding Congress.

Evaluators participate on request, and as the initiative has expanded across the country, they have often been called upon to travel to SILAIS and health units far from home. To support their participation, the Ministry of Health established an expense account to cover the costs of lodging, food, and transport. One national evaluator explained the evaluators' commitment by commenting, *We have breastfeeding in our souls, from our heads to our toes and out of our mouths.* (Dr. W. Aguilar, National evaluator)

One commented, *As evaluators we report to the Ministry of Health. We've supported the initiative almost quixotically, as we've responded to the call to evaluate the health units. I think Ministry of Health personnel have a strong social commitment, which makes you do things for nothing— you see doctors far off in the hills, on the Atlantic Coast, risking their lives, with ridiculous stipends that don't come close to compensating for the work you're doing, but still, you're convinced that your work is making a contribution to the development of society and the Ministry.* (Dr. R. Cisnero, National evaluator)

The evaluators believe they could play a more active role in ensuring the sustainability and quality of the initiative. They have an overall view of what is happening in the health units and are willing to do more than simply evaluate the process.

In terms of evaluation, the national team of evaluators has already gone beyond the topic of breastfeeding. They are also evaluating actions to improve pediatric care and have been trained in a performance evaluation method that allows them to evaluate the skills of the health care personnel in providing prenatal and newborn care.

4. The Evaluation

The moment of truth comes with the arrival of the evaluators. The evaluators first report to the SILAIS authorities, who are waiting for them and assign them a vehicle so they can travel to the health units. They review the distances, the estimated time required, and the paperwork, which is jealously guarded by the person in charge of the program and delivered at the last moment in a sealed envelope, to ensure that the content does not leak out and influence the results.

The units are colorfully decorated for the evaluation. People put up balloons and information boards with photos of mothers and babies breastfeeding and messages to promote breastfeeding. Some of the more ambitious units invite musicians, usually health brigade members, to sing songs about breastfeeding they have composed. If there is a maternal home in the municipality, the pregnant women come wearing their hospital gowns and robes but with their hair well-coifed, so they can watch the evaluation. People put an incredible amount of effort and creativity into making everything as attractive and agreeable as possible. Some evaluators have commented on how moving it is to visit these little towns in the hills and find the path into town decorated with colorful banners full of drawings and slogans about breastfeeding and to feel all the excitement. The users of the health services see how nervous the staff is and pray for everything to come out well. The atmosphere is party-like, but also tense.

The evaluation team is made up of three professionals, and all efforts are made to ensure that the teams are balanced, with a nurse, a doctor, and a nutritionist or social worker. The evaluation normally lasts three to five days, depending on the size of the units and the distance between them. Hospitals are

evaluated during a 24-hour period and longer if necessary to observe delivery care for the practice of early initiation of breastfeeding.

The staff continues to see patients and carry out their routine tasks, but everyone is anticipating the evaluators' movements. Staff at one unit will radio ahead to warn another that the evaluators are headed in their direction. The excitement and anxiety are palpable; some people are so nervous they have to hide until they are called in for the interview.

The evaluation itself consists of the application of instruments developed by UNICEF and adapted by the Ministry of Health. For hospitals, these are the same ones used internationally—those oriented to maternity, pediatrics, and neonatology wards to evaluate early initiation of breastfeeding (in the first half hour of life) and rooming-in. Additionally, the team makes qualitative judgments about the overall involvement of the hospital in supporting breastfeeding. Administrative and support personnel are interviewed as well as clinical staff.

The evaluation instruments include:

- Interviews with facility authorities: Director, Deputy Director for Training, administrator, secretaries
- Interviews with personnel directly involved in care delivery: physicians, nurses, and nurse auxiliaries chosen at random from different shifts or from each health post within the facility's catchment area
- Interviews with mothers post-partum, mothers with infants in the newborn ward, and mothers attending prenatal care
- Interviews with mothers in breastfeeding support groups
- Interviews with support personnel
- Observation of delivery care and counseling
- Review of records of the breastfeeding committee, work plan, training plans, the written policies for each service, and the overall policies of the facility.

Evaluating the primary care units can be more challenging, since they are often located in distant, isolated regions that can be especially hard to reach during the rainy season. In some cases, evaluators have to cross swollen rivers or use trails deep with mud, among other obstacles. The spirit with which people carry out this work, despite the effort involved, is quite impressive.

During the evaluation, the role of the evaluation team is to collect information which is tabulated later to produce a final score. Each of the 11 steps has a series of weighted criteria upon which completion of the step or standard is rated. To be certified, a facility must have received a score of at least 80% on each step. Even if a facility receives an overall average score above 80%, if one of the steps does not meet the 80% threshold, the unit is not certified.

In reality, the real evaluation is made by health personnel and mothers. The responses of mothers have particular weight in the evaluation, since they are the ones who can confirm whether or not they have received counseling, or whether they know how to manually extract breast milk, among other points covered in the evaluation. If the evaluation team senses any bias during the interview, the interview is discarded and additional interviews are conducted.

Once they have done the interviews and filled out the forms, the evaluators consolidate the information and inform the breastfeeding committee and the local authorities of the preliminary results. These results are sent to the Ministry of Health to be ratified by the Health Minister and the UNICEF representative, who send an official letter to the corresponding SILAIS to officially report the scores.

The León SILAIS established a model that attempts to integrate the whole health system by ensuring that all levels in the system are certified. They proposed that when the primary care units and hospitals have been evaluated and 80% of the units have obtained positive results, and the personnel at the SILAIS level

have also been trained and evaluated, the entire SILAIS should be certified as Mother and Baby Friendly. Certifying the entire SILAIS can be a slow process, since it sometimes happens that the primary care units obtain positive results in their evaluations but the hospital does not, or vice versa.

When everything turns out well, there is a big celebration. The workers congratulate and hug each other, laugh nervously, make jokes about those who got nervous or stumbled, and start to work on the next event, the certification ceremony. As one evaluator said, *The staff were happy with what they'd achieved, and there was a festive mood in the units that were being certified. This was the first time they had held an event to celebrate something that had required everyone's efforts, including the users who'd changed their practices and behaviors.* (Dr. I. Sandino, UNICEF Health and Nutrition Officer)

Comments of health care workers who have gone through the certification process include:

They evaluated us, interviewed everyone, and realized that we had mastered the information. Then they called us in for the certification ceremony. The SILAIS organized everything.

If we weren't certified they wouldn't give us the plaque, and we really wanted it, it was an incentive; we knew we wouldn't get it unless everyone down to the night watchman knew the eleven steps, and we all wanted to achieve this.

We like challenges, because they're very important, they make it possible for you to set goals and to decide what you're going to do and how and with whom in order to achieve them, and in the end we were successful—our results were quite satisfactory.

It meant a lot to all the workers because it was the result of the efforts made by each one of us who make up this team.

5. Coverage of the Initiative to Date

Table 2 shows the total number of facilities that have been certified as Mother and Baby Friendly Health Units, from 1995 through 2005.

	Certified	Not Certified	Total
SILAIS	11 (65%)	6 (35%)	17
Health centers	129 (84%)	25 (16%)	154
Health posts	644 (61%)	404 (39%)	1,048
Hospitals	17 (77%)	5 (23%)	22

Of the 22 maternal and child hospitals, 17 have been certified. Two of these did not achieve certification in the first evaluation: in one of them because a donation of baby bottles was discovered at the moment of the evaluation, and in the other, because the medical personnel did not demonstrate basic knowledge about breastfeeding, despite having been trained. In this hospital, an intervention plan was developed that included rotation of personnel through hospitals that had already achieved certification.

6. Re-evaluation and Recertification

Following up on the continuing implementation of the steps, according to the criteria established for each one, is very important in quality assessment. The Ministry of Health established the norm that each health unit should be re-evaluated annually. In practice, however, this has not been possible because of the high demand for evaluation on the part of units that have not yet been certified as well as those ready for re-evaluation. The re-evaluation process is carried out about every two years. One of the important differences with re-evaluation is that it is not based on a request from the facility but rather initiated by the Ministry of Health. The facility is notified a week in advance of the re-evaluation. All certified

hospitals have been re-evaluated; one lost its certification when it was found not to be in compliance with four of the 11 steps. The process of re-evaluating health centers has not yet begun.

Instruments were developed for re-evaluation, and a second round was carried out. Results show that on the whole, hospitals have been somewhat less successful in ensuring that babies breastfeed within the first half hour after birth and in maintaining the support groups; however, they have done a good job in sustaining activities related to promotion, protection, and support in general. The other steps have been institutionalized in such a way that they constitute a routine part of the staff's work.

The new challenge is to decentralize the re-evaluation process so that municipalities can perform it themselves, which appears possible based on the experience of Rivas hospital whose various service areas monitor each other. Discussions are taking place around this idea to determine how to develop the necessary tools and train personnel to carry it out.

Also under discussion is the idea of expanding the initiative to include new elements, such as essential obstetric care and the integrated management of childhood illnesses, which would more holistically provide care for both mother and child.

Losing certification can be very painful for the staff. A health care worker at the Boaco hospital described staff's feelings when they earned a low score in their re-evaluation, partly because they had not been able to keep up the support groups, a difficult task for hospitals that are unused to community work: *When we realized they were taking away our accreditation, it hurt a lot. I became discouraged for a while because it didn't seem fair. . . . But here we are, and we're working on it. We're starting over, in coordination with the health center.*

Others, however, have been more successful: *We've been through two re-evaluations, and every year we re-evaluate the personnel who've already been trained. The SILAIS has emphasized that we need to pay attention to breastfeeding, to ensure that the support groups are active.* (Health care worker at San Lorenzo health center, Boaco) Another informant said, *We don't have any weak points; we're following all the steps.* (Health care worker at Somoto health center)

E. Ongoing Self-assessment in the MBFHI

Many health units do self-assessments as part of the MBFHI, both in preparation for certification and re-certification and at other times. Self-assessment is an important, low-cost quality assurance technique for measuring quality, identifying problems, and confirming improvements. In order to document the self-assessment approaches being used by hospitals and other health units as part of the MBFHI, plus some of the problems uncovered and corrective actions taken, study team members visited seven hospitals, seven large health centers, one health post, and four SILAIS offices in seven departments. Most of these hospitals and health centers had been certified for several years and have active self-assessment programs with interesting histories.

However, SILAIS certification is relatively recent and their self-assessment experience is therefore thin. MBFHI activities in SILAIS are different from direct care units, involving oversight of organizations under their jurisdiction: health centers, health posts, and municipal health activities. Therefore, SILAIS self-assessments are different than those done by hospitals and large health centers. For example, one SILAIS asked all health units under their jurisdiction to perform their own self-assessments and provided them with technical assistance, encouragement, and greater motivation when necessary.

1. Assessment Types and Processes

The methods of assessment and self-assessment used by the health units can be grouped into three levels:

Level 1 assessments are done in preparation for MBFHI certification and re-certification. They are formal, systematic assessments that use both external and internal evaluators. The external evaluations

are designed and managed by the Ministry of Health based on procedures and instruments recommended by UNICEF, using expert evaluators from outside the health unit. Internal assessments by the health unit seeking certification also are generally done using formal procedures and instruments recommended by the Ministry of Health. The initial certification may take several years. It is usually a period of high motivation and intense activity regarding breastfeeding in the health units. The process familiarizes health units with the formal MBFHI evaluation procedures and instruments. Many of these procedures and instruments are often used by health units for self-assessment after certification. We documented only minimal information about level 1 assessments because our primary objective was to learn about the sustainability of the MBFHI in Nicaragua, and in this section, about self-assessment after certification.

Level 2 assessments are formal, often quantitative internal self-assessments and self-monitoring using standard instruments for data collection. We encountered two kinds of systematic self-assessments in hospitals and health centers—those that incorporated MBFHI indicators into much broader organization-wide monitoring systems and those focused only on MBFHI indicators and issues.⁹ When health units were using such systematic self-assessment methods, we attempted to learn about the topics covered, frequency, data collection instruments and procedures, and time and resources to carry out the self-assessment. In all cases, a breastfeeding committee of staff oversaw the MBFHI self-assessment (or participated when it was part of facility-wide monitoring), and reviewed and interpreted the resulting data. In most of the hospitals and health centers, staff knowledge of lactation management was assessed using written tests, and the results were frequently the primary focus of the assessment. Frequency of self-assessment varied from monthly (for facility-wide monitoring) to annually or longer, sometimes at irregular intervals. The range of times to perform an assessment was generally one to three days. Many used instruments recommended by the Ministry of Health and UNICEF to assess compliance with the MBFHI steps.

Approaches used for the systematic self-assessments varied widely in different health facilities. One of the most rigorous methods of data collection included exit interviews with 100 mothers (with infants under six months) right after a breastfeeding counseling visit. The interviews were done privately so counselors (mostly clinical staff) were unaware of their occurrence. Results were interpreted and discussed with the counselors so they could take corrective action. The counselors expressed enthusiasm in the interviews and indicated that over the years the process had led to many improvements in their counseling effectiveness. In another institution, MBFHI-related data were collected as part of an annual monitoring of broader issues. Analysis of the data by one doctor confirmed that, in that institution, breastfed babies had significantly less diarrhea and pneumonia morbidity and mortality than babies not breastfed. This analysis helped convince other doctors to support breastfeeding much more enthusiastically.

Level 3 assessments are informal, usually qualitative self-assessments by one or more individuals. These assessments often occurred within institutional cultures that supported the principles of MBFHI and quality improvement. Most health units identified problems and possible corrective actions through an informal approach, based on the first-hand experience of one or more members of the breastfeeding committee. Several of the most successful programs used formal data collection and analysis to confirm that the corrective actions were in fact solving the problem, but they did not use them to identify the problem in the first place.

For example, in one hospital several staff noted that mothers could not focus on or remember breastfeeding messages given by staff during labor and delivery; instead the messages should be given

⁹ This report concentrates on self-assessments after certification in hospitals and health centers, and to a lesser extent by SILAIS, because many of the former have been certified for several years, whereas SILAIS certification is very recent.

after delivery when the mother could concentrate. Action was taken, and two indicators added to the biannual quantitative self-assessment: (1) percentage of mothers counseled before and after delivery and (2) percentage retaining the message. Data resulting from these indicators confirmed that the corrective action was effective. In another rural health center, everyone was aware that there was high turnover of breastfeeding counselors, and recruiting and training new breastfeeding counselors was difficult. Health center staff involved in the MBFHI all became breastfeeding counselors serving their own neighborhoods and communities and encouraged other hospital staff to do the same. They observed that by joining the breastfeeding counselor group they were able to encourage greater stability in other breastfeeding counselors. Periodic self-assessment data show a drop in turnover, confirming the effectiveness of their actions.

2. Problems Uncovered and Corrective Actions Taken

Many of the problems identified had to do with health staff's lack of knowledge in lactation management, usually uncovered by low scores on periodic knowledge tests. The corrective action was usually more in-service education, both to increase knowledge and skills (by demonstration). For example, some staff in one hospital did not know that breastfeeding should be initiated shortly after birth. Another hospital found that cleft-lip newborns were not being breastfed; staff were trained to help mothers and cleft-lip babies latch on properly. Staff at several hospitals and health centers were not showing mothers how to manually express breast milk, so staff were trained to do so, and more attention given in hospital maternal homes where highly trained staff could spend time helping mothers practice manual expression and learning to store their milk. Several health facilities identified one staff member or a few part-time consultants who lacked adequate knowledge in lactation management and brought this to their attention. One health center found that its staff had strong knowledge about the lactation problems mothers experience but little about the problems babies have. Several of the problems uncovered were not due to inadequate staff knowledge, but rather to lack of skill by the mothers and inadequate coaching of mothers by the staff. Improvement came when staff demonstrated the skill and/or worked with the mothers until they could demonstrate the skill. For example, this was the case for manual expression of breast milk.

Most of the hospitals and health centers said they had problems with *pachas* (in Nicaragua, *pachas* include bottles and nipple-shaped devices), which are very popular and widely used in the country. Although it is against norms to bring *pachas* into a hospital or health center, many mothers still bring them in secretly. Health unit staff, including entry guards, are on the lookout for secret *pachas* and have been instructed to take them away. Health units have also implemented educational programs for staff and mothers on the detriment of using *pachas* to babies' health. More difficult is the problem of staff in the independent social security clinics located on the grounds of many hospitals but not required to follow the same norms: They sometimes permit or even encourage the use of formula and *pachas*. (This is an example of problems uncovered by informal methods.) Although communication about this issue occurs among Ministry of Health and social security clinic staffs, the final solution appears to require agreement at the national level.

Other problems were of a structural or cultural nature and are more difficult to correct. Creating and maintaining effective mother support groups in communities is challenging. Many health facilities, particularly in non-urban areas, have trouble finding and keeping effective breastfeeding counselors to lead the groups. Turnover may be high because of out-migration or lack of commitment or administrative apparatus. In some units low breastfeeding rates have been blamed on funds insufficient even to hold a meeting of the breastfeeding counselors. Self-assessment has enabled many facilities to address this problem, and they try creative actions to resolve it. In the health center where the breastfeeding committee decided they would all become breastfeeding counselors in their own communities and neighborhoods, not only did they double the number of breastfeeding counselors, but helped to motivate, train, and sustain the non-staff breastfeeding counselors and to recruit additional ones. Many health facilities have organized a breastfeeding week in their locale, during which gala fairs take place, local mayors play a big role, breastfeeding queens are crowned, and in general a great deal of public education

about breastfeeding occurs. One purpose of the fairs has been to stimulate and elevate mother support groups and the role of the breastfeeding counselors.

New problems continue to emerge, uncovered by a combination of systematic and informal self-assessments. The increasing number of births to adolescent mothers is such a problem. Most adolescent mothers lack basic knowledge, many are unmarried, and too many are rejected by their parents. Although health facilities confront this problem as best they can, most have concluded it is more than just a health issue and have joined with other groups—churches, other government agencies, and community groups—to try to alleviate the problems. This is another example of the kinds of problems that emerge from self-assessment.

Appendix B presents a summary of the self-assessment processes, problems uncovered, and corrective actions taken for the hospitals, health centers, and SILAIS offices studied. Since the MBFHI only recently incorporated SILAIS into its program, many of the SILAIS offices were unable to provide much information about their experience with self-assessment.

F. External Context: Other Initiatives

As the initiative took root, other actions by other social actors and institutions helped create a positive environment for restoring a culture of breastfeeding in Nicaragua.

1. Mother and Baby Friendly Universities

In 1993, universities joined the National Breastfeeding Commission as part of its Education Sub-Commission. This gave representatives of these educational institutions the opportunity to network around the issue of breastfeeding and led to the formation of the Mother and Baby Friendly Universities Network. The universities agreed to include breastfeeding in their curricula to train future health care professionals. They also created breastfeeding rooms that teachers and students could use to continue breastfeeding during the school day.

University faculties were inspired to create a Mother and Baby Friendly Universities Initiative. They defined six criteria and the evaluation instruments and organized the certification process. *This was basic information for the faculty. Their capacity to analyze alternatives and to show how breastfeeding combats maternal, perinatal, and infant mortality, the effects of artificial formulas, etc., was a great contribution, and they responded immediately, using the means they had at hand to help solve these problems.* (Dr. G. Navas, PAHO/INCAP representative, Nicaragua)

An initial selection was made of the universities, and the National University's Polytechnic School of Health was chosen as a strategic ally. The faculty and students of the schools of medicine, nursing, and journalism, a field that plays an important role in raising public awareness, were the first to be invited; eventually people concluded that professionals in all fields should be included.

In 1996, five universities participating in the network attended a Lactation Management Education program, organized by Wellstart International and UNICEF in response to the enthusiasm around this issue in Nicaragua. This was the first such program in the world, and it aroused many expectations. The Central American University was the first to commit itself. Certification has not yet been achieved, however, due to internal difficulties: Not all the universities in the country belong to the same university council, so they have not yet reached consensus on who will be responsible for granting certification.

2. Mother and Baby Friendly Community Children's Feeding Centers Initiative

The Nicaraguan Ministry of the Family runs a network of rural community children's feeding centers, known as CICOs, where mothers bring their children during certain hours of the day. The children receive comprehensive care at these centers; complementary foods are provided to older babies, while

their mothers are educated in early childhood development and participate in hygiene, sanitation, and nutrition education activities.

Based on the MBFHI strategy, the Ministry of the Family has developed standards and instruments for certifying the CICOs as mother and baby friendly, and breastfeeding is one of the key components. Since it began in 2004, this program has seen 500 CICOs (of 1300 in the country) start the process; to date, three have been certified as mother and baby friendly.

3. Social Mobilization and Communication

Social mobilization and communication were carried out constantly over the past 10 years, including two mass media campaigns. Journalists have been active participants in the celebration of breastfeeding week, publishing news reports and life stories in the country's leading newspapers. Other activities include local breastfeeding fairs and the annual national fair, held for the past seven years with the participation of private enterprise.

G. Financial Investment

To illustrate the cost of certifying a municipality, we give an example of the cost of certifying an average-sized municipality with 100 health care personnel, 60 counselors, one health center, and five health posts. It includes the entire process, from training and materials, the external evaluation (including the costs of the evaluators' transport and food), to the certification ceremony itself (including the plaques given to each unit, the banners, and event costs).¹⁰

The data show that the cost of training MOH personnel is approximately US\$ 16 per person, and the cost of training volunteer community counselors approximately US\$ 26 per person. The higher cost of training counselors is due to the longer duration of their training workshop (five days as opposed to three days for MINSA personnel).

Table 3: Estimated cost to certify a hypothetical municipality with one health center and five health posts	
TRAINING	Dollars
100 health care personnel for 3 days	1,608
60 breastfeeding counselors for 5 days	1,608
100 health care personnel manuals	89
60 counselor's manuals	54
EVALUATION	
3 evaluators for 3 days	402
CERTIFICATION	
Municipal plaque	312
Small plaque	63
Banner	34
Plaque for each health post	316
Certification event	200
Total	8,046

¹⁰ PL 480 Baseline, 1999.

H. National Breastfeeding Indicators

According to data from the 1993 Family Health Survey¹¹ and the 1998 and 2001 National Demographic and Health Surveys¹²⁻¹³ and as shown in Table 4, the rate of exclusive breastfeeding among children under four months increased from 11% in 1993 to 30% in 1998 and to 40% in 2001. This is a significant increase, undoubtedly due in part to the implementation of the MBFHI. The results for exclusive breastfeeding among children under six months are also encouraging, as the rate increased from 19% in 1998 to 31% in 2001.

Indicators	Year and Source		
	Family Health 1993	ENDESA 1998	ENDESA 2001
Exclusive breastfeeding from 0–3.9 months (%)	11.0	30.0	40.0
Exclusive breastfeeding in children under 6 months (%)	NA	19.0	31.1
Children under 5 who were breastfed at least once (%)	92.0	92.0	94.5
Children who were breastfed in the first hour after birth (%)	41.0	79.5	76.3
Average duration in months	12	15	17.6
Average duration of exclusive breastfeeding in months	0.6	2.1	2.5

The percentage of children under five years who have breastfed at least once has been relatively stable, increasing slightly in the most recent nationwide survey, from 92% in 1993 and 1998 to 94.5% in 2001. This reflects a willingness on the part of an increasing number of mothers to make the effort to breastfeed, even if they do not all continue for the recommended period.

The percentage of children who breastfed during the first hour after birth increased considerably, from 41% in 1993 to 79.5% in 1998. This increase coincides with the implementation of the norms established by the initiative, which stipulate that all newborns, whether born in the hospital or at home, should breastfeed within that first hour. The rate fell 4% in 2001, however, which may be a warning that the Ministry of Health needs to step up its actions to monitor this practice.

Another significant indicator is the rate of “predominant breastfeeding,” breastfeeding supplemented by other liquids, such as honey, tea, or juice. Many Nicaraguan mothers believe that these liquids are good for infants, and when asked what they feed their babies, they still report that they are breastfeeding exclusively. Advice from their mothers, grandmothers, some birth attendants, and some private sector doctors, while not yet well documented, plays a role here. Bottles are often used to provide these liquids, posing a risk to the infant’s health.

The national surveys also found an encouraging increase in the average duration of breastfeeding: from 12 months in 1993 to 15 months in 1998 and to 17.6 months in 2001. These increases coincide with implementation of the Ministry of Health’s norms, which recommend that for optimal nutrition, mothers continue to breastfeed until the baby is at least two. Ask why they continue to breastfeed, most mothers reply that they have been instructed to do so by health care personnel or do it for economic reasons. The economic motive is strong, especially in rural areas.

¹¹ Cuadra, Encuesta sobre Salud Familiar, 1993.

¹² MINSA, SIVIN (Integrated Nutritional Surveillance System), First Progress Report, 2003.

¹³ MINSA, SIVIN, Second Progress Report, 2004.

The average duration of exclusive breastfeeding has also increased, from 0.6 months in 1993 to 2.1 months in 1998, and to 2.5 months in 2001. While the trend is encouraging, the recommended norm of at least four months and preferably six months has not yet been achieved for most children. Studies suggest that the failure to continue exclusive breastfeeding for the recommended length of time is mainly because mothers work outside the home, and society has yet to establish mechanisms to ensure that they can continue to breastfeed when they do. Although Nicaraguan law provides for three-month pre- and post-natal paid leaves to support breastfeeding, not all employers know the law or obey it.

In 2002, an Integrated Nutritional Intervention Surveillance System (SIVIN) was established to provide a quick, inexpensive way, based on a rigorous methodology, to periodically and systematically gather information to monitor both processes and impact. SIVIN's breastfeeding indicators at a nationwide level tend to confirm ENDESA findings, although SIVIN's margin of error is larger because of its smaller sample size. SIVIN found that almost all mothers are breastfeeding their babies at some point: nearly 95% in the 2003 report and 96.5% in 2004. The percentage of babies who breastfed in the first hour after birth was 60% in 2003 and 59.6% in 2004, and in the first 24 hours, nearly 85% in 2003 and 81% in 2004.¹³⁻¹⁴

Table 5: USAID PL 480 and Prosalud Breastfeeding Statistics (1999–2003)						
Indicators	Prosalud/ MSH Baseline 2000	Prosalud/ MSH Final 2003	PL 480 Baseline 1999	PL 480 Final 2001	PL 480 Baseline 2001	PL 480 Final 2002
	n = 512	n = 229	First Phase n = 1,100		Second Phase n = 345	
Children under 2 years breastfed at least once	n = 498 94.3%	n = 571 97.6%	22.0%	19.0%	NA	NA
Children breastfed during the first hour after birth	n = 403 76.3%	n = 498 85.1%	74.0%	70.0%	NA	NA
Exclusive breastfeeding in children under 6 months	n = 88 32.5%	n = 217 69.0%	46.0%	74.0%	47.0%	61.0%
Predominant breastfeeding in children under 6 months	n = 225 83.0%	n = 295 93.9%	NA	NA	NA	NA

Note: Predominant breastfeeding includes women who breastfeed exclusively.

Table 5 presents several indicators from the local and departmental levels; they support the national level findings. The baseline study and final evaluation of the Prosalud project, implemented for four years in 12 municipalities in three SILAIS—Jinotega, Matagalpa, and Boaco—included indicators such as the rate of exclusive breastfeeding in children under six months, which increased from 32.5% to 69% during that period. The PL 480 project, carried out in two phases, with each phase in different SILAIS, also found that the rate of exclusive breastfeeding in children under six months increased, from 46% to 74% in the first phase SILAIS and from 47% to 61% in the second phase SILAIS.

These data, like the ENDESA surveys, reveal that a culture of breastfeeding does exist in Nicaragua, since the vast majority of mothers breastfeed their babies, although they may not breastfeed exclusively or pay sufficient attention to the duration. In addition, early initiation of breastfeeding has increased to the point that it has become almost the norm.

VI. CONCLUSIONS

A. Lessons Learned

- The creation of a positive environment in terms of policies, leadership, values, investments, structures, and top-level political support significantly contributed to the initiative's success.
- Implementing local capacity building, information and communication strategies, the monitoring of data, and mechanisms to recognize quality in the certification process has also been an important contributing factor for the spread and endurance of the initiative.
- The initiative established a single model, in which the country's health care institutions and communities play leading roles. The MBFHI's singular focus, strong local ownership, and excellent coordination and alignment of international cooperation agencies provide a model intersectoral approach.
- The initiative was based on three key quality assurance activities: the definition, measurement, and improvement of quality. This made it possible to achieve significantly better results in newly developed processes, as demonstrated by the initiative's impact.
- Other factors that have contributed to the initiative's institutionalization and sustainability are its focus on users' rights, understanding how to integrate breastfeeding in different care processes, use of data in decision making, and following a participatory approach.

B. Challenges

- The Ministry of Health should further develop and improve the monitoring and follow-up of the initiative and assess the possibility of establishing a decentralized process.
- The initiative should be expanded to cover topics related to service management and comprehensive women's, children's, and adolescent health care, as part of a new comprehensive health care model.
- Service users and the community as a whole should play a more active role in monitoring, evaluation, and follow-up, following the framework of the Citizen Participation Law.
- Individual and collective incentives should be identified and implemented.

C. General Conclusions

- The initiative is being carried out in Nicaragua in a very dynamic way. It is not organized in a rigid or linear way, but rather has been implemented through numerous channels, such as the community, the municipal governments, universities, the social security sector, and the private sector, in addition to the Ministry of Health. In not offering a formula or specific steps to follow, Nicaragua has fostered a model based on feelings of solidarity and a respect for human rights.
- The dynamic nature of the Nicaragua Mother and Baby Friendly Health Units Initiative is exemplified by its many modifications and additions over the years in response to needs. For example, including health centers allowed it to reach more mothers and babies during early infancy, and having medical schools introduce new doctors to the science of lactation has meant that new generations of health professionals enter the workplace aware of the importance of breastfeeding.

- The initial organizing force for the initiative in Nicaragua came from committed health professionals who were associated with various organizations and often in contact, rather than from a grassroots movement. The number of knowledgeable and committed professionals involved in the initiative has grown substantially, propelling the initiative's success.
- In conclusion, the promotion of breastfeeding has been formally and philosophically integrated in the structure and operations of all the health care systems for women and children in Nicaragua. That is real institutionalization.

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APPENDIX A: The 10 (and 11th) Steps to Successful Breastfeeding

The first 10 steps below are criteria that UNICEF and the Nicaragua Ministry of Health established for hospitals seeking certification as Mother and Baby Friendly in Nicaragua and Baby Friendly in other countries. Nicaragua added the 11th step and made them all applicable to primary health units (SILAIS, health centers, and health posts in the municipalities) so that all health facilities should be certified as Mother and Baby Friendly.

1. Have a written breastfeeding policy that is routinely communicated to all health staff.
2. Train all health care staff in skills necessary to implement this policy.
3. Inform all pregnant women about the benefits and management of breastfeeding.
4. Help mothers initiate breastfeeding within a half-hour of birth.
5. Show mothers how to breastfeed and how to maintain lactation even if they should be separated from their infants.
6. Give newborn infants no food or drink other than breast milk unless medically indicated.
7. Practice rooming in—allow mothers and infants to remain together—24 hours a day.
8. Encourage breastfeeding on demand.
9. Give no artificial teats or pacifiers to breastfeeding infants.
10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the facility.
11. Eradicate the practice of free and indiscriminate distribution of inappropriately called “alternatives” to mothers’ milk.

APPENDIX B: Summary of Self-assessment Processes, Problems Uncovered, and Corrective Actions, by Health Unit Visited

Health Unit	Years Certified	Self-assessment Level and Process	Problems Uncovered	Corrective Actions
Hospitals				
Hosp 1	~11	Level 2. Breastfeeding committee chair leads formal SA once/year using Ministry of Health-UNICEF instruments. Takes about 1 week. Main focus on competence of hospital staff.	<ol style="list-style-type: none"> 1. Occasional low knowledge and low motivation of staff, so (a) breastfeeding was not always initiated within 1/2 hour of birth, and (b) some mothers did not position correctly. 2. Mothers use bottles at home. 3. Low weight-for-age <6m stop EBF, use <i>pachas</i>, much diarrhea. 	<ol style="list-style-type: none"> 1. Breastfeeding test motivated and increased knowledge of staff, so (a) the test now emphasizes breastfeeding initiation and (b) staff are trained to demonstrate positioning. 2. Educate mothers on danger of formula and <i>pachas</i>. 3. Help mothers re-lactate.
Hosp 2	10	Levels 2 & 3. Breastfeeding committee chair leads level 2 SA about once/year using Ministry of Health-UNICEF instruments.	<ol style="list-style-type: none"> 1. Early: Moms brought <i>pachas</i> to hospital. 2. Early: Some part-time consultants recommended formula. 3. Recent: Social Security clinic sometimes allows formula rather than helping mother breastfeed. 4. Mothers think they don't have enough milk. 5. Prenatal clinics did not address breastfeeding. 6. Premature newborns given formula. 7. Staff thought cleft-lip babies couldn't breastfeed (latch on) properly. 	<ol style="list-style-type: none"> 1. Entry guards began checking. 2. Trained part-time consultants. 3. No corrective action discovered yet. 4. Work with health centers because of very short postpartum period in hospital (<24 hrs). 5. Modified prenatal clinic topics to include breastfeeding. 6. Train staff to help mothers express breast milk. 7. Pediatrician trained staff; staff trained mothers.
Hosp 3	10	Levels 1, 2, & 3. Re-certification in 1999 and 2004, for which level 1 is vital. Annual hospital monitoring includes breastfeeding data. Breastfeeding committee analyzes data (level 2) and suggest problems and solutions (level 3).	<ol style="list-style-type: none"> 1. Doctors were skeptical that breastfeeding will improve outcome for various difficult situations. 2. In early evaluation, some new mothers could not relax for first breastfeed. 3. Despite counseling, some mothers lacked key breastfeeding knowledge. 	<ol style="list-style-type: none"> 1. Extensive monitoring data enabled one doctor to compare breastfeeding and non-breastfeeding by type of mortality. Highly significant results for breastfeeding was convincing for many doctors at hospital. 2. Wider beds solved problem. 3. Correlating missing knowledge by topic to staff counseling schedule identified staff who were ineffective for certain topics.
Hosp 4	6	Levels 2 & 3. Breastfeeding committee and its chair lead SAs. Level 2 SA done once/year; takes 1 day to collect; breastfeeding committee uses more time to produce analyses.	<ol style="list-style-type: none"> 1. Continued lack of understanding and motivation in community, both mothers and leaders. 2. Many mothers discharged too quickly after birth (8–24 hours) for their needs. 3. Mothers lack manual extraction skills; possibility of HIV infection eliminated milk banking. 4. Information and training given to mothers during labor and delivery not retained well. 	<ol style="list-style-type: none"> 1. Annual 1-week breastfeeding fair, with breastfeeding queen, local TV, etc. was a great public relations success. 2. Built residential house for new mothers next to hospital with round-the-clock staffing. 3. Extensive training in extraction in maternal home with refrigerated storage of breast milk. 4. Provide most important training <i>after</i> delivery.
Hosp 5	6	Levels 2 & 3. Breastfeeding committee leads SAs. Recent level 2 was knowledge exam to staff and review of ten steps: "Keeps pressure on staff." Most problems discovered informally (level 3).	<ol style="list-style-type: none"> 1. Discovered mothers bringing <i>pachas</i> to hospital. 2. Inexperienced mothers cannot breastfeed sick infants. 3. Staff report some older mothers lack colostrum. 4. Working mothers stop breastfeeding early. 5. Many adolescent mothers with many problems; extensive use of tobacco. 6. Difficult to find and keep good breastfeeding counselors. 7. Social Security pediatric clinic supports some formula. 	<ol style="list-style-type: none"> 1. Became more vigilant. 2. Train these mothers. 3. No solution. 4. No solution. 5. Psychologist is effective counselor. 6. Hospital staff have become breastfeeding counselors (all pediatric staff and others): very effective. 7. No solution at local level.
Hosp 6	Not yet certified; in process	Levels 1 & 2. Breastfeeding committee guiding large effort to become certified. Monthly hospital monitoring (3 days of one staff) includes breastfeeding data. Breastfeeding committee analyzes data and takes action.	<ol style="list-style-type: none"> 1. Diarrhea cases in young infants were high; primarily not EBF. 2. Mothers think they don't have enough milk. 3. Community mother groups weak. 4. Premature newborns given formula. 	<ol style="list-style-type: none"> 1. Emphasize link of formula and diarrhea with staff and moms. 2. Have staff encourage mothers; tell them they are doing great. 3. Just discovered; no action yet. 4. Train staff to help mothers express manually.

Health Unit	Years Certified	Self-assessment Level and Process	Problems Uncovered	Corrective Actions
Hosp 7	Not yet certified; in process	Levels 1 & 3. No formal SA system yet, but some informal SA. Preparing for certification is all-consuming.	<ol style="list-style-type: none"> 1. Insufficient staff knowledgeable in breastfeeding. 2. Adolescent mothers. 3. Few active community mothers groups. 4. Mothers with sick infants stop breastfeeding. 	<ol style="list-style-type: none"> 1. No solution. 2. No solution. 3. Working on it. Good communication with communities. 4. Helping mothers re-lactate.
Health Centers				
HC 1	9	Levels 2 & 3. Breastfeeding committee leads active breastfeeding program that includes SA. Breastfeeding monitoring every 6 months, including sample of 100 mother exit interviews, over several weeks (level 2). Strong breastfeeding and improvement culture leads to early identification of problems and creative solutions (level 3).	<ol style="list-style-type: none"> 1. Counseling materials were dull and disintegrated in rain. 2. Breastfeeding counselors felt isolated, and sometimes without support in community. 3. Counselors, local volunteers, and traditional birth attendants were not sharing lessons learned and supporting one another. 	<ol style="list-style-type: none"> 1. Switched from paper to cloth; added drawings. 2. Formed a community breastfeeding group of TBAs, the local volunteer who helps at the health center, and the breastfeeding counselors. 3. Separate monthly half-day meetings of breastfeeding counselors, volunteers, and traditional birth attendants.
HC 2	7	Level 1. Re-evaluated frequently by external experts using Ministry of Health-UNICEF instruments.	<ol style="list-style-type: none"> 1. Staff knowledge inadequate. 2. Frequent use of <i>pachas</i>. 3. Weak community mother groups; counselors are not strong. 	<ol style="list-style-type: none"> 1. Trained staff using case studies. 2. Just discovered; no action yet. 3. No action yet.
HC 3	7	Level 2. Director provides leadership. Give breastfeeding test each year to staff, feedback private. Not much contact with SILAIS on MBFHI.	<ol style="list-style-type: none"> 1. <i>Pachas</i> are popular with mothers, less so with infants <6m. 2. Tests show staff very knowledgeable about breastfeeding; one new pediatrician was not. 3. Only two active community mother groups (20 communities). 	<ol style="list-style-type: none"> 1. Guards notify health care staff if they find <i>pachas</i> on entry; staff try to convince mothers not to use. 2. Pediatrician trained in breastfeeding. 3. No solution yet.
HC 4	6	Levels 2 & 3. Has both a formal SA system and a strong culture of SA and improvement. Breastfeeding committee and director lead breastfeeding activity. Many problems/corrective actions emerge informally from the culture rather than from the formal system, although they are often confirmed by the formal system.	<ol style="list-style-type: none"> 1. Inconsistent commitment by the 16 municipalities and their members to the MBFHI principles. Small-town mothers lacked knowledge. 2. Annual staff tests on breastfeeding renew knowledge and motivation. One weakness: What are the babies' problems (as opposed to mothers')? 3. High percent of births are to adolescents, many unmarried, abused, with little knowledge of breastfeeding, and/or rejected by parents. 4. High annual turnover of counselors, due to out-migration. 	<ol style="list-style-type: none"> 1. Started annual breastfeeding fairs in the municipalities with mayors often taking prominent roles and in cooperation with SILAIS. 2. Intensified training on babies' breastfeeding problems. 3. Provide quality care, but problem is beyond hospital; so working cooperatively with other groups such as church, family planning agency, clubs, and schools to find solutions. 4. Working to find good new counselors and train, but problem not yet solved.
HC 5	6	Levels 1, 2, & 3. Re-evaluation by external expert 2 years after certification (level 1). Unit-wide monitoring every 3–6 months includes breastfeeding data, analyzed by one pediatrician (level 2). Data/experience discussed often by director and key breastfeeding staff searching for breastfeeding problems and solutions (level 3).	<ol style="list-style-type: none"> 1. <i>Pachas</i> are used a lot in community, but less with infants <6 months. 2. Years ago, some staff recommended formula. 3. Adolescent mothers have special problems and are often uninformed about breastfeeding. 4. Monitoring system measures postpartum contacts but not breastfeeding practices and problems. 5. Few community mother groups; not effective. 	<ol style="list-style-type: none"> 1. Try to convince moms not to use, but difficult. 2. Retrained staff; no more such problems. 3. Special Ministry of Health program for adolescent mothers is helping. 4. Need better monitoring. No solution yet. 5. No solutions.
HC 6	4	Levels 2 & 3. Director and breastfeeding committee lead SAs. Two staff do level 2 SA at irregular intervals (~every two years), sometimes using Ministry of Health-UNICEF instruments.	<ol style="list-style-type: none"> 1. Weak community mother groups; counselors are not strong. 2. Private clinics are recommending formula. 3. Mothers do not understand verbal counseling and providers were not checking. 	<ol style="list-style-type: none"> 1. Retraining counselors, with initial emphasis on motivation. 2. No action yet. 3. Train providers to check mothers' understanding and demonstrate.

Health Unit	Years Certified	Self-assessment Level and Process	Problems Uncovered	Corrective Actions
HC 7	Not yet certified; in process.	Level 1. Certification process all-consuming. Three persons do it using Ministry of Health-UNICEF instrument.	<ol style="list-style-type: none"> 1. Staff knowledge weak. In earlier assessment, staff forgot 40% of policies. 2. Community mother groups weak. 3. Mothers use <i>pachas</i>. 	<ol style="list-style-type: none"> 1. No action yet. 2. Just discovered; no action yet. 3. Just discovered; no action yet.
SILAIS Offices				
SILAIS 1	4	Level 2. Three staff (doctor, nurse, auxillary) used the 11-step Ministry of Health-UNICEF instrument last year to assess all their municipalities, health centers, and health posts. Took one day per municipality or health center and half-day per health post, over 2 months (6 person-months). Hope to do every two years.	No examples.	
SILAIS 2	4	Level 2. SILAIS staff person leads SA. Annual SA of many municipalities, health centers, and health posts using 4-page Ministry of Health-UNICEF instrument initially; developed/used a revised 1-page instrument this year (UNICEF funds). Took two staff several months. Results were fed back to units. SILAIS director had to reinforce feedback in some cases.	<ol style="list-style-type: none"> 1. Some mothers could not express milk, even though providers explained how. 2. Counselors (245 in SILAIS) do not meet together; not motivated or effective. 3. Breastfeeding not on agenda of prenatal clinics. 	<ol style="list-style-type: none"> 1. Train staff to help mothers demonstrate and thus be sure they understand. 2. Trying to get funds for meetings. 3. Put breastfeeding on agenda.
SILAIS 3	1	Study visited rural health post, but not the SILAIS office. Health post does not use a formal SA.	<p>At health post:</p> <ol style="list-style-type: none"> 1. Difficult for working mothers to breastfeed exclusively, so they use <i>pachas</i>. 2. No money for fix-up projects (e.g., paint). 3. Educating mothers about breastfeeding. 	<ol style="list-style-type: none"> 1. Teaching manual extraction and law requiring time to breastfeed at work place help. 2. NGO (World Vision) helps out. 3. Saturday breastfeeding radio program is popular with mothers.
SILAIS 4	Not yet certified; in process.	Negotiated separately with each health unit under SILAIS jurisdiction to do its own SA, with different SA methods for different units.	No examples yet.	
SILAIS 5	Not certified	Not doing SA, but SILAIS staff actively help health units foster certain activities, including especially the BF fairs.		
<p>Notes: EBF = exclusive breastfeeding. SA = self-assessment. SA levels are: Level 1 = preparation for formal certification or re-certification (external or internal), Level 2 = formal quantitative survey; Level 3 = Mix of formal and informal qualitative assessment (see report's section VI. Findings, E. Self-assessment). Breastfeeding counselors are unpaid community members who lead mother support groups.</p>				

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