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A Needs Assessment of Knowledge Management and Social Learning for a National Health Federation in Nicaragua

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Abstract

A Needs Assessment of Knowledge Management and Social Learning for a National Health Federation in Nicaragua By Katie Morris

NicaSalud is a national health federation comprised of 28 national and international non-governmental organizations that joined forces in order to improve health indicators nationally following the devastation of Hurricane Mitch. The federation has initiatives funded by USAID and the Bill and Melinda Gates Foundation and is being used as a model for the formation of other health networks in Central America. Program objectives explicitly include the sharing of process, content, and lessons learned among organizations, but these are not being met due to a lack of understanding of the concept and capacity for knowledge management in the federation. As a result, there is a major lack of communication and information about what specific organizations are doing and there is a high level of duplication of efforts and resources.

The purpose of this study was to explore existing experiences with knowledge management among health-promoting non-governmental organizations in the federation, and expectations of key stakeholders for a knowledge management strategy at the level of the federation. Three research questions were addressed:

- 1. What experiences do health-promoting non-governmental organizations in the Federation have with knowledge management?
- 2. What is expected of key stakeholders and how are the roles and responsibilities to be divided for designing and implementing the strategy?
- 3. What are the priority content areas for such a strategy at the level of the Federation?

Secondary analysis of data from an evaluation conducted by CARE, and key informant interviews and nominal group process sessions were conducted with directors, program managers and technical staff from NicaSalud member organizations in three geographic subregions and the coordinating Technical Office. The results highlight the need for conceptual clarity and uniformity on how knowledge management is defined within the federation. Member organizations expressed interest in formalizing information sharing through the formation of a knowledge management commission, establishing a network of knowledge promoters, and pursuing additional funding to support the sustainability of these new initiatives. Recommendations are made about key content areas and processes for designing a knowledge management strategy and areas for further study.

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I. Introduction

Background

For a number of years, Nicaragua has consistently ranked among the top three poorest nations in the Western hemisphere with an extremely unequal distribution of wealth (World Health Organization, 2000). Nicaragua is perennially susceptible to natural disasters including hurricanes, floods and landslides, tidal waves, volcanic eruptions and earthquakes due to its climate, geographic location, and impoverished population (World Health Organization, 2000). Hurricane Mitch, the second deadliest Atlantic hurricane struck Nicaragua in 1998 killing at least 3,800 people, leaving 800,000 homeless and causing over \$1 billion in damage (Rocha and Christoplos, 2001). In an attempt to effectively channel and allocate the aid money pouring into the country to support reconstruction efforts, USAID created a consortium of health providers consisting of eight non-profit organizations, both national and international, ultimately forming the first non-governmental organization (NGO) health network in Nicaragua, NicaSalud (Lee, 2000). The Board of Directors, comprised of the Directors of the eight NGOs, initially identified four key strategies: sub-grant financing, provision of quality program services, institutional strengthening, and advocacy (Campos, Valadez, and Vargas, 2001). The NGOs implemented health projects targeted at high priority populations including women of childbearing age, children under 5, and adolescents

(Campos, Valadez, and Vargas, 2001). Today NicaSalud is a legally registered Nicaraguan federation comprised of 28 national and international NGOs joining forces in order to improve health indicators nationally (NicaSalud, 2004 Informe Annual). The NGOs are grouped together into three regional sub-networks: Pacific (departments of Leon and Chinandega), Las Segovias (departments of Madriz, Esteli, and Nueva Segovia), and Northern (departments of Jinotega and Matagalpa). The purpose of the subnetworks is to establish an institutional co-management among NGOs implementing the same health projects in order to maximize the use of time, resources and abilities of each (NicaSalud, 2004 Reporte Annual). Presently, the Federation has initiatives funded by USAID and the Bill and Melinda Gates Foundation and is being used as a model for the formation of other health networks in Central America.

CARE-USA conducted an extensive evaluation of the knowledge management system within the Latin America and Caribbean region beginning in 2002 that yielded many important findings about the role of knowledge management and social learning for development organizations working to fight global poverty (Center for Reflective Community Practice, 2006). CARE-Nicaragua fulfilled the role of linkage agent in the present study due to their involvement in the CARE diagnostic of knowledge management and learning and their participation as an original member and leader in the NicaSalud Federation.

A proposal came forth to utilize lessons learned from the CARE diagnostic and apply them to the context of NicaSalud in order to design a knowledge management strategy. Presently, some NicaSalud objectives explicitly include linking and articulating exchange of experiences, best practices and sharing lessons learned between

organizations in different geographic regions (NicaSalud Reporte Annual, 2004).

However, without an official strategic direction and a thorough understanding of knowledge management concepts and the capacity for its implementation in the Federation, these objectives are not being adequately met. As a result, there is a lack of communication and information about what specific organizations are doing and there is a high level of duplication of efforts and resources.

Purpose of the Study

The purpose of this secondary analysis is to examine data collected from non-profit health professionals in Nicaragua from June to August, 2007 in an attempt to better understand how the NicaSalud Federation functions, specifically with regard to knowledge management and social learning. The findings will be used to inform the production of a knowledge management proposal and ultimately support the creation of a strategy that will guide knowledge management practices for the 28 organizations that constitute the Federation and other institutions with whom they collaborate.

Research Questions

Based on these objectives, this study seeks to answer the following research questions:

- 4. What experiences do health-promoting non-governmental organizations in the Federation have with knowledge management?
- 5. What is expected of key stakeholders and how are the roles and responsibilities to be divided for designing and implementing the strategy?
- 6. What are the priority content areas for such a strategy at the level of the Federation?

Assumptions

The following are assumptions of this study:

- Study participants provided the investigator with honest information concerning their experiences and expectations with regard to knowledge management in the interviews and participatory workshops.
- Each participant experience will be placed within the context of a member organization of the NicaSalud Federation while also recognizing the individual differences in experience with and understanding of knowledge management.
- Qualitative methods, specifically semi-structured interviews and nominal group
 process sessions, are an appropriate means for data collection across organizations
 to contextualize the situation in the Federation.
- 4. The findings from this study can be applied to inform a future knowledge management strategy in the NicaSalud Federation.

Definition of Key Terms

The following are definitions for knowledge management and social learning that are relevant to international development organizations and have been used in the diagnostic of knowledge management for CARE USA's Latin America and Caribbean region as presented by Sebastiao Mendonca Ferreira. The definitions were also used in the conceptual introduction to the study received by all participants.

Knowledge Management: the management of the processes of generation, transfer and application/use of knowledge. It is also the art of creating value among intangible resources (social relations, image, knowledge, etc). Knowledge management contributes

so that a federation, organization or groups of people are able to extract lessons and deepen their understanding based on their own experience and/or that of others.

Social Learning: multi-directional learning that occurs in society between individuals, groups or organizations. Social learning crosses organizational borders and simultaneously involves a wide array of actors, such as individuals, businesses and organizations in society. Knowledge is made explicit, integrated and used by these social actors to strengthen their capacities thereby improving their strategies and actions.

II. Literature Review

Nicaragua

The geographic, socioeconomic and context in which NicaSalud was formed and currently operates was briefly discussed in Chapter I. The following presents some basic statistical and demographic information for the country. Nicaragua is the largest country in Central America, located South of Honduras and North of Costa Rica. It is bordered by the Pacific Ocean to the West and the Caribbean Sea to the East. The country is comprised of 15 departments and 2 autonomous regions, the Region Autonoma del Atlantico Norte (RAAN) and the Region Autonoma del Atlantico Sur (RAAS) (CIA, 2008). The population is estimated at 5,785,846 with a median age of 21.7 years (CIA, 2008). The country is plagued by widespread underemployment, severe degrees of income inequality, and the third lowest per capita income in the Western Hemisphere (CIA, 2008).

Health Care System

In the 1980's the Ministry of Health took control of and responsibility for administering the infrastructure and resources of the Nicaraguan Social Security Institute

(PAHO, 1998). Since that time, the Ministry of Health provides a huge majority of health services while the social security system covers 5% and the private sector is responsible for 4% (PAHO, 1998). The Ministry of Health has a reported 873 primary health units that serve nearly 3 million Nicaraguans (PAHO, 1998). A National Health Policy was developed for 1997-2002 with the objective of modernizing the health sector, developing new programs and strategies to address health problems, increasing coverage, and improving hospital care (World Health Organization, 2000). In recent years the number of non-governmental organizations providing health services has increased particularly in addressing women's health and health education (PAHO, 1998). NGOs in Nicaragua bring in nearly \$300 million annually and employ an estimated 10,000 staff members (World Health Organization, 2000). Factors such as low physician salaries and poor physical infrastructure have influenced the recent movement of health professionals away from the National Health System and into work in private practices or with NGOs (PAHO, 1998).

Knowledge Management and Learning in International NGOs

International NGOs have long sought to determine ways in which they can create organizational conditions that promote and learning as a priority for improving program impact and quality. The fields of organizational learning and knowledge management evolved separately beginning in the corporate sector to improve competitive advantage (Picard, 2007). In the 1990's organizations began recognizing that in addition to storing and maintaining institutional knowledge, they needed to create it as well and this required processes that fostered innovation and creativity (Picard, 2007). International NGOs differ from businesses in terms of accountability to constituents. Power et al. (2003)

argued that International NGOs and other development institutions have put very little effort into revealing or learning from past mistakes and in fact; this process is not required by their donors. Ultimately, development organizations should place more emphasis on creating the enabling conditions within their own organizations to reexamine values, assumptions, and practices (Pasteur, 2006).

The priority given to improving NGO achievement and impact requires a framework to increase coordination and alignment between several different social actors (Wolfensohn, 1999). The increased pressure and emphasis placed on demonstrating effectiveness and improving collaboration across multiple organizations is a new challenge faced by international NGOs (Beckwith, et al., 2002). This calls for increased professionalism, improved monitoring and evaluation and inter-organizational relations and requires effective processes for organizational learning and sharing knowledge externally (Britton, 2005).

CARE's Experience with Knowledge Management and Learning

In late 1998, the Latin America and Caribbean Regional Management Unit (LACRMU) at CARE began the process of establishing a guiding framework for organizational reform (Beckwith, et al., 2002). The framework was structured around the identification of a strategic target, five breakthrough arenas, program implications, and internal changes required (Beckwith, et al., 2002). Of the five breakthrough arenas, two addressed the areas of knowledge management, institutional learning, and inter-institutional partnerships. The first breakthrough arena sought to develop and promote learning processes so that programs would make available new approaches and knowledge that could potentially be used for social service providers and to influence decision makers

(Beckwith, et al., 2002). The third breakthrough arena focused on expanding and deeping inter-institutional relationships with LACRMU engaging stakeholders at multiple levels of society and developing relationships that extended beyond the traditional ones based on funding (Beckwith, et al., 2002). Ultimately a working system would be developed that involved the transfer of knowledge and learning between collaborators, dissemination of lessons learned from CARE programs, and CARE's increased involvement in networks and coalitions (Beckwith, et al., 2002). These goals of the management framework also necessitated internal organizational change in each of the aforementioned areas in order for them to be realized. One important approach undertaken by LACRMU is that of double loop learning. This deals with the kinds of questions asked, e.g. rather than asking, 'what is wrong with our program implementation?' the organization asks, 'is our strategic hypothesis correct? Have we identified the correct focus or targets from the beginning?' (Argyris and Schon, 1996). An initial limitation for the management framework is that there was no assurance that lessons learned by LACRMU would transcend the region and influence the larger CARE strategy so that learning and innovation would be prioritized (Beckwith, et al., 2002).

LACRMU contracted the Center for Reflective Community Practice at MIT to develop a tool at shifting the organization and social learning model that would allow for a multi-directional flow of information rather than the traditional top-down mechanism (Center for Reflective Community Practice, 2006). Later, they would also be responsible for evaluating the effectiveness of the LAC Knowledge Management System. In 2001, LACRMU began developing the LAC Knowledge Management System. One of the primary activities in rallying support and interest in knowledge management was to

organize a regional knowledge fair (Center for Reflective Community Practice, 2006). This process sought to advance experiences in social and organizational learning and focus on the planning stage of the knowledge fair, the event itself, and the period following the fair in order to determine what CARE can learn about learning processes and the implications for CARE's role in promoting them(Center for Reflective Community Practice, 2006).

NicaSalud: Network Promoting Health in Nicaragua

Health networks can be beneficial because they combine organizations with a long and successful community presence and expertise in different areas of health promotion (Hruska and Osborne, 2003). The literature also suggests that organizational networks that share decision making and combine efforts in program implementation are at an advantage in their ability to develop new services and approaches in less time and provide more creative solutions in the process (Alter and Hage, 1993). At an international level, this strategy is seen in the global alliances created to improve public health in developing countries. The Global Polio Eradication Initiative; Global Alliance for Vaccines and Immunization; Roll Back Malaria; and the Global Fund for HIV/AIDS, Malaria, and Tuberculosis are examples of these global alliances(Bill & Melinda Gates Foundation, 2002). As recognition of their successes and potential, the Bill & Melinda Gates Foundation are investing 80% of the total value of global health initiatives in alliances (Bill & Melinda Gates Foundation, 2002). There are, however issues that hamper the progress of service delivery in these networks including: insufficient governance, poor performance in monitoring and evaluation, and lack of productive relationship with the local Ministry of Health (Hruska and Osborne, 2003).

In the case of NicaSalud, the added value of a health network was evidenced through improved monitoring and evaluation systems incorporated across most member organizations (Hruska and Osborne, 2003). Another successful, although unintentional strategy has been the informal mentoring of small, local NGOs by larger, international private voluntary organizations which has enabled institutional growth through collaboration on projects (Hruska and Osborne, 2003). While NicaSalud has not had a concrete objective for the strengthening of its members and does not provided training opportunities in that area, it has worked with its member organizations to identify weaknesses and worked those institutions individually to address areas for improvement (Hruska and Osborne, 2003).

The regional sub-network structure enables knowledge sharing among organizations to take place through regular meetings and exchange of experiences on the programs in which they are collaborating (Hruska and Osborne, 2003). The network can also bring together organizations that are ideologically or politically dissimilar to collaborate and learn from one another's approaches and communicate with one another in an attempt to improve health at the national level (Hruska and Osborne, 2003).

An evaluation conducted by the NGO Networks for Health Project sought to better understand the reason behind strategic and tactical changes in program implementation and the ultimate source of the learning member organizations experienced in the process (Hage and Valadez, 2003). Their results suggested that the vast majority of the reasons for the aforementioned changes were due to learning obtained from NicaSalud (Hage and Valadez, 2003). Many of the organizations reported learning from other organizations within their regional sub-networks (Hage and Valadez, 2003). This represents a cooperative behavior in the exchange of learning about and

teaching specific techniques across organizations. Gradually, some of the organizations even began to share economic resources and combine forces politically (Hage and Valadez, 2003). So, while there is great potential for learning and knowledge sharing, an explicit framework and objectives should be developed to institutionalize and officialize these practices within the NicaSalud Federation.

Methods for the current study

Developed in 1968 by Delbecq and Van de Ven, the nominal group process was initially utilized in assessments of business settings (Gilmore and Campbell, 2005). Since that time, the process has been used effectively in a wide variety of professional settings, including human service agencies, voluntary organizations, and healthcare (Gilmore and Campbell, 2005). The advantages of the process are many, but the most important to the present study are planned interactivity, full participation from all participants, ability to foster a creative atmosphere, and direct involvement of target groups (Gilmore and Campbell, 2005).

Standardized open-ended interviews strike a decent balance between structure and flexibility. In this methodology the wording and sequence of questions are determined in advance, that is to say, all participants are asked the same questions in the same order (Patton, 2002). This aids in ensuring that the same concepts and domains are addressed in the response of each participant and that the comparability of responses across responses is increased (Patton, 2002). This interview type can also facilitate data analysis and organization (Patton, 2002).

III. Methodology

Introduction

Qualitative methods are an effective way to gather information and contextualize the experiences and expectations a participant might have with regard to knowledge management and social learning. The study utilized multiple formats including semi-structured interviews, and nominal group process workshops. These formats allowed participants to describe their conceptual understanding and experiences and voice and discuss their opinions on a potential knowledge management strategy for the Federation. *Target Population and Sample Participants*

The population of interest consisted of directors, program managers and technical staff from multiple NicaSalud member organizations representing three geographic subnetworks: Norte, Las Segovias, and Occidente, and the NicaSalud Technical Office. The interviews were scheduled and conducted with individuals based on their availability and the workshops took place at the regional or Technical Office level among people working on the same projects, and in some cases the same communities, but representing different organizational entities.

A total of 14 participants were interviewed, representing approximately 50% of NicaSalud member organizations. This sample represented well-funded, international organizations in the federation as well as smaller, national NGOs that do not currently receive NicaSalud funding. Three participatory workshops involving the nominal group process were conducted with a total of 30 participants representing 12 organizations and the Technical Office. To be eligible for the study, an individual was required to be a staff member working in health programs for a member organization of the NicaSalud Federation. The individuals had to be able to give informed consent to participate in either an interview or nominal group process session. Individuals who were under 18

years of age and not employed by a NicaSalud member organization or by the Technical Office of NicaSalud were ineligible to participate in the study.

Recruitment

Interview participants were recruited utilizing purposeful sampling in order to gather information-rich data from individuals who were very familiar with NicaSalud operations and were leaders within the Federation. Interview participants were approached by telephone and email correspondence with either the NicaSalud Director of Knowledge Management, Director of Networks, or the field investigator. At this point of contact, a general overview of the purpose of the study was provided, informal consent given, and interviews scheduled for a date, time and place convenient to the participant. The involvement of NicaSalud staff in study recruitment was extremely helpful because of their existing relationships with participants.

Recruitment for the regional workshops began by first contacting the coordinator for the sub-network via telephone and email. The regional coordinator then forwarded a description of the study and rationale for the workshops written by the field investigator to a minimum of one technical or project manager from each organization in the regional sub-network. Email correspondence then took place about availability, location, and logistics. From there, the workshop was scheduled and the regional coordinator sent a confirmation email to each participant. Generally, those who participated in the workshops constitute a "core group" that is very active and engaged in the sub-network activities.

Procedures

Interviews generally took place in the offices of the participants, but in a couple of instances, they were conducted at another convenient location agreed upon by the participant and the interviewer. The field investigator read a description of the study, discussed the purpose of the interview and voluntary nature of participation, and provided conceptual definitions for knowledge management and social learning. Verbal consent was obtained following this introduction and the interview began. Interviews lasted from 40-60 minutes from start to finish. All of the interviews were recorded using a standard tape recorder. To ensure consistency, all interviews and subsequent transcriptions were conducted by the field investigator. The audio tapes were kept in a locked cabinet at the office of the investigator and the transcriptions were stored electronically in a password protected file on the investigator's personal computer.

The participatory workshops consisted of a conceptual presentation on knowledge management, nominal group process sessions, and social network mapping activities.

Each took place at a different location. The workshop for the Northern sub-network was conducted at the CARE office in Matagalpa. The workshop for the Las Segovias subnetwork was conducted at the CEPS office in Somoto, and the workshop for NicaSalud Technical Office staff was held at the FamiSalud office in Managua. The field investigator was responsible for facilitating each workshop and designated one participant, usually the regional coordinator, for support in this role. After an introduction to the study and field investigator, the first hour of the workshop consisted of a conceptual presentation and discussion on knowledge management and social learning and how it relates to the NicaSalud Federation.

The other workshop component providing data for the present study was a nominal group process exercise to gather input from participants about key content areas and objectives for the knowledge management strategy for NicaSalud. Subjects began by reflecting intra-personally on their responses for each and writing them on colored pieces of paper. Next, each subject posted their papers under the key content area heading. Small groups made up of 2-4 participants were then given the task of discussing and synthesizing the inputs for one content area and presenting the findings to the large group. Discussion followed each presentation; points were clarified, sometimes changed, and priorities identified. The sheets of butcher paper and colored paper were collected by the field investigator, fully documented, and then destroyed.

Instrument Development

A nine-item semi-structured, quality interview guide was developed and implemented to better understand existing experiences with knowledge management across different organizations. The field investigator generated the questions in collaboration with and following key informant interviews with an expert in the field, and consultant from the Massachussetts Institute of Technology and the NicaSalud Director of Knowledge Management. The interview guide was reviewed by the NicaSalud Director of Knowledge Management and a CARE-Nicaragua project manager familiar with the subject. A number of questions focused on the individual's expectations (of other organizations and the NicaSalud Technical Office) in an inter-organizational collaboration. Subjects were asked how they could contribute to the incorporation and institutionalization of knowledge management practices in NicaSalud. They were also asked questions about roles and responsibilities of different stakeholders in the process of

developing a knowledge management strategy. Secondary questions and probes were asked in each interview. After the second interview was completed, a question was added to extract information about which knowledge was being transferred and to whom at the level of individual organizations and NicaSalud. A question addressing the types of lessons taken from NicaSalud programs was not asked of a majority of the participants because respondents had already answered it in previous interview questions.

The facilitation guide for the nominal group process was designed and implemented by the field investigator. This technique can be useful in identifying problems, generating ideas on how to solve problems, or planning programs for an organization. The objective was to address and prioritize the following key content areas for a NicaSalud knowledge management proposal: 1) events, initiatives, and activities involving knowledge management in the Federation; 2) roles and responsibilities of different stakeholders as they pertain to implementing knowledge management; 3) audience for the proposal; 4) points for sustaining and promoting the learning activities within the network.

Analysis

All of the interview transcripts were reviewed with the audio recording to ensure accuracy of the verbatim transcriptions. The data were analyzed in an inductive content analysis approach. Preliminary analysis consisted of reviewing transcripts and compiling a list of open codes based on themes that emerged. The open codes provided the basis for a codebook and were then applied to each of the questions in the interview guide.

Separate documents were created illustrating categories and codes for each question.

Finally, the categories and codes were combined into one document and color-coded by

interview question. By comparing all data to the main themes discovered and initial open codes that emerged, additional categories and codes were developed and added to the codebook. Linkages were made between some themes, categories and codes.

The nominal group process data including audio recordings and written responses to each of the content areas were first reviewed and analyzed individually. Next, each group was compared against the other two in order to check for similarities and differences in responses and priorities.

IV. Results

This chapter presents results from the analysis of semi-structured, qualitative interviews and nominal group process sessions. These findings address the primary research questions of the present study. Research question three, which deals with specific content for a knowledge management proposal is addressed in part here and also in the following discussion chapter. The study sample for the interviews consisted of directors, technical advisors, or project managers from 13 different NicaSalud member organizations. These individuals were selected for interviews based on their familiarity with the dynamics and work carried out in the Federation.

Table 1. Organizations Interviewed

Number	Organization
1	Adventist Development and Relief Agency (ADRA)
2	Alistar
3	CARE
4	Catholic Relief Services (CRS)
5	Companeros de las Americas

6	Fundacion para la Promocion y Desarrollo de las Mujerez y la Ninez
	(FUNDEMUNI)
7	Centro de Mujeres Ixchen
8	Project Hope
9	Project Concern International (PCI)
10	Profamilia
11	PASMO
12	Centro de Estudio y Promocion Social (CEPS)
13	Instituto de Promocion Humana (INPRHU)

The sample for the three group process workshops consisted of representatives, both technical and field staff from member NGOs in the Northern (N=9)and Las Segovias (N=12) sub-networks and staff from the NicaSalud Technical Office (N=9). Five of the 30 workshop participants were also interview participants. Qualitative data analysis was conducted by identifying emergent themes and later categories of codes to address the research questions. The findings from the nominal group processes were incorporated into the interviewing codes, but also compared against the other group process workshops.

Research Question 1: What experiences do health-promoting non-governmental organizations within the Federation have with knowledge management?

The first research question sought to better appreciate the current understanding of knowledge management, experiences in knowledge management that have actually taken place, and the institutional context of the NicaSalud Federation. Responses from

the interviews and nominal group process sessions suggest that most participants are not entirely comfortable with the concept of knowledge management and its application. Participants provided information that illuminated knowledge management experiences at multiple levels; within their own organizations, and outside of their organizations including other NicaSalud member organizations and external partners. A myriad of methodologies that participants consider to be knowledge management activities were listed and some described in great detail. Participants expressed how they feel they have benefited from these experiences with knowledge management as well as barriers that impede improved work in the area.

Familiarity with knowledge management

A brief conceptual definition of knowledge management was provided to each interviewee prior to beginning the interview and a conceptual and theoretical PowerPoint presentation was given at the beginning of each of the group workshops. Following the workshops, many participants reported having a better understanding of knowledge management and increased interest in the subject matter. Several participants stated that knowledge management is not a term used within their own organizations or that they had heard much about in their work with the Federation. Some posited that very little if anything is done within their organizations locally, but perhaps more at the international level for communicating across regions. A few participants expressed the sentiment that, "generally, we do not explicitly work in 'knowledge management,' but we probably do all kinds of activities that are in fact 'knowledge management.'" One of the most common responses when asked how they would define knowledge management was "sharing or exchanging experiences." This sharing reportedly takes place at many

different levels including beneficiary communities, within their own organization, within NicaSalud, and with external partners. Some participants also said that knowledge management is a very novel term in Nicaragua and one that is growing in popularity in the field of international development, so while they may have heard of it, its exact meaning is not entirely clear or understood. Others were more confident in their understanding due to their review of the literature or prior trainings and incorporated terms such as "benchmarking," and "organizational and social learning" into their responses. One participant shed light on some of the institutional conditions that contribute to the current state of knowledge management in the Federation: "while there is plenty of interest in knowledge management, the problem is that there is no time to work on it and no staff within the organizations or NicaSalud directly responsible for it." *Experiences within own organization*

The experiences reported by participants about their own organization also took place at multiple levels: with the beneficiary communities, within the same country office, but across sectors, with other Central American country offices and ultimately, at the global level of their organization. Some stated that they were aware of very little, if any instances of knowledge management within their organizations, however a majority described their experiences and methodologies used.

Some participants addressed learning at the level of the communities in which they work. One member organization explained that in an attempt to better understand the knowledge and learning possessed by their target populations in communities, they developed a methodology to harvest community member impressions of the projects and activities being carried out, gauge their knowledge and understanding, and compare and

contrast those with the program objectives. The participant expressed a willingness and excitement at the possibility of sharing this methodology and more horizontal approach to community development with other member organizations.

Others described mechanisms for sharing information and experiences with other sectors in the same office. Intra-office methodologies included monthly meetings in departmental offices in which program staff from different sectors, report on the work being done in their programs, successes, challenges, and there is a space for discussion and feedback to enrich the perspectives of participants. At the level of country office, some described structures in place for sharing information and practices with different departmental offices, although less frequently:

The teams from Jinotega and Esteli departments that are implementing the same projects work together and communicate with one another, so we see the experiences of each, combine them, and it helps us to improve interventions that in theory are the same, but in practice, are done differently.

Other frequently mentioned methodologies for the sharing of information and experience include annual evaluations, communicating results, feedback sessions, identifying weak areas and providing training for all relevant staff, and discussion groups. Some individuals were pleased to report that although knowledge management is a novel term in their organizations, they feel that they have advanced significantly in their institutional approach to knowledge management and learning:

We've come to the conclusion that when one creates their work, it is a combination and culmination of knowledge that doesn't belong to a specific team or to the institution; it belongs to the society... That's been a good achievement.

Within our organization, knowledge management used to mean sending out a bulletin encouraging people to include their lessons learned. Now we have it as an organizational standard that we document the entire process and this gives us more elements and greater evidence to introduce the knowledge and begin making the change."

These passages suggest that some of the individual NGOs, both national and international, are thinking critically about the potential for knowledge management to improve organizational functioning and are taking steps toward that end independent of their affiliation with NicaSalud.

One participant received extensive training in social learning and knowledge management and served as a member of the organizing committee for a National Knowledge Fair with CARE colleagues and other institutions in El Salvador. The Knowledge Fair trained knowledge promoters to identify innovative experiences within organizations and communities and collaborate with these groups to share their experiences with an audience of other knowledge communities and potential strategic allies. Two other representatives from NicaSalud were invited to participate in formative workshops prior to the Knowledge Fair. This experience with the CARE staff member in the enormous undertaking in El Salvador, and his integration of NicaSalud counterparts was the impetus to undertaking the investigation in the present study.

Experiences outside of own organization

Participants were also asked to describe their experiences with knowledge management, the methodologies employed, and whether there are existing structures within the NicaSalud Federation. Several participants stated that they consider their membership in the Federation to be an experience in knowledge management and learning in and of itself.

Our motivation for joining NicaSalud was to obtain support from other organizations in order to synergistically carry out programs, and obtain our organizational and programmatic objectives.

The most important part of belonging to a Federation is sharing experiences and knowledge back and forth with the organizations and this allows us to take the lessons learned from others and put them into practice. In this way, a constant knowledge process occurs.

Two particularly poignant examples of knowledge management initiatives within the Federation were mentioned by multiple participants as experiences that were very rewarding, or that were an appropriate first step in institutionalizing knowledge management in NicaSalud.

Comisión PRORED

One such initiative was the formation of the *Comisión PRORED*, or Pro-network Commission. PRORED was created in 2005 to serve as a connecting body or liaison for the exchange of experiences between the member NGOs. One country director who was a member of the commission described the rationale behind the commission from his point of view.

The idea was that an organization would tell us which areas they were weak in or were looking to learn about and we would connect them with a particular organization so that they could appropriate that strength from them. In that way, the network could grow in a more uniform manner and move away from the idea that the network contains strong organizations and weak organizations; it would be more balanced.

When probed about what PRORED accomplished, he explained that while it was not officially disbanded, it was no longer active. The interest was present and it was a felt need by many organizations in the Federation, but in actuality, very few followed through with the action.

No one understands knowledge management in a uniform fashion; in a way that they can carry it out and share it. There were a few organizations

who took it really seriously, but others were not as motivated. The commission members could never all get together at the same time and then they put different Technical Office staff in charge and there was no coherence on what was understood about knowledge management and what we wanted to apply, so there again, nothing happened."

Another participant and member of PRORED said that he had hopes the Commission would be recognized as an official interest group within NicaSalud, one that provided a "space for the socialization of experiences from each NGO." Three members of PRORED were interviewed and they all expressed frustration at the dissolution and inactivity of the commission and hope that another, similar group could be created. One suggested forming a small group of people with experience and training in knowledge management that would be willing and able to commit time and act as the driving force behind knowledge management in the Federation. Similarly, another member recommended the following structure and composition for such a group:

It would be good to develop facilitators of this process, a team whose diversity would be representative of the Federation; nothing as prescriptive as naming people who possess certain affinities, but rather considering the human resources and capacity within each NGO, some just can't afford to be that involved. The coordinators of each sub-network could spearhead the work and disseminate the training and information to the NGOs in the sub-network. Because that's going to guarantee you participation from the entire Federation without exclusion and engage people in the production of the knowledge management strategy.

Pasantillas

When interview and group workshop participants were asked about successes or positive experiences with knowledge management, for many, *pasantillas* were the first response. The *pasantillas* are opportunities in which 4 or 5 NGOs are invited to spend a few days with a host NGO and observe how things function in the office, and more importantly, within the projects in the communities. These activities were coordinated by

the NicaSalud Technical Office in terms of the host NGO and those invited to attend the field visit. It was a positive experience for the host NGO because they were given an opportunity to exhibit their work to colleagues first-hand and in turn were validated:

It was gratifying to share our experience with a project in Boaco and hear that another organization thought there was potential for them to successfully incorporate it to their initiative in Chontales.

Conversely, several participants mentioned the value of attending these exchanges for the lessons they learned and simply observing the reactions and response of the other attending NGOs. The director of an international NGO that does not receive NicaSalud funding summarized the experience of one of his technical advisors after participating in the exchange:

We were so impressed with a microfinance project being carried out by an organization in the North; many of the things that we saw they were doing, we thought could be utilized in some of our projects and from there arose two new youth initiatives for our organization in the West.

This adoption of practices, methodologies, and lessons learned can be a complete adherence to what attendees see and learn about on the exchange, or users have the flexibility to make any modification they see fit for their contextual reality, be it target population, geographic region, human resources, or instrumentation and monitoring and evaluation. There was however, one limitation to fully realizing the potential impact from these exchange experiences. Participants stated that while the exchanges provide incredible opportunities for learning, and incorporation into their own practice, the process often stops there. There is an expressed need to systematize these exchanges and to be more specific in defining the overall intended product. These exchanges have taken place for years with organizations representing different profiles and regions, but as one

participant stated, "To provide follow-up, to document, and disseminate these experiences would be excellent."

With external partners (MINSA, SILAIS)

Given that the Nicaraguan Ministry of Health (MINSA), and the Departmental Health Authorities (SILAIS) are key partners in many NicaSalud initiatives, there are several opportunities for knowledge sharing and knowledge management covering all components of program implementation including design, methods and evaluation. Participants stressed the importance of excellent communication with MINSA and SILAIS particularly in matters relating to procedures and protocol. The Western subnetwork partners differently and with MINSA as compared to the Northern and Las Segovias sub-networks; one NGO is designation as the financial and administrative coordinator and they transfer the funds to the other organizations in the Western subnetwork, the other sub-networks have direct contracts with NicaSalud. In spite of this difference in approach at the sub-network level, overwhelmingly participants said they felt it was important to exchange information and experiences with other organizations, with governmental institutions and with communities.

Supportive factors for knowledge management

A number of positive experiences and successful methodologies for knowledge management have been discussed. As demonstrated above, participant response suggests that there are supportive factors such as organizations and individuals within them that are explicitly incorporating knowledge management into practice and existing structures for exchange of experiences and information across organizations. There are also several perceived benefits for implementing knowledge management based on experience within

the member organizations. Chief among them is the ability to advance and strengthen the capacity of all of the NGOs on intellectual programmatic performance levels as well as expanding their reach and working in unison. While membership in the Federation is advantageous to the organizations, the institutionalization of knowledge management in a strategic sense will help to guarantee that the work remains sustainable, competitive and constantly improving.

Impeding factors for knowledge management

There are however, several existing institutional conditions and attitudes within the Federation that serve as barriers and ultimately hinder effective knowledge sharing and knowledge management practices. The limited understanding of knowledge management concepts as described in the beginning of this chapter acts as an impediment to large-scale implementation throughout the Federation. This lack of understanding can result in disinterest or a lack of motivation to engage in knowledge management. One participant stated that until there is an official stand on and direction for knowledge management within the context of NicaSalud, some will be skeptical or resistant because of the abstract nature of knowledge management concepts and theories. In terms of organizational priorities for carrying out work, some view knowledge management as a function separate from mainstream work and it is difficult to allocate time and resources when they do not appear in the job description or program objectives. Although the data suggest that learning experiences and knowledge exchanges are taking place, there is no official mechanism for providing continuity to those initiatives. Several participants mentioned the need for systemization of formats, methodologies, processes and experiences:

We need to better document, structure and organize our experiences so that they can be explained more clearly, readily understood, easily adopted and widely disseminated.

There are several experiences, like the pasantillas, with their own specific methodology that could, well, should, outline what people can get out of those experiences and how to put it into practice for health or development. I think what's lacking is to have different kinds of methodologies for different kinds of projects.

Participants also expressed concern over unequal distribution of information among the member organizations. The NGOs represent a wide variety of profiles and institutional capacity. Some NGOs have programmatic approaches that are not compatible with NicaSalud and ultimately USAID funding requirements. Examples include organizations that disseminate information about therapeutic abortions or have progressive approaches to HIV interventions. One country director from a national NGO that belongs to a sub-network, but does not receive NicaSalud monies or implement their programs described this predicament:

Organizations are unhappy because they don't qualify for funds and can't compete with those that have more experience and greater capacity to present a better developed offer.

In the workshop with the Las Segovias sub-network, this issue was discussed and the consensus was that more effort needed to be made to re-engage organizations that are currently on the periphery in the activities and dialogue of the sub-network.

Another deterrent to knowledge sharing among member NGOs is the phenomenon of egoism, or the belief that one's work profile and approach is superior to that of others and they will only participate in self-interest. There is also an overwhelming competition for resources and funds in spite of the cooperative, synergistic intentions of the Federation:

Some organizations are totally closed off and uninterested in changing. They already know that what they are doing is best. Originally there was jealousy and fear about sharing experiences and methodologies, but bit by bit we've improved.

The demand for financial resources is so much greater than what is being offered. With our current funding sources and options as low as they are, I think we should realize that we can't all be experts in everything and we should create expert groups around different themes to alleviate some of this pressure. Then organizations would be allowed to be good at what they're good at and when they need additional information on a subject, they turn to that expert organization.

Lastly, many participants discussed tensions between the NicaSalud Technical Office and the member NGOs. The perceived role of the Technical Office will be addressed in detail under research question 2, but it was clear from many reports that NGOs are uncomfortable or discontent with specific Technical Office practices. One point of contention is with some NGOs is the perception that when USAID or Gates Foundation offers a limited number if spots at trainings or conferences, the Technical Office occupies all of them with their staff, and the information is either not disseminated among organizations, or when it is received, it feels like a hierarchical, vertical exchange of knowledge rather than a horizontal one. Others mentioned frustration at the tendency for NicaSalud to appropriate the efforts and resources of organizations acting as protagonists in an intervention and fail to give them the recognition they warrant:

It's happened a lot in the past, individuals or teams from member NGOs will carry out the backbreaking work of setting up an initiative and then the Technical Office staff takes over, takes credit for our efforts and in the NicaSalud published reports, we're lucky if our tiny logos appear on the back cover. This lack of recognition leaves us feeling frustrated and demotivated.

Research Question 2: What is expected of key stakeholders and how are the roles and responsibilities to be divided for designing and implementing the strategy?

Questions surrounding expectations of different key stakeholders including organizations themselves, and the Technical Office were asked in the semi-structured interviews. One of the questions in the group process sessions specifically addressed roles and responsibilities of the stakeholders. The primary stakeholders discussed in this data set are the member NGOs, the NicaSalud Technical Office and other external partners.

Individual Organizations

When participants reflected on the role and responsibilities of individual organizations, and the expectations of other organizations with regard to collaboration in knowledge management, the most popular response was being "open and accepting to the ideas and knowledge of others." There was also an expressed need for all of the organizations to commit to participating actively in the generation, transfer, and application of knowledge. Again, the issue of differences in the development of organizations arose and participants stressed the importance of sensitivity and responsiveness to the different organizations, "understanding that some move faster than others" but still respecting their aptitudes. One director of a national NGO captured the complexity of this role for organizations in the Federation:

We are all totally different, and yet we have a couple of things in common: we all work to improve health and community development, and we all need funds and resources in order to operate. Aside from that, we are totally different, many forms of carrying out the same work, different work, many ways of thinking, many individual experiences, and many collective ones...so, there you have the NicaSalud Federation.

The context of the Federation is a very complex one in which organizations strive to find a balance between achieving their own organizational and programmatic objectives, approaches and priorities, while also working in unison on the same health projects with organizations that are potentially politically, spiritually, geographically, and methodologically dissimilar.

Within the group process sessions, participants viewed the role of member organizations as being the force that drives facilitation and implementation as knowledge management is operationalized in the Federation. Again, interest in facilitating processes according to organizational specialty. Generally participants felt that the responsibility would be to ensure participation and adherence to the agreed upon processes involving knowledge management. Another responsibility is to form knowledge management teams either at the level of the Federation or for each sub-network. The role of the sub-networks was also discussed and most agreed that knowledge sharing should be taking place across and between sub-networks and structure or mechanism is currently not in place. Given that many of the most active, engaged NGOs are implementers of the FamiSalud program, and as a result, members of the sub-networks, one participant took the observation one step further and her insight was well-received by other participants:

We need to move beyond, to transcend, our knowledge sharing being a commitment merely at the level of actual projects. We've got to apply it to the entire Federation, not just a project; this will not be a knowledge management strategy for FamiSalud, but rather a strategy for the entire Federation.

Technical Office

Member organizations answered this question specific to the role and responsibility of the Technical Office both as interview participants and in the group

process sessions. The responses between the two research methods differed somewhat in that the group sessions focused almost exclusively on concrete roles while the interviews touched on some of the institutional conditions they view as a requirement in successfully implementing knowledge management. Additionally, in the interviews it quickly became evident that the role of the Technical Office has been under debate and highly contentious for the past two years. Participants hoped that the opportunity to participate in decision making and implementation regarding knowledge management would be made available to all member NGOs, not just those being funded. There was also an expressed desire for the Technical Office to respect what the majority of the organizations decide and commit to providing follow-up and support to the efforts of the organization while also giving them the recognition they deserve. An alternative view was expressed by two participants who feel that the Technical Office fosters a hierarchical relationship and the technical capacity and expertise is already in place within the member NGOs. They argued that the funds could be better used by investing in the member NGOs directly. In fact, most of the Technical Office staff worked at member NGO offices prior to being employed by NicaSalud:

I think the role should be more like there shouldn't be a technical office at all. I think they should create a type of secretariat that directs the organizations without a technical office. And it would be the same technical staff from the organizations that provide the technical assistance to the Federation in their area of expertise

The Technical Office staff answered the question of themselves in their group process session. They described their role as being responsible for facilitating the implementation of the knowledge management strategy. One staff member added that their role at first would be to provide the NGOs with and exercise and practical

application of knowledge management. Ultimately, they agreed the Technical Office should facilitate opportunities for member organizations to strengthen and build their knowledge management capacity.

The Las Segovias sub-network decided the Technical Office should act as facilitators of the process, and provide coordination across sub-networks. They should also oversee the design of the overall knowledge management methodology to be used and the design of models for specific areas of intervention and work groups: child survival, sexual and reproductive health, and environmental health. Another responsibility of the Technical Office to guarantee the procurement of technical and financial resources needed to carry out the knowledge management strategy. The Northern sub-network was in agreement on the aforementioned points, but added that The Technical Office should host a forum promoting knowledge management, and its application in the Federation, while also assisting with the logistics involved in training al of the member organizations.

External Agents

Expectations surrounding the involvement and responsibilities of external partners were more difficult to pinpoint because of the variation in external partnership in which each of the different member NGOs is involved. Additionally, external partners were not explicitly mentioned in the interview guide. The Ministry of Health (MINSA) and the local health departments (SILAIS) are the single entities with which all member NGOs have contact, collaborate with, and ultimately report to in matters of health programs. To that end, interview participants most commonly mentioned the importance of incorporating MINSA and SILAIS into the knowledge management strategy. Others

suggested it could incorporate other governmental institutions, community-based organizations, and academic institutions as well as donor agencies such as Gates Foundation and Oxfam International.

While the Las Segovias sub-network prioritized governmental institutions as an important audience for the knowledge management proposal, they did not describe what their roles or responsibilities might be. The Technical Office initially concluded that MINSA should have a role in communicating regularly with NicaSalud and supporting the initiatives of the Federation. In the discussion round, an interesting perspective was presented that proposed a different responsibility for government institutions:

The state for example, is responsible for making laws that protect and affect civil society each day, particularly when it comes to finances. They shouldn't be competitive with NGOs, but rather work together with specific ones to form juridical or cultural alliances.

This prompted more examples of potential alliances to be explored. One Executive Team member suggested the National Commission on Science Technology would be key in transferring and adopting innovative experiences from the governmental level. Another mentioned plans underway to incorporate the National School of Public Health in the knowledge management strategy so that the methodologies and conceptual information could be incorporated into the curriculum of that institution. As a result, graduates of the program would enter the workforce with NicaSalud, or NGOs already being well-versed in NicaSalud knowledge management strategies. A barrier to these discussions was hesitation to really dream about what future collaborations would look like without knowing exactly where NicaSalud stands on the issue of knowledge management and learning.

Research Question 3: What are the priority content areas for such a strategy at the level of the Federation?

The purpose of the nominal group process workshops was to get one step closer to identifying priorities and opinions about what should be done in preparation for the design and implementation of a knowledge management strategy as well as specifics to be addressed within the strategy. There were four categories presented to all participants for individual reflection and group discussion in the three sessions:

- 1. Events, activities and initiatives to be carried out as part of the strategy
- 2. Audience for the knowledge management proposal
- 3. Roles and responsibilities for key stakeholders (already discussed)
- 4. A plan to sustain and promote social and organizational learning within NicaSalud.(see following chapter)

Events, Activities, and Initiatives

The Northern sub-network identified six action steps that they felt would be appropriate:

- 1. Develop exchange of experiences between organizations and at the community level involving different levels and spaces: Executive Board, member organizations, NGO Directors, Sub-networks, Community leaders, and families.
- 2. Carry out *pasantillas* between different field staff teams at the level of the subnetwork. Thus far they've taken place with higher officials, but technical staff from different organizations that should be carrying out the programs in a uniform way could see how other technical staffs conduct the work.
- 3. Implement an intra-Nicasalud Knowledge Fair between sub-networks to sensitize and promote different initiatives.
- 4. Conduct an inventory of the strengths of the member NGOs and their human resources. This should be updated constantly and for a purpose, not just to have a document.

- 5. Systematize and document the experiences of the Federation in knowledge management.
- 6. Establish a marketing team to investigate steps in developing projects for other donors. We need to find other funding sources

The Las Segovias sub-network identified several initiatives and activities to carry out or develop; the following are the five that were prioritized:

- 1. Plan and implement a Fair in the traditional sense; an exchange of experiences and exposition of successfully initiatives and organizational strengths.
- 2. Conduct a conceptual and theoretical training workshop for the entire Federation so that all are on the same page with regard to knowledge management.
- 3. Incorporation of the positive deviance methodology across health program areas (Child health, sexual reproductive health, environmental health)
- 4. Diffusion and incorporation of the "Grandmother Methodology" being used in some FamiSalud communities
- 5. Continue with the *pasantillas*

The Technical Office generated the following list of priority initiatives:

- 1. Develop skills and competencies for monitoring and evaluation in our health projects that incorporate establishing key indicators for knowledge management.
- 2. Facilitate knowledge generation between members of the Federation in order to utilize best practices in social learning, share the social learning processes, adaptation of the concept (the basics of knowledge management).
- 3. Communication campaign to facilitate an adaptation and clarity of knowledge management concepts and NicaSalud's train of thought on them.
- 4. To generate, transfer and use knowledge in all of our processes: administrative, financial, technical, information technology, human resources, etc would be ideal. We must decide who we're going to begin with and how.

Audience

Participants were asked to think about whom/what entities would be interested in the information contained in the knowledge management proposal. There was little variation in the responses from each of the group sessions. All agreed that it would be necessary for the beneficiary communities, field staff from the organizations, and project managers/coordinators to be familiar with the contents of the plan for the purposes of implementation in the programs. At the next level were members of each sub-network, and later all member organizations of the Federation. Next directors of the NGOs and the NicaSalud Board of Directors (although only one person mentioned them) were listed. Finally, the organizations comprising civil society and governmental institutions were addressed.

Once preliminary analysis of the key informant interviews and nominal group processes was conducted, the consultant and key staff from member organizations and the Technical Office met to draft proposed action steps as preconditions for the development of the knowledge management strategy.

- 1. Creation of a knowledge management commission: This group should consist of individuals with a background in knowledge management and social learning and will commit themselves to being the driving force in this formative phase toward the development, promotion, and facilitation of incorporating a knowledge management strategy into the Federation. This group will be responsible for drafting a knowledge management proposal with preliminary findings from this study to the Executive Board of NicaSalud as a starting point.
- 2. Conceptual clarity and direction with regard to knowledge management so that the subject and its practice can be institutionalized: Given that knowledge

management in a new topic for the Federation, it is necessary to develop a series of activities geared toward familiarizing and standardizing the concepts of knowledge management including: the development, presentation and appropriation of knowledge management practice, sensitization and training in knowledge management at the level of the Federation and resource acquisition to develop and carry out social learning initiatives.

- Implementation of a Communication Plan: To inform, promote and disseminate knowledge management activities designed to take place in the Federation
- 4. Establish a functional network of social learning promoters within the Federation: Aim to establish and create a network of knowledge promoters consisting of staff from member organizations with the purpose of building capacity in the promotion of social learning.
- 5. Carry out Knowledge Fairs Focused on Social Learning: NicaSalud should plan to promote knowledge fairs at local and national levels with the purpose of identifying innovative social experiences and promoting knowledge and social learning among the communities and groups that participate.
- 6. Continued support for innovative initiatives post-fair: Given that the knowledge management strategy will include knowledge fairs centered on social learning, prior to that it is necessary to have a plan to sustain and continue all of the innovative initiatives. This includes seeking out funding opportunities, collaborators, social recognition or creation of societal conditions in which the initiative can flourish.

Chapter V: Discussion

This study examined the understanding of and experiences with knowledge management and social learning within the context of the NicaSalud Health Federation in Nicaragua. The study also sought to gather information from member organizations about the capacity and requisite conditions for developing a knowledge management strategy. A range of methodologies and experiences have been identified which describe knowledge management activities as they are understood in other countries and cultural contexts (Hruska and Osborne, 2003).

Needs and capacity assessments are increasing in their utilization due to justifying and documenting programs and initiatives (Gilmore and Campbell, 2005). From a capacity perspective, community groups value recognition as resources in the planning, implementation, and evaluation of health program activities (Gilmore and Campbell, 2005). Although preliminary, the qualitative needs assessment presented in this thesis is an important first step in moving toward an understanding of the needs and expectations of NicaSalud organizations as they pertain to knowledge management and social learning so that a strategy can be developed ultimately institutionalizing knowledge management practice in the Federation. Additionally, there are larger implications for NGOs that implement public health programs by working in association with one another.

A number of themes that emerged from the data analysis in this study are consistent with social learning themes identified in an evaluation of CARE's Knowledge Management System Final Report. Although that study was evaluating a well-developed knowledge management system 6 months post-knowledge fair, and it utilized the critical

moments reflection methodology, the social learning themes of documentation, transferring/sharing knowledge, clarity of knowledge management process, recognition, and motivating factors (CRCP, 2006), all surfaced in the data provided by the NicaSalud member organizations and Technical Office. The second group of themes in the CARE Final Report addressed external and internal supporting conditions. Similarities between the two studies also existed in terms of a need for affiliation and interaction with others, and perceived hierarchy of capabilities among groups and a power imbalance.

Limitations

The findings from this study should be considered in light of some important limitations. Generalizability was limited by the qualitative interviews and nominal group process sessions as well as the sample size. Many of the participants were among those most actively involved in NicaSalud activities and may not be representative of professional staff within NicaSalud member organizations. Additionally knowing that the investigator was a CARE consultant and collaborating with Technical Office staff, participants may have wanted to provide socially desirable responses.

Another limitation to this study is the potential that language barriers may have impeded understanding, particularly in the presentation of conceptual and theoretical information pertaining to knowledge management. Although the investigator has worked in Latin America for several years and is highly proficient in Spanish, she is not fully fluent. In the group process sessions, there was always a designated Nicaraguan co-facilitator acting in a support role.

Implications

There are many implications for the practice of NGOs implementing public health programs from this type of study. Leveraging its social and political capital as one of the leading organizations in NicaSalud, and its recent practical experience in social learning CARE was able to catalyze the undertaking of this research initiative and begin a strategic discussion around knowledge management and social learning. Where this initiative fell short, was in the catalyst's ability to sensitize the entire NicaSalud Federation as an individual who is already over-extended in his professional role. This experience suggests promise for CARE's ablity to cultivate broader commitment to social and organizational learning within other networks in which it operates. Political will and capital within an organization contributes heavily to an agency's commitment to learning and knowledge management. When this level of commitment varies, it is important for the coordinating body, in this case the Technical Office, to promote and foster a uniform understanding and strategy.

Increasingly, donor agencies including the United States Government and the Gates Foundation are demanding evidence of programmatic impact and documentation of successes and learning. There are also trends toward encouraging NGOs to formalize partnerships with one another in consortium or federation to capitalize on the comparative advantages and strengths of each.

Recommendations

This study has highlighted the challenges and successes experienced by NicaSalud. The Federation was established as a collaborative network of NGOs with the aim of improving health outcomes in Nicaragua. Given the complexity of its membership, it is important for the Technical Office to elaborate a knowledge

management strategy to improve and standardize information sharing, communication and learning within and between organizations. Future research should conduct more indepth analysis of key factors or domains and the enabling or limiting conditions that affect each.

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Appendix A: Introduction of Research Project to NicaSalud Member Organizations

To: NicaSalud Sub-Network Coordinators

Ref: Workshop on Knowledge Management at the level of the Sub-Network

Katie Morris is a consultant working with CARE USA in Atlanta, Georgia. She is in Nicaragua until the end of August to support the development of a knowledge management strategy for the NicaSalud Federation. Knowledge management is a topic, not formally undertaken by the Federation, but there is a felt need from the member organizations to improve communication systems, information sharing and knowledge management.

The first step is to undertake exploratory interviews with key informants from various NicaSalud member organizations.

Secondly, a participatory knowledge management workshop will be carried out at the level of each Regional Sub-Network. The agenda includes a description of basic concepts and specific knowledge management modalities (including a map of communication and information flow and identifying priority areas for inclusion in the knowledge management strategy). This is a one day workshop which will take place from 9:00AM-4:00PM.

We would like to request the presence and participation of one manager/coordinator and one technical staff person from FamiSalud for each organization. Previous experience with "knowledge management" is not required, but individual interest in communication and learning with other organizations will be helpful. Snack and lunch will be provided for participants.

Please advise as to the convenient day for scheduling this workshop.

The same workshop will be undertaken with all three Regional Sub-Networks and the results will be compiled to elaborate a knowledge management strategy for NicaSalud, as well as initiate the formation of a Knowledge Management Core Group responsible for following up the implementation of the action plan.

Appendix B: Inter	view Guide	
Organization		
Position		
Date		
Interview Guide) :	
managem	nent (systematizations, e	eriences you have had with knowledge valuations, participatory workshops, sons learned, bilateral exchange, etc.).
knowledg		r organization in an inter-organizational? (Improving programming, professional best practices, etc.)?
3. What role	would you like for your o	organization to play in this process?
managem a. Wh	nent?	th a joint effort in knowledge ribution be in the development of a rategy?

5.	What do you expect from the other NicaSalud member organizations in a shared initiative with them?
6.	What do you expect from the NicaSalud Technical Office in a shared initiative with other organizations?
7.	What have been your major achievements and difficulties in these experiences? a. What attitudes and factors of the team or organization are supporting or limiting your ability to take advantage of these experiences?
8.	What suggestions do you have in order to develop a knowledge management strategy for the NicaSalud federation? a. What institutional conditions are needed so that initiatives such as this strategy can come alive?

Appendix C: Methodology for nominal group process sessions in regional workshops (1.5 hours)

Purpose: With the application of the methodology, the following should be achieved:

- Develop a clear and realistic vision and objectives for a knowledge management strategy that utilizes the perspectives of all workshop participants.
- Utilize communication and cooperation between participants through individual and group work.
- Define the priority areas for the strategy through methods including visualization and documentation.

The primary concentration areas for the discussion are the following:

- 1. Knowledge management events, initiatives, and activities within the NicaSalud Federation (internships, knowledge fairs, etc.)
- 2. Roles and responsibilities of different stakeholders (member organizations, the Technical Office, other external agents)
- 3. Audience for the proposal- donors, cooperative agencies, press/media, decisión makers
- 4. Plan to sustain and promote learning activities within the Federation
- 1. (10 minutes) Individual Reflection: Each person should take some time to write their ideas and opinions for each of the four aforementioned concentration areas (One idea/contribution per small piece of paper).
- 2. (2 minutes) Once they have finished writing, each participant should paste all of their small pieces of paper on the wall below the sign for each area of concentration.
- 3. (15 minutes) We will now form four groups. Have the large group number off from 1-4. Each group will take responsibility for grouping similar ideas, different ideas, those that appear multiple times, and make a synthesis of the responses for one of the areas of concentration. Each group should designate an individual to present the synthesis to the large group.
- 4. (10-12 minutes for 4 groups = 45 minutes) Each group will present the synthesis and responses for their concentration area. Following each presentation, the large group will briefly discuss and determine priorities for each area as well as attempt to reach a consensus.

Appendix D: Social Network Worksheet

	N	JicaSalu	d Fe	ederation:	Inf	ormal	Net	works	for	Knov	vledge	Exchan	ıge
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Name		
Organization/Position		
Geographic Location		

Indicate the names of the people who you turn to in order to obtain information or advice to resolve problems having to do with your work; these people can be from the same organization, or external. Please indicate the frequency of these consults or conversations (daily, every few days, weekly, every 15 days, monthly).

Person Consulted/Organization	Primary Topic of Consultation (What for?)	Frecuency

Please indicate the names of the people who seek you out to solicit information or advice to solve problems with their work; these people can be from the same organization, or external. Please indicate the frequency of these consults or conversations (daily, every few days, weekly, every 15 days, monthly).

Person Seeking Advice/Organization	Primary Topic of Consultation (What for?)	Frecuency