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Shared learning

Demonstrational Phase for Improvement Collaboratives of:
Pediatrics Hospital Initiative, Essential Obstetrics Care and
HIV-Family Planning at the Ministry of Health of Nicaragua



Managua, Nicaragua. May 2010

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The described in the present publication does not express the point of view or position neither of The United States Agency for International Development, USAID, nor of the United States' Government.

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Acronyms

EOC	Essential Obstetrics Care
PHI	Pediatrics Hospital Care
GTZ	German Society for Technical Cooperation
HCI	Health Care Improvement Project
JICA	Japan International Cooperation Agency
MINSAs	Ministry of health of Nicaragua
PAHO	Pan-American Health Organization
WHO	World Health Organization
FP	Family Planning
QAP	Quality Assurance Project
SILAIS	Health Care Integrated Local System
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
HIV	Human Immunodeficiency Virus

Executive Summary

Starting in the year 2003, The Ministry of Health of Nicaragua (MINSa), with technical and financial support from USAID, through their Quality Assurance Project (QAP/USAID, currently USAID/HCI), developed three continuous improvement collaboratives for care quality of children and women: Essential Obstetrics Care (EOC), Pediatrics Hospital Care (PHI) and HIV-Family Planning (HIV-FP), which concluded their Demonstrational Phase in the year 2007.

These collaboratives consisted of shared learning systems that gathered improvement teams from several health units, which worked together and achieved significant improvements quickly in a service or care provision area.

USAID, through its Health Care Improvement Project (HCI), has conducted this qualitative Study, of exploratory and descriptive character, in order to show how good practices' learning was generated among teams, in the Demonstrational Phase.

For it, we applied techniques as: desk research, in-depth personal interviews directed to key informants, and focus groups. The study was performed in 9 hospitals and 8 health centers of 8 SILAIS from MINSa, with the participation of 50 people.

Main findings of the Study

About the Demonstrational Phase processes

1. How do change ideas come up? What are the sources of these ideas?

Change came up when improvement teams, started to define quality through standards and indicators, measuring compliance with these and applying

improvement rapid cycles to produce changes, which teams afterwards shared.

These change ideas came from several sources, mainly from: teams' members; experiences from other teams; guidelines from authorities; claims and suggestions by users.

2. What information produced during effective changes implementation is useful for other teams to implement them?

Improvement teams produced and shared diverse information, such as: data from the results of standards and indicators measuring; formularies and flowcharts designed by teams; statistical data of the area or service; improvement cycles reports; publications or successful experiences systematization.

This information was also transmitted to the rest of the staff members to contribute to raising awareness among them and motivating them. It was the evidence to convince and achieve consensus on the decision to implement changes.

3. Which factors prevent teams from capturing or adopting effective change ideas?

Among the three most important factors that may delay, more than prevent, change adoption, are: believing everything is being done the right way; weakness in involving authorities, and shortage of human, material and financial resources.

4. Are there changes easier to diffuse than others? Which are their characteristics?

What makes a change easy to implement is the conjunction of several factors, however the main



factors are the willingness of people and availability of human and material resources.

About the results in the Demonstrational Phase

1. What is the magnitude and speed with which teams adopt new ideas generated by others?

The collaborative promoted implementation of small changes, which together produce good outcomes. People inquired explained that in a period of approximately 6 months, a change had already been accepted by the staff and incorporated into the work routine, achieving the established percentage in the respective indicator threshold in most cases. Equally, in one month they start to see the first results, this is used for convincing and raising awareness.

2. Which ideas exchange process results more effective, to be adopted by other teams?

Learning sessions were not the only thing that allowed for teams to learn that a change, already implemented by others, would lead them to improve their care processes; they also used visits to other health units included in the collaborative, phone consultation, work meetings, training events and technical assistance from the QAP/USAID (USAID/HCI) Advisors.

3. Which factors facilitate capturing of effective changes through teams?

Changes were possible to implement due to factors such as: commitment from teams, technical assistance from QAP/USAID (USAID/HCI) and other agencies, evidences, care protocols and norms, measuring of standards and indicators, team work, training, increase in supervision and support from management, and SILAIS leadership.

4. How could this effective change diffusion dynamic be improved?

Unanimously, they expressed that learning sessions must be a permanent activity performed at least three times a year and for it, MINSA instances must advocate for funding and technical assistance with the cooperation agencies.

General Conclusions

Findings demonstrate that the collaborative strategy is effective since it generated significant and shared knowledge between units that participate in them; developed a stimulating collaboration within and between teams that diminishes the levels of resistance to changes and disbelief because of their effectiveness, in addition it allows for the diffusion of changes even to units not included in the collaborative, but part of the general health system.

I. Introduction

An improvement collaborative is a shared learning system that gathers a great number of teams to work together, with the purpose of rapidly achieving significant improvements in quality and efficacy of a specific care area, with the intention of diffusing these methods to other sites.

The definition of what will be diffused occurs in the Demonstrational Phase, for which, improvement teams exchange learning, whether this is positive or negative results.

The Expansion Phase allows for the best innovations to be synthesized and communicated for promoting their implementation at a greater scale, in new health units, saving costs from trial-error interventions.”

From 2003, the Ministry of health of Nicaragua (MINSa), with the technical support of USAID, through their Quality Assurance Project (QAP/USAID, currently USAID/HCI), developed three continuous improvement collaboratives for care quality continuous improvement: Essential Obstetrics Care (EOC), Pediatrics Hospital Care (PHI) and HIV-Family Planning, which concluded their Demonstrational Phase in the year 2007.

In June of 2009, USAID/HCI provided support for the General Health Services Division on making and publishing the document: Childhood and Maternal-neonatal Care Quality Continuous Improvement Experiences, which systematizes the main implemented improvement changes.

However, the synthesis of aspects referred to how the mentioned improvement collaboratives were developed was pending.

For which USAID/HCI, with the participation of 50 people from 9 hospitals and 8 health centers, 17 health units from 8 SILAIS of MINSa, conducted this study on the Demonstrational Phase, with the purpose of offering to the Ministry, a document of work and diffusion of this successful experience in Nicaragua. (Please see Annex for details).

The objective of the Study to demonstrate how good practices’ learning was produced among improvement teams in the Demonstrational Phase of the EOC, PHI and HIV/FP Collaboratives, developed in MINSa health units, starting from the Hypothesis that improvement teams obtain ideas from other teams and implement them. As well as: improvement learning and results are faster in a collaborative.

The methodology applied for this Study was qualitative, of exploratory and descriptive character, to proportion a detailed description and answer the questions derived from the hypothesis.

The following techniques were employed:

- Pertinent documentary research provided by USAID/HCI.
- In depth individual interviews, targeting key informants, following an open ended questionnaire.
- Focus groups

II. Main Findings of the Study

"We tried to do things well, but with indicators measuring we realized that sometimes we were not right regarding quality". Dr. Brenda Velásquez, La Trinidad Hospital (Estelí).

A. About the Demonstrational Phase Processes

I. How do change ideas come up? Which are the sources of these ideas?

Improvement teams, from each one of the three collaboratives, at the beginning took on a challenge, since they were performing actions but did not achieve concrete changes related to decreasing maternal, perinatal and child morbidity and mortality, as well as to strengthening HIV prevention and family planning counseling integration.

They started to analyze the challenge and to detect the main gaps that made its approach more difficult, among these lack of standards and indicators, and quality measuring processes (monitoring), as well as norms and protocols to standardize.

That is why teams led by chiefs of services or areas were formed, and with technical assistance from the QAP/USAID Advisors, worked on the one hand raising awareness among staff and identifying quality gaps and on the other hand, training staff, participating in creation of norms, protocols, standards and indicators, as well as exchanging experiences among teams.

After standards and indicators were defined, monitoring started, which had a great effect on teams,

since it motivated them to implement change ideas and consequently obtain a high score, showing quality improvement.

They performed indicator monitoring taking 20 files randomly, reviewing them and analyzed results to determine the causes of non-compliance, to apply solutions proposed by team members.

That is how change ideas came up from within teams, which were shared with others in different ways addressed later.

Those inquired expressed that change ideas had the following sources:

- From improvement teams members.
- From other improvement teams' experiences.
- From health units, SILAIS and Central Level MINSa authorities guidance.
- From QAP/USAID (USAID/HCI) and other cooperation agencies, advisers, who transmitted experiences from teams.
- From users' claims and suggestions, during or after receiving care. A user satisfaction measuring survey was implemented in this period.

"The problem was born here, analyzed here and the solution for it was sought here". Dr. Orlando Picado, MCH Hospital "Mauricio Abdalah", Chinandega.

"We came from experience. Everything that has already produced a good outcome needs to be retaken... All we need is evidence", Dr. Omar Palacios, Hospital San Juan de Dios, Estelí. From the same hospital, Dr. Nelly Rivera: "We learned a lot from failure and improvements of others, when they explained what they had done to improve an indicator, we retook this and applied it in our hospital".

2. What information produced during effective change implementation is useful for other teams to implement them?

The most important moment to share information was that of learning sessions, since, as stated by Dr. José Manuel Cantillano from the Somoto Hospital: "When we met, hospitals brought information according to the subject we had been assigned. We presented it; there were question and answers after said presentation. At the same time this created links between hospitals."

This information consisted of:

- Data from standards and indicators measuring results.
- Formularies and flowcharts.
- Statistical data from the area or service that were later consolidated at the SILAIS.
- Improvement cycles' reports, which were also, used by authorities for follow up and to systematize the improvement experience.

"... they bought forms and guides that other hospitals had created; we reviewed them, improved them and adapted them to the hospital, to our reality ..." Dr. Lissette Mairena, Hospital in La Trinidad (Estelí).



“There were magazines and other publications to motivate others. This information was also received digitally. They gave us what was good, what had stood out in another hospital and then we shared it internally.”
 Dr. Agustín Suárez, Hospital “Ernesto Sequeira”, Bluefields

- Publishing of improvement successful experiences systematization, which was prepared with the technical and financial support of QAP/USAID (USAID/HCI).

Information was transmitted to the rest of staff members to motivate them and raising awareness among them. Sometimes, it constituted the evidence to convince and reach consensus on the decision to implement changes.

3. Which factors prevent teams from capturing or adopting effective change?

People inquired expressed that change adoption may be delayed, more than prevented, because the implementation of a change depends primarily on will and positive attitude; reason why they need to be given time and information. Secondly it depends on the availability of material and financial resources, and, in some cases, favorable geographical conditions (location, accessibility, transport).

Among the factors that difficult change ideas adoption, the following were mentioned:

- a) Believing they're doing everything right.

- b) Change resistance and disbelief reactions to what others have accomplished.
- c) Required work competencies are too weak.
- d) When authorities involvement is too superficial and they feel unsupported.
- e) Shortage of human, material and financial resources and in general in the institution.
- f) That norms, protocols, standards and indicators contain some incomplete or out of date aspects to consider diverse situations.
- g) That scientific information is too brief.
- h) Believing that service' users or general population will not understand the change and will reject it.

In case any of these factors was being an obstacle, teams sought a way to minimize it or to adjust change ideas to avoid coming to a point where change implementation was not possible.

In general, during the development of the collaborative, there were no situations of total rejection and this didn't prevent change ideas implementation.

However, from the beginning there were some change resistance reactions, considered as natural, due to the following reasons, among others:

- Some physicians and nurses were applying criteria and procedures they learned in the places where they studied, which in several cases are different.
- Lack of standardization in care.
- Some people considered themselves to be very competent and thought they were doing everything right. It was an attitude problem.





For it, chiefs of services and some team members dedicated time and effort to convince the rest of the staff. Fortunately, resistance manifestations were from a minority, for which their influence was not critical, and when they saw positive results, their attitude also changed.

According to respondents, in a group, there are always three types of people: those who always say yes and quickly become involved; those who are not totally convinced, but are willing to get involved; and those few who always say no to everything, but that later become involved when there's no choice either because they become convinced or because changes become institutional norms and must be complied with.

In the Focus Group at SILAIS Masaya, they presented their experience: "When a change is presented, the staff reacts well to it, because it was presented as a proposal and left open for modifications. We debate on it and analyze it to reach agreements and implement it."

Meaning that, the collaborative moves forward and resistance diminishes, until it reaches the point that Lic. María Julia Lazo, a nurse at the Hospital in La Trinidad

from the Estelí Department summarizes: "...with indicators we were able to move forward, they are in turn high...because there is great willingness from staff, we say there's a change and why, and people are willing and try to comply with it, first for the patient and then to state it in the chart and on standard measuring."

4. Are there changes easier to diffuse than others? Which are their characteristics?

For respondents what makes a change easy to be retaken by other teams is determined by environment factors, which must not necessarily be present all at the same time, only when it's necessary. Among these factors, the most relevant are:

- a) If there's willingness and openness of improvement team members.
- b) If the necessary human, material and financial resources are available.
- c) If teams are convinced about the benefits of change implementation and there is an attitude change.

- d) If team members and authorities are involved from the beginning and information is shared with them.
- e) If the change refers to concrete and visible things; for example, the dosage of a drug; this is not the case of counseling according to quality indicators, because this requires other skills to be developed in time.
- f) If there are norms and protocols that set clear guidelines and include variants for different situations.

B. About the results in the Demonstrational Phase

I. Which is the magnitude and speed with which teams adopt new ideas generated by others?

The collaborative promoted implementation of small changes, which together produce good outcomes. People inquired explained that in a period of approximately 6 months a change has already been accepted by staff and incorporated into the work routine, achieving the established percentage in the respective indicator threshold in most cases. Equally, in a month they start to see the first results, this is used for awareness raising and convincing.

A difficulty in that sense is rotation of resident or social service staff, causing the percentage of indicator compliance to drop in the first month of their integration, even when they received training on care norms and protocols.

A 100% of respondents, which belong to the health units which started when standards and indicators, care protocols and norms, as well as a package of implemented changes, were already defined, expressed to have discovered, quicker than the units that started first, that they had to comply with a standardized way to perform care procedures.

In the previously stated situation, they said that acquiring knowledge, on the collaborative and initial changes, occurred through contact with the (QAP/USAID) Advisers, and that experience exchange started with their participation in subsequent learning sessions.

In all teams, according to what respondents said, they immediately proceeded to implement change ideas taken from other teams. They expressed, speed was determined by factors such as:

- The need to adjust the change idea to the health unit's conditions.
- The search for some logistical requirements for implementation.
- Efforts for raising awareness and motivating people.
- Training provided to involved staff.
- Reorganization of staff.

62% of inquired find that it takes less time to implement a change that as been generated within the team, because it is easier to convince staff when searching for solutions as a group and decisions are made by consensus. Also, because when a change is brought from other teams there are greater doubts on its effectiveness even when there's evidence of it.

23% of inquired staff expressed that there is no time difference in implementation between a change generated internally and one taken from another team, because it depends on the skill of the person proposing the change, to do it in a convincing way and, also without imposition.

Also, 15% stated that changes taken from other teams, or oriented by higher instances, are faster to implement because they have an established

"Since they have taught us to perform rapid cycles, this has allowed for it to be faster. The following month we can already evaluate it and see positive results. Momentarily we want to improve everything at once, and it's difficult to set many objectives." Dr. Lissette Mairena, Hospital in La Trinidad (Estelí).

“One of the great accomplishments is to have become unified; providing care in the same way and that in each management, different procedures were respected, as well as being in continuous evaluation.” Dr. Danilo Narváez, Hospital San Juan de Dios, Estelí.

order in their process and have defined criteria for implementation.

For 100% of respondents, all changes, both generated by teams and taken by other teams were incorporated into work routine, since authorities stated them with a regulatory character; in other cases, they are institutionalized and received as a national protocols and norms.

This integration into the work routine accompanied systematic processes such as: supervision, standards and indicators, continuous education, improvement rapid cycles, information on work results, as well as from coordination and communication actions led by the SILAIS superior instances, which have allowed for strengthening of the relationship between health units from primary and secondary care.

2. Which exchange idea process to implement a change results more effective to be adopted by other teams?

Meetings for construction of standards and indicators, as well as to adapt norms and protocols, constituted

the first encounters where they began to exchange ideas, even though meetings didn't have that objective and they began to ask each other: How are you targeting x difficulty?.

The mechanisms through which teams learned that a change, already implemented by other teams, would lead them to improve their care processes were the following:

a) The collaborative's learning sessions

The collaborative's learning sessions were evaluated by 100% of those inquired as a very important and effective strategy, to learn from other teams and share the obtained experience. As reported, each participant presented how his or her team progressed. Likewise, with demonstrations they presented change ideas or strategies.

For these learning sessions, they generally called on all health units included in the collaborative; however, they also organized some with very specific subjects and they only invited teams which had a common problem or geographical proximity.





During learning sessions, according to respondents, they also held informal conversations about how they were “doing things” in different places. For example, one time, one of the hospitals provided support to another on children’s cannulation, since they had difficulties to perform it properly.

During the presentation of indicators measuring results, there were different reactions. Some participants doubted the veracity of the data, others were interested in learning how they were achieved, and all showed a willingness to take change ideas.

Respondents reported that they felt really good when presenting high scores on indicators measuring since

the rest of participants reacted interested in learning how they had accomplished it.

One person recalled that in his or her health unit, before joining the collaborative, they had already tried to implement partogram use systematically, however, this was not achieved for lack of indicators, standards, protocols and because they were doing it in an isolated way. They did not know how to measure correct use partogram and had no one to share the experience with.

Two units reported that the fact of knowing that others presented the results of quality measurement and improvement aroused their curiosity; they also

Dr. María Esther Estrada, from the SILAIS in Chinandega, stated how learning was produced in the collaborative through learning sessions between municipalities: *“It is perceived as a practical methodology, learning the best of the best that has been done locally, with realities similar to ours, not from another country; which allows for better adaptation to our reality. It has allowed for strengthening both care levels, since the hospital learns from municipal health units and these learn from the hospital, and to strengthen us as SILAIS, in the area of managerial leading of those processes trough that methodology.”*

expressed their desire to join the collaborative. In the first measurement of the indicators they were convinced that they were not doing things right, causing disappointment, but very quickly, they felt the desire to begin implementing the change package. One of these units sought technical support from another very close unit, in the same department, which was also integrated in the collaborative.

In general, all respondents said that although they did not achieve to be the best in compliance with 100% of the indicators, they always excelled in some of these, which gave them the opportunity to contribute with change ideas to other teams.

They also explained that when presenting change ideas taken from others to their teams, they always tried to start with the analysis of the difficulties they were facing, which were reflected in indicators measuring results. Then, they referred to high scores achieved by other health units. With this they tried to raise awareness and to motivate the rest of members, noting that if others could achieve it, they might also be able to.

Following, they presented the change idea, analyzed it and then decided by consensus how to do it: organized the work distributing the different tasks to quickly move to implementation, including the respective monitoring activities to check whether they had achieved expected results.

According to respondents, although there was a lot of willingness to implement changes taken from other teams, no change was accepted until it was analyzed and, if something was not right, modified or adjusted to reality. For example, taking improvement instruments, sharing them and team members contributed and suggested some modifications, with this they became owners of ideas and applied them to their reality.

Although there is no exact information available on how many changes were shared among teams, the respondents recall that they all heard of successful change ideas and implemented those that responded to the needs to meet care standards, indicators, norms and protocols. Indeed, implementing the various change ideas was required for care standardization.

b) Visits to other health units included in the collaborative

Groups of doctors and nurses from one health unit went to another integrated into the collaborative, the visitors observed the change and implemented it or, in other cases, visitors provided technical assistance to visited units.

This mechanism was applied, mainly among primary care units (visitors) with secondary care units (visited), especially, to improve referral and counter referral. According to the respondents, results were immediately visible, both children and pregnant women, arrived with greater stability to the referral unit and by improving counter referral, patient was provided with greater safety for recovery.

c) Phone consultation to other teams

This communication was more frequent between health units in the same department.

d) Work meetings organized by the SILAIS

In each health unit and SILAIS, it is regulated that monthly, quarterly and/or annual meetings must be held, in which they plan, organize and evaluate the work. That is why, in 100% of respondent SILAIS, people said that during these meetings they also addressed the results of indicators measuring and also presented some successful improvement experiences,

"We visited other hospitals, performed sessions and people right then and there asked us what they should do. Monitoring their charts with us, they detected that what they had done was not correct. We did not point it out to them, they measured their indicators. It was another way to transmit the mechanism; they detected their own weaknesses and strengths." Dr. Juan Ramos, MCH Hospital "Mauricio Abdalah", Chinandega.

“An interpersonal relationship was also established between chiefs of service from other hospitals and we contacted each other by phone to talk about what could be done to improve certain indicators.” Dr. Nelly Rivera, Hospital “San Juan de Dios”, Estelí.

which had led a determined unit to obtain a high score in compliance with some indicators.

Sometimes, at the time or immediately after, SILAIS authorities formalized these changes and transmitted them to the rest of health units, as a matter of strict compliance guidelines.

In two out of the eight SILAIS included in the study, they said that the exchange of experiences was also extended to provisional medical clinics, which provide health services to insured workers, including pregnant women and children.

- e) Training events organized by QAP/USAID (USAID/HCI), some in partnership with other agencies or those executed by the SILAIS

During the collaborative; training to teams was systematic and responsive to the needs to comply with established quality standards. For example; for the proper use of partograms, neonatal resuscitation, family planning and HIV counseling, etc.

This training was imparted by the QAP/USAID (USAID/HCI) Advisers, by other specialists in the country or teams members.

During training there was also an exchange of experiences among participants, since they posed problems and ways to solve them corresponded to change ideas implemented by other teams.

An innovative training experience, assessed as successful and that should function permanently is the denominated Knowledge Award, in which doctors

and nurses formed study circles in health units to learn the care standards. Subsequently, they elected some members of the circle to represent them in the national contest in which all teams in the collaborative participated. Those whose score was in the top three spots were given awards.

In a health unit, they made a replica of the Knowledge Award with staff from an area or service, which proved to be very effective for studying norms.

Similarly, in three health units, they explained that when a person made a mistake in procedures, they were assigned the subject for further study and presentation in continuous education sessions.

- f) Technical assistance from QAP/USAID (USAID/HCI) Advisers

When respondents described how the collaborative was started, they mentioned it was because of the promotion and call made by the Quality Assurance Project (QAP/USAID), offering technical assistance to form improvement teams, as well as for owning methodologies and learn about scientific data on care processes and procedures.

Technical assistance provided by QAP/USAID (USAID/HCI) is evaluated in the following terms:

- It was developed through work sessions to review charts and analyze cases jointly; they were not judges but work mates. We did team work. They helped us to detect gaps timely. It allowed for growth in the health unit's service or department, for there were no doubts left unaddressed and

“The success when we started was the direct technical accompaniment. We received monthly technical support and we were the ones becoming stronger. Now we do not only go for technical assistance; I go to review charts, generate rapid cycles, we are head to head, learning. Now we are empowered. Learning by doing.” Dr. Ma. Esther Estrada, SILAIS Chinandega.



sessions were always very participative, making them very productive.

- They accompanied us to visit patients in the ward.
- We met with the health unit's management.
- Provided scientific literature on most important subjects related to changes to implement.
- Trained on improvement rapid cycles that allow for seeing results in a very short period of time. They facilitated specialists to train us.
- They provided guidance on quality indicators follow up.
- Must continue and be more frequent.

3. Which factors facilitate capturing of effective changes through teams?

Changes generated by them and those taken from other teams, were implemented thanks to the following factors:

- a) The commitment acquired by improvement teams to assure quality of care.
- b) Pressure from population on better care demands.
- c) Availability of QAP/USAID (USAID/HCI) and other agencies technical assistance, as well as trusting advisers.



“USAID’s Advisers commented on successful experiences and have suggested them to us. We have tried to adapt them... The most effective way of technical assistance has been that they help us find solutions to problems, which sometimes we can not find by ourselves.. I have felt it as very helpful from all points of view.”
 Dr. Ethel Flores, Hospital of Nueva Guinea (SILAIS Chontales).

- d) The fact that changes to implement were based on evidence and previous success.
- e) Care protocols and norms formalized by MINSA.
- f) Measuring of established quality standards and indicators.
- g) The will, commitment and humility of the health unit’s staff involved.
- h) The convincing, in progress, of staff that showed greater change resistance.
- i) Raising awareness among administrative staff.
- j) Team work, strengthening of interpersonal relations and good communication in the service
- and in general in the health unit involved in the collaborative.
- k) Training of staff.
- l) Increase of supervision of the work.
- m) Recognition to people who supported and implemented change ideas.
- n) Improvement of relation between both care levels: primary (health centers) and secondary (hospitals).
- o) The fact that great financial costs were not needed for change implementation.
- p) Involvement and support from health unit’s management.

“...learning by doing as a methodology, it was advisory in the field; we do and if we do wrong, right there and then is were they show us how to do it in the correct way.” Dr. Juan Ramos, MCH Hospital “Mauricio Abdalah, Chinandega.

q) Leadership and guidance from SILAIS authorities to optimize the benefits the collaborative was providing to the health system in general.

4. How could this effective change diffusion dynamic be improved?

Without exception, the respondents expressed that learning sessions should be an ongoing activity, performed at least three times a year and to this end, authorities should advocate for funding and technical assistance with cooperation agencies.

They also expressed the following recommendations to improve learning session's development:

- To conduct, in plenary session, only three experiences presentations, and the rest in small groups, to ask more questions.
- To choose a central subject and offer conferences on it.

- To document the three most successful and innovative experiences produced in the previous period and publishing them.
- To conduct them with health units from the same geographic region.
- To share the experience on improvement rapid cycles and produced information.
- Must include visits to health units.
- To have Central MINSA officials attend to those conducted nationally.
- There must be a periodic informational bulletin because mobilization of many people is difficult.
- To maintain financial support for collaboratives.
- To use the internet for experience exchange.

“These encounters are important, to share work methods or ways. Looking at the characteristics from each region, it works for us to adapt some strategies that others implement; it is sharing ideas.” Dr. Luis Huete, SILAIS Nueva Segovia.

III. Collaborative's learned lessons

"I am sure we learned a lot... I know inputs from others were very valuable." Dr. Danilo Narvaez, Hospital "San Juan de Dios", Estelí.

Learned lessons

- a) Team work and consensus. It's easier to comply if there is consensus and no imposition, because that way people own what they will do, they make it their own and comply with it with greater love.
- b) Awareness among staff is very important; while this is not achieved it is very difficult to implement changes because negative attitudes are manifested.
- c) From minor adjustments or changes in health units, great breakthroughs can be accomplished on standards and indicators compliance.
- d) Quality measurement results must be analyzed by team members and staff in general. You can change what you have proposed to change if you follow up with it every day and if improvement rapid cycles are performed timely.
- e) Experiences exchange in the collaborative allows for moving forward rapidly. Help is always needed because we do not know everything, we're always learning.
- f) The Collaborative allows for acquisition and application of knowledge with scientific evidence.
- g) It is important and necessary to have good relationships, coordination and communication between health units, especially those that are close in territory.
- h) There must be rules and protocols as well as guides for collecting information that allows for standardization.
- i) Staff's knowledge updating must be continuous.
- j) To be humble and acknowledge when work is not right. You only need to have a positive attitude to face the problem.
- k) It is not necessary to discharge staff, but to show them the problem in the system and that we achieved the solution working according to norms and protocols, because we have the knowledge and energy to improve care for our users. It can be done with respect, to avoid negative reactions.
- l) The team members' discipline to monitor is fundamental to identify the achievements and difficulties.
- m) It is necessary to have the appropriate technical assistance, but that in the end of it, sustainability is achieved. In that sense, the work of QAP/USAID (USAID/HCI) was very important.

Recommendations regarding health units' management involvement

- a) To maintain strong support from corresponding management.
- b) To involve all necessary staff (care, administrative and support).
- c) To listen carefully and respond to the services staff proposals, giving them the right treatment.
- d) To train staff on a systematic basis.
- e) Managers must have competencies and permanent interest, to know what is happening in their health unit.
- f) To perform changes results' analysis based on MINSA's priorities and policies.
- g) To maintain articulation between health units from both care levels.

Recommendations about involvement of the SILAIS and the Central Level MINSA authorities

- a) The SILAIS and Central Level staff must be present during assistance from cooperation agencies, especially for making decisions towards sustainability. So that when the agency leaves, MINSA can function alone.
- b) Greater supervision and follow up to health units' initiatives to support their work.
- c) To listen to the proposals submitted by health units carefully, and involve their staff, because later on

they don't know how to implement guidance from higher levels.

- d) To promote training for health units' staff from both care levels
- e) To attend to learning sessions.
- f) To promote networking between health units.
- h) To promote municipal and departmental encounters between health units.

Recommendations for collaborative's results institutionalization by MINSA

- a) To structure a central technical team to support services in health units, through supervision and training, as well as, to transmit experiences of other health units.
- b) To use media to inform population on care improvement.
- c) To institutionalize changes and follow up with them through training supervision and service quality periodic evaluation.
- d) To collect and document success experiences and disseminate them appropriately.
- e) To build on the agencies support to advise health units, on the institutionalization of some changes.
- f) To maintain in their position people who have started improvement processes, in order to ensure continuity, especially when there is higher authorities' turnover.

IV. General Conclusions of the Study

One of the conclusions from the Focus Groups from SILAIS Masaya was: *“There’s a saying that states you learn from mistakes, but in this case it is not from mistakes but from experiences that others have already had, and these can be tested to prove if it produces outcomes. Experience exchange is enriching. We have proven that it helps to solve problems.”*

1. The collaborative strategy dynamic implied the generation of learning, both among improvement team members and among teams that integrated it. This learning was characterized as:
 - Significant: according to participants needs in function of their work performance.
 - Ongoing: maintained throughout the improvement dynamic that teams develop.
 - Timely: right at the moment when gaps in care were identified.
2. Teams always decided to analyze, adjust and test the changes for the following reasons:
 - There was an institutional commitment from MINSA.
 - There was primary interest from chiefs of service or other authorities from the instances involved in the collaborative, who assumed leadership.
 - They had evidence on the effectiveness of change ideas from other teams.



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- Teams felt a positive competitive spirit to move forward, as much or more than other teams.
 - The wide variety and quantity of change ideas, which represented the solution to main problems.
 - Creation of norms, protocols, standards and indicators, which made the difference between a heterogeneous performance and one standardized.
 - Many change ideas were regulated or institutionalized at the health unit level, SILAIS or Central Level MINSA.
3. For ideas exchange, they used following mechanisms:
 - The collaborative's learning sessions.
 - Visits to other health units included in the collaborative.
 - Phone consultation to other teams.
 - Work meetings organized by the SILAIS.
 - Training events organized by QAP/USAID (USAID/HCI), some in partnership with other agencies, or those executed by the SILAIS
 4. Learning in the collaborative spread beyond the initially considered limit; meaning, it was not only developed between the health units involved in it, but also between these and those from different care levels belonging to the same SILAIS, precisely promoted by them. For example, the hospitals integrated in the collaborative trained the municipal health units that were not integrated in it, on the implemented changes, which strengthened referral and counter referral.
 5. Implementing change ideas taken from other teams, reduces the time required, related to the time employed by the team which created the idea.

However, this reduction does not necessarily imply that these ideas are faster and easier to implement than those arising within the improvement team. This is due to the fact that, there is disbelief of something that has not come up from themselves, even when they decide to test it; another reason is that by becoming involved in creating an idea, it helps the commitment for implementation to be assumed quicker.

Annex:

Data summary on number of instances and people inquired

No. of Focus Groups	No. of Interviews	Integrated Health Care Local Systems (SILAIS)	Hospitals (Secondary Care)	Health Centers (Primary Care)	No. of participants
5	17	8	9	8	50

Integrated Health Care Local Systems (SILAIS)	Hospitals (Secondary Care)	Health Centers (Primary Care)	No. of participants per SILAIS	No. of participants focus groups	No. of participants Interviews
Chinandega Department (1)	MCH Hospital "Mauricio Abdalah" (5) Hospital "España" (1)	HC Chinandega (1) HC Villa 15 de Julio (1)	9	6	3
León Department (1)	Hospital "Oscar Danilo Rosales" (1)		4		4 (group interview)
Masaya Department (3)	Hospital "Alfonso Dávila Bolaños" (2)	HC Nindirí (1) HC Monimbó (1) HC Catarina (1) HC A. D. B. Masaya (1)	9	7	2
Nueva Segovia Department (1)	Hospital of Ocotal (2)		3		3
Madriz Department	Hospital of Somoto (3)		3		3 (2 in one interview)
Estelí Department	Hospital "San Juan de Dios" (4) Hospital of La Trinidad (3)	Health Center "Leonel Rugama" (1)	8	5	3
Chontales Department		Health Center Nueva Guinea (8)	8	7	1
South Atlantic Autonomous Region (RAAS) (1)	Hospital "Ernesto Sequeira" (5)		6	4	2
		TOTAL	50	29	21

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