The Guatemala QAP Evaluation: Application and Institutionalization of Quality Assurance
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Recommended citation


About this series

The Evaluation Report series presents the findings, recommendations, and lessons learned of completed quality assurance (QA) evaluations in countries with long-term QA programs. An electronic copy of this publication may be found at qapdissem@urc-chs.com.

Additional Information

If you would like to obtain additional information including a profile of the field researchers, a set of the focus group and in-depth interview questions, a list of the participants and locations of the focus groups and in-depth interviews, and examples of the problem solving and redesign methodology, please contact qapdissem@urc-chs.com.
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## Abbreviations and Acronyms

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<th>Abbreviation</th>
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<tr>
<td>EOC</td>
<td>Essential Obstetric Care</td>
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<tr>
<td>MOH</td>
<td>Ministry of Health</td>
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<tr>
<td>NGO</td>
<td>Nongovernmental Organization</td>
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<td>QAP</td>
<td>Quality Assurance Project</td>
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<td>QA</td>
<td>Quality Assurance</td>
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<td>QD</td>
<td>Defining Quality</td>
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<td>QI</td>
<td>Improving Quality</td>
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<td>QM</td>
<td>Measuring Quality</td>
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<tr>
<td>SIAS</td>
<td>Integrated System of Healthcare (Sistema Integral de Atención en Salud)</td>
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<td>SIGSA</td>
<td>Integrated System for the Management of Health Statistics</td>
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<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
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Abstract

This report documents the experiences of the Quality Assurance Project (QAP) in implementing quality assurance activities in five regions of Guatemala: Quetzaltenango, Chimaltenango, Totonicapán, Sololá, and San Marcos. QAP initiated technical assistance in Guatemala in 1998 to support implementation of a new health system, the Integrated System of Health Care (Sistema Integral de Atención en Salud, SIAS) as part of health sector reforms. QAP focused on three main technical areas during its 15 months of providing technical assistance: communicating primary healthcare standards, implementing problem-solving activities, and redesigning hospital obstetrical services.

The evaluation collected qualitative data through focus groups and in-depth interviews to: (a) evaluate how quality assurance teams perceived quality assurance methodologies, (b) learn about the teams’ experiences in implementing those methodologies, and (c) make recommendations for future applications of the methodologies. The data were collected, analyzed, and documented with the guidance of the “Institutionalization of Quality Assurance” model. Developed by QAP, this model illustrates eight “essential elements”—leadership, resources, policy, core values, structures to oversee quality assurance activities, capacity-building, communication, and rewards for quality work—that contribute to the institutionalization of quality assurance.

The evaluation found that quality assurance teams (each focused on communication of standards, problem solving, or redesign) found the methodologies both useful and applicable. Furthermore, the teams have made great strides in two important areas: improving the coordination between different segments of the health system and increasing community involvement in healthcare activities. Factors that consistently inhibited the teams’ success were changes in leadership and a shortage of human resources. These findings, along with background information and other lessons learned, are discussed in detail.
1. Purpose of the Document

An evaluation of QAP’s technical assistance in Guatemala was conducted to examine the use of quality assurance (QA) methodologies, specifically, quality improvement and quality redesign. This evaluation uncovered valuable information about the methodologies and detailed the context in which quality assurance activities were applied. Therefore, the objective of this study is to share the QA successes achieved in Guatemala, discuss the lessons learned, and explore ways to further strengthen QA in Guatemala. These findings are presented using QAP’s “Institutionalization of Quality Assurance” model, which identifies the essential elements necessary to develop QA as an integral and sustainable part of a community or healthcare organization. This report is intended for organizations interested in implementing quality assurance activities in Guatemala in the future, such as the Ministry of Health, United States Agency for International Development, and collaborating agencies.

2. Introduction

Guatemala is a country rich in culture and tradition; its landscape is lush with rivers, lakes, and volcanoes. This diversity is also found in its people. Of Guatemala’s 12.3 million inhabitants, 44 percent are of indigenous Mayan origins and there are 22 distinct languages (with more than 100 dialects) spoken in Guatemala (Demographic and Health Surveys 1996). This diversity in landscape and culture, however, also creates rural, geographically disperse communities with little access to healthcare services.

2.1 Challenges to Accessing Healthcare

Guatemala is the least urbanized country in Central America with 65 percent of its population living in rural areas. In 1996, the Ministry of Health (MOH) estimated that 46 percent of the population live in areas outside the reach of health centers, health posts, or private practices. It is estimated that up to 70 percent of the roads are unpaved, which often makes travel difficult in rural areas. A lack of resources for transportation and poor, inaccessible roads prevent communities from seeking the care that they need. Limited access to healthcare is not only caused by transportation barriers, but is also influenced by demographic characteristics. Guatemala’s population is mostly indigenous, poor, and in many cases, illiterate. As a result, the Guatemalan population confronts a number of barriers in accessing healthcare, such as:

- **Cultural barriers.** Health personnel often lack awareness of clients’ traditions and cultural practices. Therefore, services are often provided without a full awareness of the clients’ needs.
- **Economic barriers.** The perceived or actual costs of transportation and services particularly inhibit women from accessing services on account of an inability to pay.
- **Information barriers.** Women, families, communities, and providers often lack awareness and understanding of health problems and available services.

All of these factors contribute to Guatemala’s epidemiological profile, characterized by high rates of maternal mortality (200 per 100,000 live births), infant mortality (51 per 1,000 live births), and high rates of morbidity (UNICEF 1996).

2.2 Health Sector Reform

To address these issues and comply with the peace agreements of 1996,\(^1\) the MOH initiated a health sector reform process in 1997 that emphasized modernization—in particular, increasing the efficiency, coverage, and quality of healthcare—and gave priority to neglected social groups. These health reforms attempted to improve access to basic preventative and curative healthcare for disperse and rural populations throughout the country. Under these reforms, the structure of the health system was modified to promote a greater decentralization of administrative and financial regulations as a way to improve the general efficiency of the public health sector.

To put these objectives in place, the MOH designed a new healthcare delivery model that would increase the delivery of services by contracting healthcare

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\(^1\) The Peace Agreements on Socioeconomic Aspects and the Agrarian Situation set forth the requirement that national health sector reforms be promoted to guarantee access to quality healthcare for populations with limited resources. Priority areas included malnutrition, environmental health, preventive health, and primary care solutions, particularly in the area of maternal and child healthcare. From: “Agreement on Socioeconomic Aspects and the Agrarian Situation.” Organization of American States, Annual Report, 1996.
providers—specifically non-governmental organizations (NGOs)—to serve remote areas with primary healthcare services and refer patients to health centers and hospitals. Therefore, the Integrated System of Healthcare (SIAS) was implemented with the objectives of: integrating three levels of healthcare (community, health centers, and hospitals); extending access to quality healthcare services; and increasing multi-sectoral and community participation in healthcare services. The previous healthcare structure in Guatemala, which consisted of local and regional hospitals as well as health centers with satellite health posts, remained operational during the health sector reforms.

Contracted NGOs consist of administrative staff, doctors, nurses, and health technicians with established central offices for data collection, financial management, and administration. Healthcare workers hired by the NGOs are responsible for establishing community clinics—in selected remote sites—in collaboration with the community. Together, the NGO and the community form a basic community health team, consisting of a healthcare provider, an institutional facilitator, community facilitators, community volunteers, and, often, midwives. Each of these team members has a specific role and responsibility. The role of the healthcare provider (a doctor, nurse, or technician) is to provide care to women and children. The institutional facilitator contributes to community participation in the health services by organizing and training community facilitators. In turn, these community facilitators are then responsible for organizing community volunteers to promote healthcare services and collect community census data as well as other community information such as the number of latrines and access to water. The community facilitator then aggregates the data and presents the information to the community on the walls of the community center.

These community centers are visited on a monthly basis by the basic healthcare team. Community members, sometimes 80 to 90 per day, line up to see the healthcare provider. Because many of the healthcare workers do not speak the indigenous language, community facilitators often translate. The institutional facilitator also provides classes for community facilitators and volunteers on such topics as diarrhea management and hand washing. While community facilitators receive a monthly stipend for their roles, community volunteers are reimbursed for per diem expenses. Currently, this extension of coverage is being carried out in 19 of the country’s 22 districts through 108 healthcare service delivery and administration agreements with 84 NGOs and other organizations (Guatemala Ministry of Health 1998).

In addition to extending access to healthcare, SIAS also introduced a new Integrated System for the Management of Health Statistics (SIGSA). SIGSA is comprised of 15 data collection forms that provide basic information, such as the vaccination rates and mortality rates of specific communities. This information is filled out in succession, starting with community facilitators who deliver the data to the NGO, health district, and then the central government. Therefore, SIGSA provides a system for the flow of information through every level of the health system.
3. Quality Assurance Project

The Quality Assurance Project (QAP), funded by United States Agency for International Development (USAID), was initiated in 1990 to improve the quality and efficiency of healthcare and has assisted more than 30 lesser-developed countries institutionalize quality assurance (QA). The QAP began a 15-month technical assistance in Guatemala to five regions (Quetzaltenango, Chimaltenango, Totonicapán, Sololá, and San Marcos) the year after the implementation of SIAS with the objectives of:

- Increasing immunization services and other maternal and child health services
- Improving health workers’ ability to provide quality health services
- Increasing the ability of the district facilities (health posts, health centers, and hospitals) to provide efficient quality services with an approach focusing on women and children
- Increasing the use of the SIGSA for decision making at the local level
- Facilitating the implementation of SIAS in targeted regions
- Understanding the system for supplies and equipment and improving the efficiency of their use
- Strengthening integration between NGOs and the different levels of care (e.g., health posts, health centers, and hospitals)

The support of leaders was critical to accomplishing these objectives. Therefore, the first QAP activity was to host a workshop to introduce the basic concepts of quality assurance to key members of the healthcare leadership and the new QAP team in Guatemala. Participants included representatives from the Ministry of Health (MOH), regional health directors and supervisors, hospital directors, and the QAP team. The QAP advisors then assessed the overall situation to determine the most effective quality approaches to apply.

Because the MOH had recently designed the new SIAS model, it was determined that QAP could strengthen SIAS by developing a process to communicate the MOH standards for primary healthcare while monitoring and supervising the performance of the new SIAS model. Problem-solving teams that included representatives from the communities, NGOs, and district health centers would then address problems identified by the monitoring. These teams provided a mechanism for communities to participate in health services and promoted the integration of district health facilities with primary healthcare providers. At the hospital level, it was determined that essential obstetrical care (EOC) services would be redesigned to better meet the needs of clients—and create a sense of team ownership and responsibility for providing high quality maternal care. Thus, QAP provided technical assistance in three different, but complementary, QA approaches: the communication of primary healthcare standards, problem solving, and redesign.

3.1 Communication of Primary Healthcare Standards

The communication of primary healthcare standards, set by the MOH for the basic healthcare teams, was an important component of QAP’s technical support. Technical assistance at the primary healthcare level aimed to improve access to quality health services by building the basic health team’s capacity to provide quality services. Therefore, technical assistance to strengthen the delivery of primary healthcare consisted of training in the primary healthcare standards, monitoring, and supervision.
### Table 1

Pre- and Post-Training Knowledge Scores for Primary Healthcare Teams

<table>
<thead>
<tr>
<th>Region</th>
<th>Topic</th>
<th>Pre-test Score (Average)</th>
<th>Post-test Score (Average)</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Marcos</td>
<td>Growth monitoring of children</td>
<td>79</td>
<td>85</td>
<td>7.6% increase</td>
</tr>
<tr>
<td></td>
<td>Prevention of cervical cancer</td>
<td>42</td>
<td>71</td>
<td>69% increase</td>
</tr>
<tr>
<td></td>
<td>Prenatal care</td>
<td>87</td>
<td>93</td>
<td>6.9% increase</td>
</tr>
<tr>
<td>Sololá</td>
<td>SIGSA</td>
<td>52</td>
<td>93</td>
<td>78.8% increase</td>
</tr>
<tr>
<td></td>
<td>Community mapping</td>
<td>78</td>
<td>94</td>
<td>20.5% increase</td>
</tr>
</tbody>
</table>

The QAP facilitators provided continuity to the training in primary healthcare by coaching the healthcare providers and institutional facilitators about utilizing their knowledge and replicating training at the community level. This aspect of QAP assistance was designed to strengthen SIAS and address the lack of community healthcare training many physicians in Guatemala have received; therefore, these physicians needed additional training and mentoring to implement the activities required by the health sector reforms.

In order to monitor the performance of this system, QAP provided technical assistance in the development of quality indicators. These indicators were created to monitor primary healthcare delivery through data collected by SIGSA. The health data was then to be used to initiate problem-solving activities to improve healthcare. However, the magnitude of organizing the new NGOs and community volunteers was underestimated. It took longer than anticipated to obtain and train the volunteers needed to mobilize the system. Therefore, SIGSA did not provide a rapid or reliable source of data upon which to base decisions. Another obstacle to the accurate and complete collection of data through SIGSA was the dependency on community volunteers. Because some community volunteers had a limited ability to read or write—many spoke Spanish as a second language—filling out the SIGSA forms presented a significant obstacle to gathering information about a community. Furthermore, even when community volunteers were able to fill out the forms, the collected information was not always accurate since community members often felt hesitant to share personal information, such as pregnancies or deaths, and were sometimes skeptical of the motives for gathering this information. One situation that exemplified this barrier in communication occurred when community volunteers numbered houses for the purposes of data collection. One community was immediately resistant to SIGSA when a house was labeled with the numbers 6.6.6 because in Guatemala, and many other cultures, this number represents a religious symbol of evil. Although QAP provided training on how to complete SIGSA forms, it soon became apparent that community data to determine areas for problem solving would not be available to develop interventions within the time frame of the project. Therefore, it was decided to proceed with a problem-solving methodology by using the available information and the implicit knowledge of the healthcare providers.
3.2 Problem Solving

Problem-solving efforts identify where gaps exist between the services actually provided and the expectations for services. Team members then work to lessen these gaps not only to meet customer needs and expectations, but also to exceed them and attain unprecedented levels of performance (Massoud et al. 2000). The problem-solving methodology is not only used to address problems that are apparent, but also to identify opportunities for improvement in which services could be more efficient, more responsive to the needs of customers, and less likely to encounter problems in the future.

Because of the difficulties with ongoing monitoring to identify problems, QAP decided to initiate problem-solving activities with the assumption that team members were familiar with the processes and could identify opportunities for improvement. QAP also entered this process with knowledge of needs for improvement in Guatemala’s primary healthcare, such as the decline of vaccination rates in the past five years. QAP initiated work in quality improvement by inviting representatives from NGOs and district health centers from three regions, Sololá, San Marcos, and Chimaltenango, to participate in a three-day workshop to learn problem-solving methodology and form action plans to resolve the identified problems. Fifteen quality improvement teams decided to address one of three main problems: vaccination coverage, lack of compliance with standards, and the collection of community information through SIGSA. These multi-disciplinary teams consisted of members such as representatives from the local NGOs, personnel from local health centers and posts, and in some teams, district leaders and community members. Thus, problem solving not only provided a tool to improve the quality of services, but also integrated the work of segregated actors in the health system through teams to carry out these improvements. Table 2 highlights some of the solutions developed by problem-solving teams.

### District of Comitancillo, San Marcos

This problem-solving team identified the low vaccination rates, 51 percent for children younger than one year and 12 percent for pregnant woman, as an issue to be addressed. The team brainstormed about possible causes for these low vaccination rates—such as not providing convenient hours of services, inadequate technical procedures for vaccination, and a lack of community knowledge about the importance of vaccination. Based on this information, the problem-solving team developed a number of solutions to address these causes including: promoting vaccination services in the local language (e.g., through radio spots), placing vaccination services in community meeting areas, and identifying women and children that had not been vaccinated (through community mapping) and providing monthly follow-up. The team measured several key indicators to determine the effect of these solutions on vaccination rates and noted a 30 percent increase in vaccination coverage in children under the age of 5.

<table>
<thead>
<tr>
<th>Problem Identified</th>
<th>Solutions Developed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low vaccination rates for pregnant women and children under 1 year of age</td>
<td>Produce and distribute a family vaccination card; training in filling out the card; Increase the promotion of and information about health services in communities in local language; Change schedule of visits to be more convenient for communities; Provide training in SIGSA to provide the information needed to understand the current vaccination coverage for these populations</td>
</tr>
<tr>
<td>A lack of compliance with standards</td>
<td>Plan discussions based on the use of the standards manual and provide incentives for its use; Provide a standards manual for service providers and verify that the manual is always readily available; Introduce a pocket manual</td>
</tr>
<tr>
<td>Incomplete and inaccurate information from SIGSA</td>
<td>Plan training sessions in SIGSA; Provide coaching in filling out SIGSA forms at all levels; Provide incentives to the community facilitators and volunteers that promptly submit the data forms; Hold monthly meetings for the analysis of information, decision making, dissemination of information; Create joint planning sessions between the district health facilities, administration, and health personnel</td>
</tr>
</tbody>
</table>
These problem-solving teams achieved mixed results. While one team achieved a 30 percent increase in vaccination rates, other teams encountered resistance among leaders and colleagues that delayed the success of their plans.

QAP decided to extend quality activities to the community health committees by adapting the problem-solving methodology to follow the format of the agendas for monthly community meetings. Communities with the most complete data were provided with QAP support to form problem-solving teams. Data were organized and presented to the community in a way that was easily understood by community members. Data were used to identify and to prioritize problems as well as for developing and implementing solutions to those problems. The communities thus addressed problems such as vaccination coverage, a need for drainage systems, and the need for latrines. For example, a community in Coatepeque identified that the lack of a drainage system presented major health threats to their community. The community, initially provided with support and training from QAP, is working with the local health committee to raise funds for the implementation of a drainage system. Another community, Hacienda La Zarca, decided to address low vaccination coverage for children less than one year of age and pregnant women. The community, in cooperation with the NGO primary healthcare team, implemented solutions such as the community volunteer providing advance notice of the vaccination schedule, and educating families about the importance of vaccinations and possible secondary reactions to vaccinations.

Hospital Moisés Villagran San Marcos

This redesign team was formed with the objective of improving obstetrical services, from the reception of the patient to her care during delivery. The redesign team aimed to optimize the available resources in order to provide efficient and safe care to obstetrical patients. The team, with the active support of the Hospital Director, designed and implemented plans which resulted in:

- Redesign of the physical structure to provide specific rooms for the reception and clinical examination of obstetrical patients
- Personnel to meet obstetrical patients outside, assisting them with wheelchairs or stretchers to the obstetrical services
- Traditional birth attendants and family being permitted in the delivery room upon the patient’s request
- Signs to direct patients to obstetrical services
- New sheets and gowns for patients

The experience of designing and implementing these plans not only resulted in these improvements, but also built a strong foundation and enthusiasm for improving the quality of care in the future.
3.3 Redesign of Essential Obstetrical Care Services

Although the primary healthcare system had been recently redesigned by the MOH under the health sector reforms, the services provided in the hospitals continued to function under the previous system. Therefore, it was determined that a complete redesign of services would be appropriate instead of solving a multitude of smaller problems. Because the reduction of maternal and child mortality and morbidity was a national priority, essential obstetrical care (EOC) services were chosen for redesign in targeted hospitals.²

Quality redesign is a systematic approach to service redesign in which the needs, expectations, and desires of the service users, their families, the providers, and the community are determined. Design options are then chosen to satisfy these identified needs given the resources available. Therefore, quality design involves adding new components that are currently non-existent or redesigning existing components to strengthen the given services. The quality design methodology involves the use of multi-disciplinary teams, bringing members from the community, the service sector, NGO representatives, and local officials together to identify clients’ needs for services and the design service features related to those needs. This composition of the design team ensures that the needs of both the community and the providers are taken into consideration. The quality design approach builds the ability of multi-disciplinary teams to design components of a system for quality services and a commitment to sustaining the system.

To initiate the redesign methodology, QAP invited 46 participants representing seven hospitals to attend a four-day workshop. This workshop introduced the participants to QA philosophy and the redesign methodology. Hospital teams were formed in the workshop to select a component of obstetrical care to redesign (e.g., prenatal or postpartum care) and teams worked through the first nine steps of the redesign methodology. The selection of a component for redesign was not based on data, but rather on the knowledge and judgment of teams. Teams chose a variety of obstetric care components for redesign, such as postpartum services, obstetrical surgery, and reception and triage. Teams left this initial workshop with a work plan for the next two months and began developing and implementing their plans, listed in Table 3 (Fuentes and Durán 2000).³

² QAP’s redesign teams built upon MotherCare’s efforts in Guatemala in Quetzaltenango, Sololá, San Marcos, and Totonicapán in improving the quality of obstetrical services. MotherCare worked in hospitals, health centers and health posts providing (a) in-service training, (b) efforts to increase community utilization of the health facility, (c) monitoring, and (d) information, education, and communication (IEC). QAP and MotherCare collaborated in Guatemala by attending each other’s training sessions and seminars.

³ One hospital team discontinued their redesign work due to a lack of support from hospital management.
These different, yet complementary, QA activities—the communication of primary healthcare standards, problem solving, and redesign—comprised QAP’s technical assistance in Guatemala from February 1999 to July 2000. In an effort to learn from and document the QAP experience in Guatemala, a qualitative evaluation was designed to gather information from those who participated in QA activities.

The redesign team in Hospital Regional de Occidente remodeled this room to serve as a separate operating theater for obstetrical patients.
4. Evaluation Methodology

The evaluation aimed to uncover the experience of teams and QAP staff in carrying out the quality methodologies, while also learning how other factors affected the extent to which the methodologies were successful. This type of information necessitated in-depth discussion with members of the quality assurance teams and QAP staff. Therefore, focus groups and interviews were determined to be appropriate evaluation methods. Instruments to facilitate focus group discussion and interviews were developed by Dr. Carlos Quan and Claudia Flores. Two consultants, Liza Vielman Tejada and Nelly de la Torre, were contracted to conduct and document the focus groups and interviews. Finally, Joanne Ashton and Karen Askov of QAP/Bethesda provided assistance in the analysis and synthesis of the data. This evaluation team of six worked together to analyze, draw conclusions, and provide recommendations based on the data collected.

A nominal group process was used to review the qualitative data for each of the key areas of QAP’s technical assistance in Guatemala: problem solving, redesign, and the communication of standards. Team members first reviewed the data and requested any clarifications from the consultants who conducted the focus groups. Each team member then wrote his or her key conclusions drawn from the data on an index card; these index cards were posted and categorized to identify shared conclusions. Based on these conclusions, the evaluation team discussed and generated recommendations for ways to further strengthen the use of quality methodologies in Guatemala.

The QAP recently developed a model, featured in Figure 2, to illustrate all of the essential elements that enable and support the institutionalization of QA activities. These essential elements have been identified by QAP staff working worldwide and validated through the analysis of QAP experiences in Niger, Zambia, Ecuador, and Chile. Therefore, this model not only represents the activities that directly contribute to the quality of care, but also the essential elements to take into account when planning for the institutionalization and/or evaluation of QA activities.

This model for the Institutionalization of Quality Assurance provided a framework to analyze and document the data from QAP/Guatemala. In addition, this model provided a framework to assess the QA activities carried out and to consider all of the essential elements that contributed to or inhibited their success. This information is useful not only in understanding the achievements and challenges throughout QAP/Guatemala, but is also intended to identify opportunities to further strengthen QA activities in Guatemala.

5. Institutionalization of Quality Assurance

5.1 Principles of Quality Assurance

Quality assurance is a set of core activities that contribute to defining, designing, assessing, monitoring, and improving the quality of care. These core activities are synergistic in nature, with the greatest impact on quality of care being achieved when these activities are carried out in a coordinated fashion. There are three main categories of QA activities and they are illustrated in Figure 1.

QA is founded on four fundamental principles that reflect that QA is not only a set of activities, but also a set of beliefs and values that guide an organization:

- **Client perspectives and needs:** QA recognizes that health services exist to meet the health needs of clients. This principle emphasizes the importance of knowing who clients are, while understanding and trying to meet their needs and expectations. Clients include those within the organization—who have needs and expectations from other colleagues to be able to do their work—as well as external clients (the target population and other stakeholders).

- **Systems** and processes: QA recognizes that unclear, redundant, or incomplete systems and processes may be sources of problems in the delivery of quality care. Instead of blaming the people working in these systems for poor performance, QA

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4 The ideas presented in sections five and six regarding the “essential elements” for the institutionalization of quality assurance are largely based on the Quality Assurance Project report, Institutionalization of Quality Assurance (Askov et al. 2000). For further information about this report, please refer to its citation in the reference section.

5 A system is the arrangement of organizations, people, materials, and procedures associated with a particular function or outcome. A system is made up of inputs, processes, and outputs (outcomes, effects, and impact).
activities involve people in the prevention, detection, and resolution of problems within processes or systems in order to improve the quality of care.

- **Data-based decisions**: QA emphasizes the need to improve processes by understanding how they function. This principle promotes decision making based on accurate and timely data, rather than on assumptions.

- **Teamwork**: QA focuses on participation and teamwork to solve problems and implement quality solutions, recognizing that the impact of QA activities is most powerful when the participation, experience, and knowledge of major participants and stakeholders are included.

A key question, however, is not just how to implement QA, but also how to establish and maintain QA as an integral, sustainable part of a health organization. The QAP has defined the institutionalization of QA as an ongoing process in which, “QA activities are formally and functionally incorporated into the structure of a health system (or organization), consistently implemented, and supported by a culture of quality, as reflected in organizational values and policies that advocate quality care.”

The institutionalization of QA activities does not take place in isolation because its essential elements—enabling QA through policies, institutional core values, effective leadership, and adequate resource allocation—interact with a larger environment. The institutionalization of QA also depends on certain support functions to develop and maintain capacity in order to implement QA activities, disseminate information, and reward quality work. Finally, a structure for QA contributes to its performance by overseeing and coordinating activities as well as defining roles and responsibilities for QA.

### 5.2 A Model for the Institutionalization of QA

The QAP has developed the model (Figure 2) to illustrate the elements that contribute to the institutionalization of QA. The core of the model is **quality care**, the desired outcome that resides within the triangle representing the three main QA activities: **defining quality (QD)**, **measuring quality (QM)**, and **improving quality (QI)**. These technical QA activities will have the greatest impact and success in achieving quality care when they are implemented in conjunction with the eight essential elements present in the model. QA activities are augmented through three support functions: capacity building, communication, and rewarding good work. The circle surrounding QA activities and support functions demonstrates the
importance of structure as an essential element for framing effective implementation of QA. Finally, an over-arching factor that influences every element is the internal enabling environment, which consists of policy, leadership, core values, and resources. While recognizing that every health organization functions within a larger environment that influences its organizational structure and ability to implement QA, this framework of essential institutionalization focuses on those elements within an organization’s sphere of influence. The sections that follow describe each of the essential elements in greater detail.

5.3 Essential Elements of Institutionalization

This model divides the essential elements for institutionalizing QA into three main groups: support functions, structure, and internal enabling environment. These essential elements surround and support the core QA activities illustrated in Figure 2.

**Support Functions:** In order to institutionalize QA, there needs to be formal, ongoing processes for: developing and maintaining the staff’s capacity to implement quality assurance activities; disseminating QA information; and rewarding staff for quality work.

1. **Capacity Building:** to ensure that all staff possess the knowledge and skills to carry out QA activities. This function includes the development/implementation of a systematic process to assure appropriate QA training for all involved staff, as well as mechanisms to provide continuous support for applying QA methodologies and reinforcing new skills with the assistance of a coach and/or supervisor.

2. **Communication:** to disseminate information about QA activities to healthcare providers, clients, and policy-makers. This function assures that the work carried out by QA teams is communicated to a wide audience of stakeholders to determine policy, advocate resources, and promote peer learning about successful QA activities.

3. **Rewarding Quality Work (incentives/recognition):** to ensure that individuals and teams are rewarded for quality efforts and outcomes. These incentives are not necessarily monetary; effective incentives also include the recognition and appreciation for work that is well done. This function supports an ongoing motivation among health workers to practice QA.

**Structure:** The institutionalization of QA activities requires a clear delineation of roles, responsibilities, and accountability. The specific organizational structure for implementing QA can vary greatly from one organization to another and will evolve as the QA program matures. Hence, there is no “correct” or “best” structure; there may or may not be a “QA unit” or fixed organization structure per se. However, institutionalization needs “structures” or mechanisms for oversight and direction, decision making, the provision of support and/or expertise for the QA activities, the implementation of QA technical activities, and the coordination or linking of QA to other activities in an organization.

**Internal Enabling Environment:** An internal environment conducive to initiating, expanding, and sustaining QA is necessary to institutionalize QA. Such an enabling environment includes the following elements, each individually important, but supportive of each other.

4. **Written Policies that Support Quality:** clear, explicit, and communicated directions/directives that provide support, guidance, and reinforcement for QA as an integral part of the organization.

5. **Leadership:** leaders who work directly and openly to improve quality, set priorities, model core values, promote a learning atmosphere, act on recommendations, advocate for supportive policies, and allocate resources for QA.

6. **Core Values:** organizational values that emphasize quality care and continuous improvement to ensure that services are articulated, promoted, and practiced.

7. **Resources:** the sufficient allocation of human and material resources to conduct, support, and maintain QA activities.

Thus, this model provides a comprehensive view of the elements that need to be in place to institutionalize QA as an integrated part of an organization. By recognizing elements that have been critical to successful implementation and identifying opportunities to further strengthen QA within an organization, this model also provides a framework for the evaluation of QA activities.
6. Evaluation Findings of the Quality Methodology by Essential Elements

The following section describes the experience of quality assurance teams in carrying out QA activities. This section also compares and contrasts evaluation findings for each of the key components of QAP’s technical assistance in Guatemala (redesign, problem solving, and the communication of standards) using the model for the institutionalization of QA as a framework.

6.1 QA Activities in Guatemala: Problem Solving, Redesign, and Communication of Standards

Focus group discussion and interviews with quality assurance team members and QAP staff indicated that the quality methodologies were not only well liked, but also encouraged them to improve services by thinking about their work from the perspective of clients. Quality assurance team members also commented that the problem-solving and redesign methodologies were logical, useful, and scientific. As team members expressed their desire to continue and expand their work, some also encountered difficulties with implementation activities. Some teams found that the fifteen-month time frame was not long enough to fully develop, implement, and monitor plans. Therefore, some teams suggested that the methodology should be applied for a longer period of time and/or research methodologies should be shortened.

Specific comments about the QA activities implemented in Guatemala include:

- **Problem Solving.** The teams often commented that they did not perceive problem solving as extra work, but as an important tool to identify and solve problems. Problem-solving methodology also gave team members ownership over problems, and the ability to resolve them. Problem solving became engrained as a thought process for many team members. Several focus group participants stated that because the methodology proved to be so useful for solving problems at work, they had started to use the methodology to identify and solve problems individually. This indicates an important step toward institutionalizing QA: when team members identify problems and take personal responsibility for solving them.

- **Redesign.** In general, teams were able to complete the redesign steps but encountered a variety of obstacles in finishing and implementing their designs. The biggest obstacle proved to be the short period of time to train, develop, implement, and monitor designs. Teams found 15 months too short a time period to carry out activities—especially if there is a shortage of human resources. Another challenge for redesign teams has been the development and use of indicators. Teams were asked to develop three key indicators that would reflect the degree of success of the redesign: one for inputs, one for processes, and one for outputs. Indicator development, however, took a significant amount of time and sometimes resulted in team members becoming discouraged. Furthermore, developing a method to measure the indicators was difficult for the teams. Consequently, measuring the impacts of the quality methodology was not effective. Despite these obstacles, teams have
“Right now we are using this methodology in obstetrical services, but we will be able to use it in other services. There is no need for more training because we can maintain the same group.”

Member of a Redesign Team

Communication of Standards for Primary Healthcare. Members of the basic community health teams that were interviewed indicated that the training and supervision were effective. The healthcare providers and institutional facilitators observed that the community facilitators, volunteers, and midwives had improved their ability to attend to the health needs of their communities. Institutional facilitators were successfully able to replicate the training they had received from QAP facilitators. Community members commented that they found the training in vaccinations and the recognition of danger signs in pregnancy to be the most useful skills learned. Healthcare providers noted that this was particularly true for midwives, who now knew the danger signs of pregnancy and when to refer pregnant women for health services. Community participants also indicated, however, that they would prefer to learn these skills through a mixture of classroom activities and applied learning, i.e., actually practicing with patients under the supervision of the institutional facilitator.

6 This finding is also attributed to the work of MotherCare in Guatemala, which trained traditional birth attendants to recognize and refer women with danger signs in pregnancy.

6.2 Support Functions

Capacity Building

Capacity building refers to the ongoing process of ensuring that staff have the knowledge and skills to carry out QA activities. This not only includes training to teach QA skills, but also coaching, mentoring, and supervising to reinforce and model these skills. Therefore, capacity building for QA extends beyond formal QA training to a wide variety of activities such as self- and peer appraisal, feedback from supervisors, and the modeling of QA skills.

One key finding from the focus groups and interview data was that participants felt the quality assurance workshops conducted by QAP/Bethesda were effective and provided excellent training. At the same time, the focus group and interview data revealed opportunities to improve this aspect of QAP’s technical assistance. First, quality assurance teams working in redesign received an initial off-site training in QA concepts and practiced the steps of the QA methodology with a hypothetical process for redesign. Upon returning to the work site, however, teams sometimes forgot how to carry out the necessary activities, which slowed the work of the team. One recommendation suggested by focus group participants was to provide frequent, on-site training for quality assurance team members. These frequent training sessions would allow teams to concentrate on learning a limited amount of material during each training, reduce the amount of time they spent away from normal duties (training would be on-site), and provide a mechanism for the continuous support and reinforcement of the material learned.

Efforts to provide continuous support and reinforcement to implement quality methodology were a mixed success. Even though the quality workshops were highly rated, the QA facilitators had difficulty coaching teams to apply the methodology after the workshops. Various factors contributed to these difficulties. Upon

“The training would be better if they weren’t spread so far apart, giving doses little by little. There are many themes and many doubts... more frequent training, at least once a month.”

Member of a Redesign Team
becoming involved in SIAS (December 1999), QAP hired two facilitators to lead the redesign efforts in the hospitals. In contrast, the facilitators in the primary healthcare areas were originally hired to provide capacity building related to primary healthcare. Thus, when QAP assumed responsibility for the strengthening of the SIAS model, these primary healthcare facilitators were asked to function in the new role of QA facilitator. All of the QA facilitators (both hospital and primary care) received QA training at the same time as their teams. Unfortunately, they did not receive additional training in coaching, facilitation, and quality methodology in advance. Nonetheless, the hospital redesign teams indicated that the facilitators were instrumental in assisting with the redesign methodology. At times, however, the teams encountered difficulties—e.g., setting limits and priorities for the design, establishing indicators, and monitoring indicators. When technical assistance was provided, the advisor found that the team sometimes was off-track and needed to redo a step in the methodology. The primary care QA facilitators continued capacity building related to primary care, assisted the NGO in organizing their services, and organized community volunteers to collect health data. Focus group participants indicated that the primary healthcare facilitators contributed to their work by teaching primary healthcare patient management skills. In addition to the routinely scheduled classes, each facilitator had several quality assurance teams in their areas. The facilitators’ ability to provide guidance to the quality assurance teams was limited by conflicting priorities, multiple tasks, long distances between teams, and little technical assistance in the field to implement quality methodology. This must be contrasted to the hospital teams in which: each quality facilitator was responsible for three hospitals; the only focus was redesign; and the teams were located at the hospital.

Facilitators play a critical role in the success of quality assurance teams. It was recognized that in this project, the facilitators required additional coaching in quality methodology and additional support to function effectively as quality facilitators. Facilitators of QA teams require specific training, coaching, and mentoring to carry out the function of providing assistance to teams in applying quality methodologies. Based on this information, a key recommendation for future QA efforts is to strengthen and expand the knowledge and skills of QAP facilitators who already have a base of experience in QA methodology. Currently, at the conclusion of QAP technical assistance to Guatemala, redesign and problem-solving facilitation has ended, while the facilitators for the communication of primary healthcare standards are continuing under the MOH. If, however, QAP facilitators were further trained under the MOH or provided with other forms of technical assistance, they could then identify members of quality assurance teams that demonstrate an aptitude for QA and train these individuals to become QA facilitators for the MOH. In other countries where QAP has provided technical assistance, the MOH has made this transition toward a sustainable structure for QA facilitation by allowing selected facility staff to coach QA teams one day a week. This transition to a sustainable structure for QA facilitation allows for the continuous building of a “critical mass” that supports and sustains QA activities. In light of these recommendations to increase the sustainability of QA in Guatemala, it is also recommended that the role of facilitators be expanded into new areas—such as advocacy, methodological decision making, and resource mobilization—and used as a source of providing information to teams.

Another important finding in the area of capacity building was a need to use culturally appropriate materials designed according to the education level of the participants. The focus group members and interviewees consistently stated the materials should contain more illustrations and examples, larger spaces to write, and simpler language. The data also revealed the need for each member of the quality assurance teams to have his or her own materials. This was particularly true for the problem-solving teams whose members were usually dispersed over large areas, inhibiting the team members from sharing materials with each other.

Finally, the data revealed some difficulties regarding the capacity building for the communication of standards. Capacity building is particularly challenging...
because it involves training an entire team in providing primary healthcare to communities, with team members ranging in academic levels from physicians to community health volunteers. The QAP team trained the community physicians and the institutional facilitators together; they in turn then trained the community facilitators and volunteers. According to the data, this system encountered two areas of difficulty. First, physicians indicated they preferred to be trained separately, and when possible, by specialists in areas such as gynecology and pediatrics. Second, community facilitators and volunteers suggested that training should involve participatory activities rather than traditional didactic techniques. The data indicated that community facilitators and volunteers believed they learned more when they actually worked with physicians or were presented with hypothetical cases.

**Communication**

Communication involves a two-way interaction for organizations to share information with other staff, communities, other organizations, and policy makers. Communication has proved to be imperative to QA activities because including others increases the likelihood that they will accept—instead of feel threatened by—any changes that are made. Communicating involves documenting, sharing, and using QA experiences not only to inform others, but also for the purposes of advocacy and benchmarking.

Quality assurance teams initiated community meetings to share information and involve community members in the improvement of services. In problem-solving teams, health workers displayed community health data in such a way that communities (generally communities characterized by a low level of literacy and a diverse number of languages spoken) could interpret the data to identify problems. Quality design teams included community members in their redesign of services, discovering their needs through focus group discussion. Quality assurance teams have not only initiated communication between health facilities and communities, but also between different segments of the health system. This is especially true for problem-solving teams, which united personnel from district facilities, NGOs, and community members to work together.

Communication is an area that could greatly strengthen QA activities in Guatemala. One conclusion from the analysis of the focus group and interview data was that teams often focused their efforts on developing and implementing their plans, and did not always communicate these ideas to the individuals and groups that were key to the success of the plan. This was a productive lesson to learn as teams used quality methodologies for the first time and discovered ways to improve the success of their plans. Some teams felt there was a lack of communication with their colleagues—some of whom viewed the quality assurance team with the suspicion that quality monitoring would entail evaluating their work. Other teams sometimes felt there was a lack communication with those managers and decision makers that were not actively participating in the teams. When this lack of communication with key stakeholders occurred, it often resulted in resistance to the changes that were introduced. Therefore, effective channels of communications were powerful tools in winning the necessary support to implement plans and persuade others to “buy in” to any changes these plans might require. One mechanism to communicate with others about quality initiatives is through the documentation of experiences. This documentation would inform others of the quality initiatives as well as contribute to the sharing and adaptation of experiences among quality assurance teams.

**Rewarding Quality Work**

In addition to having the capacity to do QA and having information about what can be achieved, staff members also need to see that their efforts in QA are important to the organizational leadership and the community served. Rewarding quality work (or efforts to improve quality) fosters a commitment to quality and a motivation to strive for excellence. Staff rewards can be material, such as presenting them with a shirt or a plaque as an award, or non-material, such as public recognition during a ceremony. Rewards help to foster an increased sense of self-esteem among employees and give them a sense of pride when they are performing their work. Ultimately, this encourages the continuous striving for quality. Not only should an organization develop incentives that bolster a worker’s motivation to undertake QA activities, it should also examine any disincentives or barriers to quality care that exist and identify ways to remove them.

The quality assurance team members in Guatemala indicated that they were proud of their work and enjoyed being members of a quality assurance team. Although a formal system for recognizing quality work had not been established, some team members believed that the work itself was a reward. When a quality design team was asked what motivated the members to proceed through the methodology, one team member responded, “The patient. We keep pushing ahead for the patient.” This response demonstrates that the team
members found motivation in knowing that they were improving the care for their clients. One team member indicated that because she was so proud to be a member of a quality assurance team, she wore a tag stating “I do quality work.” This information indicated that team members also received increased levels of respect from colleagues. Quality work could be further recognized, however, through simple actions, such as an employee of the month award, presenting team members with clothing with the name or logo of the quality assurance team, or recognizing the team in a facility meeting. Another way to motivate quality assurance teams is to plan for short-, medium-, and long-term results, which keeps teams enthusiastic about their work.

The data also indicated that some disincentives for participating in QA activities were in place and should be addressed. For all of the teams, the training times appeared to be too long, creating pressure to complete their work in addition to their usual range of responsibilities. A problem-solving team member expressed frustration with a three-day quality workshop, stating that this was only one of many workshops that he needed to attend—in addition to all his other responsibilities attending to clients. As mentioned in the description of capacity-building activities, more frequent, but shorter, training sessions might help reduce the disincentive for participating in QA activities. A community health worker suggested that the training for communication of standards should only last a half-day because volunteers were taking time away from their jobs. These issues should be further explored, identified, and resolved in order to make participation in quality assurance teams a more feasible and rewarding experience.

6.3 Structure

QAP has learned that there are many ways to organize QA and no single correct structure for implementing QA. It is clear, however, that a structure for QA should include the clear delineation of roles and responsibilities, the coordination of QA activities, and the technical oversight and accountability for the implementation and institutionalization of QA activities. The structure for QA will vary over time, because as the maturity of the QA program grows, the capacity of health providers to carry out QA increases and the overall health service delivery system changes. Therefore, although a structure for QA is essential, the “correct” structure varies with the individual needs and development of the QA program.

The current structure for QA activities was introduced by QAP. Quality assurance teams were created within the hospitals, primary healthcare areas, and communities in the five districts. These teams were designed to function within the time frame of the project with the hope that the teams would continue after QAP’s support ended. Fifteen months, however, is a short period of time to train quality assurance teams, develop and implement quality plans, and prepare facilitators to carry on the QA work independent of QAP. Therefore, it can be said that QA activities are just beginning in Guatemala and a formal structure that oversees, coordinates, and delineates roles and responsibilities for QA activities has not been developed. It is important to note that several teams indicated that they would like an official structure for QA that would legitimize and support their work. One focus group participant specified that such a structure would include QA as a responsibility within everyone’s job and allow staff time to work on teams. Based on this finding, a recommendation to further develop QA activities in Guatemala would be to “scale-up” activities while obtaining support from the regional and national Ministry of Health to create an official structure for quality assurance.

This structure for quality assurance would integrate hospitals, health centers, NGOs, and communities through quality assurance teams. This would be a fundamental shift because the different levels of the health system often function independently of each other—each focusing on problems within their specific facility. This integrated structure would provide a service-line approach in which services are viewed as a continuum, from primary healthcare to referral level facilities, and tackle issues that affect all levels of the health system, such as reproductive health education, family planning, and referral systems. This structure would also establish an official entity for quality assurance activities, and establishing clear roles, responsibilities, technical oversight, and accountability for quality assurance activities. It is recommended that this structure be initiated in a region with experience and enthusiasm for quality assurance activities and where the leadership actively supports quality assurance principles. One such region is San Marcos, where the regional leader advocates the continuation and expansion of quality assurance activities. This recommendation is based on the finding that leadership support for quality assurance is critical to its success and continuation.
6.4 Internal Enabling Environment

Policies That Support Quality

Policies reflect an organization’s governing principles and are evidenced in plans, laws, regulations or courses of action. Written policies constitute an official document outlining the governing principles by which an organization operates and provides services. Written policies that incorporate a focus on quality reinforce the institutionalization of QA, particularly in organizations where there is a high turnover of leadership. Policy is also an important link to other “essential elements”; since policy is often set or influenced by leaders, it determines the resources allocated to QA activities and may reinforce and reflect core values.

QAP technical assistance did not work directly to advocate policy in Guatemala that would support quality at the organizational, regional, or national level. National level policy in the context of health sector reforms, however, did greatly influence and support the development of QA activities. As mentioned previously, QAP entered the process one year after health sector reforms were implemented by the MOH with the objective of extending access to quality healthcare to the Guatemalan population. These health sector reforms were primarily motivated by the peace agreement (Organization of American States, 1997) signed in 1996 that marked the end of the civil war in Guatemala. Under the peace agreement, the government promised to guarantee access to quality healthcare, particularly for populations with limited resources. This written policy constituted access to, and the quality of, healthcare as a national priority and provided an impetus for the creation of SIAS and the initiation of QA activities.

Leadership

There are designated leaders with mandated authority and informal leaders who “lead” by virtue of their personal strengths. However, not all of those with mandated leadership are effective “leaders”; leaders are individuals with the ability to motivate people to follow and build upon their vision, and individuals who set an example for others to simulate and promulgate the values and goals of the organization. Leadership is critical to the institutionalization of QA because leaders have the power to establish QA as an organizational goal, model the behaviors necessary to achieve the goal, and allocate (or advocate) for resources to carry out QA activities. Experience has demonstrated that QA programs will not survive if the organizational or health system leaders are not supportive and knowledgeable of QA.

Leadership played a major role in the QA activities of Guatemala. Leadership involvement and support often led to the success of QA initiatives, while opposition by leaders often presented significant challenges to the implementation of these initiatives. QAP began its technical assistance by approaching leaders and inviting them to a QA awareness workshop. Leaders interested in QA formed quality assurance teams within their facilities and began QA efforts with the support of QAP. Therefore, QAP began to develop a relationship with these leaders, and these leaders, in turn, began to feel a sense of ownership and responsibility for the plans developed by the quality assurance teams. Changes in the MOH in December of 1999, however, resulted in a change of leadership at all levels of the health system, including area and hospital directors. This change of leadership greatly impacted the quality assurance teams because new leaders required an orientation to QA and the work of quality assurance teams. In some cases, new leaders brought different priorities to the health area or facility, thereby reducing or eliminating the work of quality assurance teams. Other leaders learned about the work of the quality assurance teams, provided continuity to their work, and contributed to their success. This experience demonstrated the importance of leadership support and participation in quality assurance teams.

Core Values

An organization’s core values are important to the success of its QA efforts because they indicate what behaviors are appreciated and rewarded within the organizational culture. The core values of the organization and the individuals working within the organization should be complementary, working together towards quality and creating a “culture of quality.”

A “culture of quality” is one in which staff view quality as a primary objective of their work and/or value it as a reward in itself, and where clients include quality care among their rights as human beings, citizens, and payers of care. The existence of such a culture of quality is an indication that QA has become integrated into the “fabric” of the organization; it is truly “institutionalized” and will be sustained. From: Institutionalization Legacy Group. July, 2000. Project Report: Institutionalization of Quality Assurance. Quality Assurance Project: Bethesda, Maryland.
support QA promote the development of a learning environment, where people feel that they are contributing to something that matters. Organizational core values develop and evolve over time. In a short time span of fifteen months, however, core values supportive of QA began to develop in Guatemala.

The data presented preliminary results in the development of core values that support the notion of working together in teams, particularly in the area of problem solving. The problem-solving methodology brought together healthcare providers that had previously been segregated from each other in the health system, such as personnel from district facilities and NGOs. As mentioned previously, district health facilities and NGOs have experienced feelings of competition with each other because of the integration of the health system to improve primary healthcare. The problem-solving teams, however, brought these organizations together to solve common problems; therefore, this initial work in problem solving improved the communication and coordination between different segments of the health system. As one member of a problem-solving team stated, “Before, problems did not belong to anyone. Now they are the responsibility of everyone.” To this end, the problem-solving methodology appears to effectively promote taking responsibility of problems.

This value for teamwork is also true for the hospital redesign teams. These team members indicated that they appreciated multi-disciplinary teams that provided knowledge and perspectives of many different individuals. They also recognized that each person is a valuable contributor to understanding the opportunities that exist for improving quality and that the work of each individual helps to build quality.

The quality methodologies also contributed to the development of a value for a “customer focus” in health service delivery. For example, several hospital redesign teams discovered through focus group research that women preferred to have their midwives with them during delivery. In creating a customer-focused design, redesign teams allowed midwives to be present and participate in the delivery. This demonstrates a critical change in service delivery: designing services to address and meet the needs of customers.

**Resources**

Human, material, and financial resources are obviously a critical element in enabling the implementation and institutionalization of QA and increasing the inputs available in a health system (e.g., drugs, supplies, and personnel). Because many health systems have limited resources available for their programmatic needs, they find it difficult to identify and justify resources for QA activities. The question arises, “Within the limits of the resources available, how can resources be maximized to achieve quality care?”

In terms of the resources necessary to carry out QA activities, it is important to mention that the health system supported QA efforts by allowing staff the time to work on the quality assurance teams. This is particularly important given that the lack of resources, particularly human resources, was a consistent theme throughout the data from Guatemala. Teams frequently expressed frustration and indicated that their plans to improve quality were paralyzed by an inability to obtain more human resources, equipment, and supplies from the Ministry of Health. Team members also felt limited in their ability to conduct/attend meetings because human resources were scarce and no one could cover their workload during meetings. There was, however, a general belief that QAP was in a position to influence the provision of additional staff.

Resources for increased inputs into the health system (such as drugs, supplies, and personnel) particularly played a role in the success of the redesign teams. The redesign teams initiated their designs with a “dream technique” in which team members imagined how services should function and created their designs accordingly. Although teams were instructed to create...
designs within the parameters of available resources, the designs often involved remodeling the physical infrastructure of the hospital and increasing the personnel and supplies available. To implement these redesigns, many teams requested resources from leaders in the facility or the MOH and, therefore, were dependent on the support of others. Based on this information, it is recommended that QA facilitators play an increased role in the development of designs to clarify any initial limitations in resources and help teams identify alternatives for resource generation such as community mobilization, international organizations, or private organizations. It is also important that teams have continuous communication with leaders and decision-makers in order to determine the resources that are available. Finally, choosing to address service areas that are national and regional priorities will increase the possibility that the team will receive additional funding to support their designs.

7. Lessons Learned

QAP’s technical assistance in Guatemala provided a number of valuable lessons and insights into the process of implementing and institutionalizing QA. One of the most significant findings from the focus groups and in-depth interviews was that those participating in the QA activities found the methodologies to be useful and applicable. These quality methodologies appeared to give healthcare providers and community health teams a tool to solve problems and develop a sense of ownership and responsibility for the quality of care.

Problem solving was particularly effective in integrating segregated parts of the health system through the use of multidisciplinary teams. These teams promoted cooperation and coordination between communities, NGOs, and district health facilities by working together to address common problems. Therefore, problem solving proved to be a valuable activity and should be considered in the future as a method to further strengthen SIAS. Community-based problem solving was an unexpected side effect of the district and NGO problem-solving team. The qualitative research revealed that the problem-solving methodology was well received in the communities. This is partly because the problem-solving methodology was adapted to an agenda format, following the style of traditional community meetings in Guatemala. Members of problem-solving teams indicated that the geographic dispersion and limited transportation between communities created difficulties in organizing meetings. Therefore, in the future, the problem-solving methodology needs to be applied in a way that is convenient and feasible for team members.

While the research indicated that the redesign methodology was considered to be valuable, participants also indicated several limitations of this methodology. The redesign process, using the ten-step methodology, requires a significant time commitment. Since QAP’s assistance in Guatemala only lasted 15 months, some teams felt that they did not have sufficient time to fully implement their designs and measure the results. Because of an existing lack of human resources, team members also expressed concern about how health services would be attended to while they were absent to attend meetings. Leadership support also played a key role, often determining the success of the redesign. Therefore, based on the experiences in Guatemala, the redesign methodology should only be selected when time, resources, and leadership support are available. Some key recommendations for the application of the redesign methodology in Guatemala include:

- The decision to carry out redesign should be justified by data. Therefore, standards and a monitoring system should be established and used to identify areas for improvements.
- Criteria should be developed for choosing the redesign methodology (e.g., sufficient time and resources).
- Redesign components should be selected based upon which ones will have the highest impact, preferably choosing an area that is a national and/or regional priority.
- Investigation of more efficient methods of redesign should continue. Some team members expressed frustration with the amount of time the redesign required.
- Short-, mid-, and long-term results should be included in a redesign plan. Seeing the results of the team’s work helps motivate team members.

Finally, the communication of primary healthcare standards also demonstrated a great deal of success: research indicated that institutional and community healthcare providers felt more capable of carrying out their specific roles under SIAS. These basic community health teams appeared to be effective in establishing a
flow of information between healthcare providers and communities, encouraging the participation of communities in the health system and empowering them to identify and solve their problems. The focus group and interview data revealed that there were specific opportunities to strengthen this work by providing training balanced between theory and practice, revising the training materials for all education levels, and providing training in local languages.

Other key lessons learned and recommendations include:

■ Quality assurance teams (problem-solving, redesign, and community health) sometimes forgot material in the lapse of time that took place between training and applying the concepts. Therefore, frequent on-site training for quality assurance team members is recommended for the future. Although training would be more frequent, the sessions would cover less material, require less time, and provide increased support.

■ Facilitators would benefit from increased preparation and support. The role of facilitators has been critical to the success of teams and should be expanded into new areas, such as advocacy, methodological decision making, resource mobilization, and a source of information for teams. Current members of quality assurance teams should be selected and further trained to become future QA facilitators. This would enhance their knowledge of QA and build a critical mass of people with QA skills.

■ The materials should present the methodologies in simpler language and provide more illustrations and space to write. It was also suggested that educational materials should be more innovative, creative, and culturally appropriate. The primary healthcare staff requested training and materials focused on primary care, rather than hospital care. Team members consistently requested to have original copies of educational materials rather than photocopies.

■ It was clear that the support of leadership was imperative to the success of the teams. Teams that received active leadership support were more successful in developing and implementing their plans. Likewise, leaders who did not support the quality assurance teams and changes in leadership created significant barriers for a team’s progress and ultimate results. Therefore, leaders need to be involved in the decision-making process and informed of a team’s results.

■ It is important for teams to make continuous communication with leaders and decision-makers a priority in order to determine what resources are available. Again, choosing to address service areas that are national and regional priorities will improve a team’s ability to receive support and funding.

■ Quality work could be further recognized in Guatemala through simple actions, such as an employee of the month award, clothing with the name of the quality assurance team, or recognition of team members in a facility meeting. Another way to continuously motivate and reward quality assurance teams is to plan for short-, medium-, and long-term results—this keeps teams enthusiastic and proud of their work.

■ There is now a strong base of QA activities to learn from in Guatemala. New quality assurance teams should learn from these experiences and, when possible, adapt existing QA designs and solutions to their own facilities. Future teams might benefit greatly from a system to communicate and share information among teams.

■ A formal structure for QA should be considered to integrate primary healthcare services, health centers, and hospitals. There is a considerable interest in “scaling-up” these initial QA activities and creating a formal presence of QA in Guatemala.

■ Developing and monitoring indicators is exceedingly important in the process of quality improvement. The data obtained through monitoring indicators drives quality improvement activities. Working with indicators and designing data collection methods often posed difficulties for facilitators and teams; therefore, additional training and support is needed for future QA endeavors.

These findings and conclusions provide opportunities for the future growth and institutionalization of QA in Guatemala. QAP’s technical assistance over a 15-month period helped introduce QA concepts and develop a base of experience in QA. These initial activities have been effective in: developing a notion of teamwork; integrating the primary healthcare and district health providers; understanding the customer; using data for decision making; and creating a sense of responsibility among healthcare providers for the quality of care. The lessons learned on how to strengthen QA activities will provide valuable direction to future teams, the MOH, and donor organizations to continue to expand and institutionalize quality assurance activities within Guatemala’s health system.
References


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