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Institutionalization and Sustainability of Donor-funded Quality Assurance Initiatives: The case of Honduras

NOVEMBER 2017

This research report examining the institutionalization and sustainability of donor-funded quality assurance initiatives in Honduras was prepared by University Research Co., LLC (URC) for review by the United States Agency for International Development (USAID) and authored by Pablo Villalobos Dintrans and Thomas J. Bossert of Harvard T.H. Chan School of Public Health through the USAID Applying Science to Strengthen and Improve Systems (ASSIST) Project. The USAID ASSIST Project is made possible by the generous support of the American people through USAID and its Office of Health Systems.

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TABLE OF CONTENTS

List of Tables and Figures

Acronyms

AECID	Spanish Cooperation Agency for Development
ASDI	Swedish International Development Cooperation Agency
ASSIST	USAID Applying Science to Strengthen and Improve Systems Project
BMI	Body mass index
GDP	Gross domestic product
HCI	USAID Health Care Improvement Project
JICA	Japan International Cooperation Agency
PAHO	Pan American Health Organization
PPP	Purchasing power parity
QI	Quality improvement
SSH	Secretariat of Health of Honduras
URC	University Research Co., LLC
USAID	United States Agency for International Development
WHO	World Health Organization

EXECUTIVE SUMMARY

Background

Institutionalization and sustainability are important issues for any donor funded program as the effectiveness of the initiatives are usually expected to persist after the donor funding period has ended. This report develops a framework for analysis integrating the two concepts and applies it to an important case of donor-funded quality improvement projects in Honduras whose funding terminated in 2012.

Honduras is a lower-middle-income country in Central America. The population is predominantly young, with fertility and under-five mortality rates similar to those in other countries in the region. Despite low levels of health care spending, the country had achieved substantial reductions in mortality rates at different ages.

The Quality Assurance Project (QAP), funded by the United States Agency for International Development and implemented by University Research Co., LLC (URC), began providing technical assistance to the Honduras Secretariat of Health (SSH) in 1997, designing and implementing a quality assurance (QA) system to improve the quality of maternal and child health services in Health Region 2 (Comayagua), including standards development, compliance monitoring, quality design, and quality improvement (QI) teams. In 2004, SSH changed its organizational structure from eight health regions to 20 departmental regions and requested that QAP support the scale-up of QI in the five USAID-assisted departmental regions: Copán, Comayagua, La Paz, Intibucá, and Lempira. QAP also supported the local implementation of the national QA regulatory mechanism of facility licensing and later participation of facility teams in a regional essential obstetric and newborn care improvement collaborative.

QAP's assistance in Honduras was directly followed by support from the USAID Health Care Improvement Project (HCI) from 2007 to 2012. HCI supported the SSH in the implementation of the National Plan for Maternal and Child Mortality Reduction, and during 2010-2011, provided technical assistance to develop a National Quality Health System.

Methods

This case study was designed to ask how much of the projects' results, funding, policies, and culture continued five years after the resources and technical assistance were withdrawn and at what level of fidelity, and what factors could explain the sustainability or lack of sustainability.

The information to inform the analysis was collected through documents, statistics, and interviews. The analysis of documents included the projects' description and reports. Interviewees were selected in order to represent different actors involved in the design and implementation of the QAP and HCI projects, following a judgment-based sample. Twelve interviews were conducted in November and December 2016: four at the national level, including national health authorities and civil servants at SSH; five of program managers and implementers at health facilities; and three of representatives of international agencies working in quality improvement of maternal and child health in Honduras. All the interviews were conducted in Spanish, in person.

Findings

The availability of resources and technical support from international institutions facilitated the implementation of the quality initiatives in the country. The Secretariat of Health led the project and it was "institutionalized" at national level through the Quality Management System, designed and implemented by the SSH Quality Management Unit. Although most of the activities of the project were carried out at the local level--mostly training and technical assistance to develop and implement facility-level improvement plans--the project's goals were embraced by authorities at the central level. Political support for the project and commitment with quality improvement in healthcare gave rise to the creation in 2011 of the National Policy for Quality in Health Care. "When URC ended the project, the torch was taken up by the

Unit of Quality Management at the SSH… The Unit's technical profile was adequate to continue doing many of the activities of the project. This gave continuity to the process", said a national coordinator.

Regarding sustainability, most stakeholders acknowledge that many activities that started with the QAP and HCI projects are still in place: "I think many things continued. Even with new elements, without the influence of URC… I think the main impact (after the project withdrew) is that we stopped moving forward", said a stakeholder at the SSH. Interviewees mentioned visible products, such as quality units and the National Quality Congress. Although they all agreed that these activities and organizations still exist, some doubts were raised about their functionality. One of the critical aspects identified by several interviewees is the lack of trained human resources to continue the project's activities. Interviews highlighted that central-level personnel trained during the duration of the project have continued working on promoting quality, but many of them are no longer working at the SSH or are close to retirement.

At local level, quality improvement projects were well understood: "In general, people understood the projects (continuous improvement), I will say in 85%... Standard, indicators, measures. People knew these things… They know the methodology." Other factors previously highlighted refer to the flexibility of the intervention, and its ability to be adapted by local teams. On the other hand, technical requirements were also mentioned as one potential barrier to institutionalization and continuation of the activities of the projects. Several stakeholders flagged the lack of monitoring and evaluation systems as critical in explaining the stagnation of processes initiated by URC.

Conclusions

The projects implemented by URC in the country for more than a decade set the basis to maintain a process of continuous improvement in Honduras. In terms of results, interviewees agree that the main component of the project was the quality training. This element helped to create a culture of quality in health care, giving policy makers and health professionals tools to work on the priority issue of quality improvement. The project also generated important administrative changes, such as the creation of quality units at the central and local levels.

Interviewees recognized that there are still many improvements required to produce impacts in maternal and child mortality in the country and that quality itself is a never-ending process. This is a key element of the project's approach that improvement is a continual process of adaptation.

However, there was a repeated theme that despite the successes of the projects during their implementation, there has been a fall-off in terms of sustaining the same level of activity as during the projects. Despite the project's orientation that emphasizes the need to move on from achieving improvements in one quality area to improve other quality problems, it is clear that after HCI ended, teams moving on to other quality issues did not occur. The activities that were achieved during the life of the project were partly sustained but not at the same level as during the life of the project.

Interviewees attributed this deterioration to the lack of dedicated resources and technical guidance for QI, turning important QI processes into mere formalities. There was a failure to monitor and follow up and there were insufficient incentives to overcome the tendency for staff to prioritize other activities. In addition, the staff which had been trained during the project moved on to other activities or retired and there was little attention to training of new staff.

Some major lessons for future projects are that project design should take into account the multiple factors involved in the institutionalization of project outcomes. In Honduras, strong attention to developing effective organizations like the committees at the national and local levels was important and instilled a strong culture around the objectives and activities of the project. The Honduras experience also shows how important it is to develop ongoing financial support from multiple sources (perhaps including other external funders), to establish ongoing training programs to replace the trained staff who retire or move on to other activities, and to develop incentives and commitment to maintaining a high level of quality monitoring.

I. INTRODUCTION

Institutionalization and sustainability are important issues for any donor-funded program as the effectiveness of the initiatives are usually expected to persist after the donor funding period has ended. The two concepts are linked in that the continuation of the initiatives and their impacts (the core of the concept of sustainability) are usually dependent on the integration of those activities into ongoing institutions (the core of the concept of institutionalization). This report develops a framework for analysis integrating the two concepts and applies it to an important case of a donor-funded project on quality assurance in Honduras whose funding terminated in 2012.

A. Background to Honduras and the Quality Projects

Honduras is a country in the middle of Central America. **Table 1** shows a series of statistics to situate Honduras in context. The country has a population of 8 million (2015) and is classified as a lower-middle-income economy according to the World Bank (World Bank 2017).

Honduras has a life expectancy of 73.1 years, similar to the average of the countries in the region and higher than countries in the same income group. The population is predominantly young, with fertility rates similar to those exhibited by other countries in Latin America and other low-middle income countries. Regarding under-five mortality, Honduras shows a rate similar to the rest of the countries in the region, but considerably lower than other low-middle-income countries and the world average.

Table 1. Selected indicators (2015)

Indicator	Honduras	Latin America and Caribbean	Low-Middle Income	World
Demographic				
Population, total (thousands)	8,075	632,959	6,159, 443	7,346,633
Life expectancy at birth (years)	73.1	74.9	69.7	71.5
Urban population (% total)	54.7	79.9	48.7	53.9
Population ages 0-14 (% total)	31.8	25.7	27.9	26.1
Fertility rate, total (births per woman) [b]	2.4	2.1	2.6	2.5
Mortality rate, under-5 (per 1,000 live births)	20.4	18.0	46.4	42.5
Economic				
GDP per capita, PPP (constant 2011 international $)	4,785.4	14,596.6	9,349.4	14,716.8
Poverty headcount ratio at $1.90 a day (2011 PPP) (% of population) [a]	18.9	5.4	12.6	10.7
Health system				
Health expenditure, total (% GDP) [b]	8.7	7.2	5.8	9.9
Health expenditure per capita, PPP (constant 2011 international $) [b]	399.7	1,111.6	533.7	1,275.7
Out-of-pocket health expenditure (% of total expenditure on health) [b]	43.5	31.7	36.1	18.2

Source: Authors based on World Bank (2017).

[a] Data from 2013.

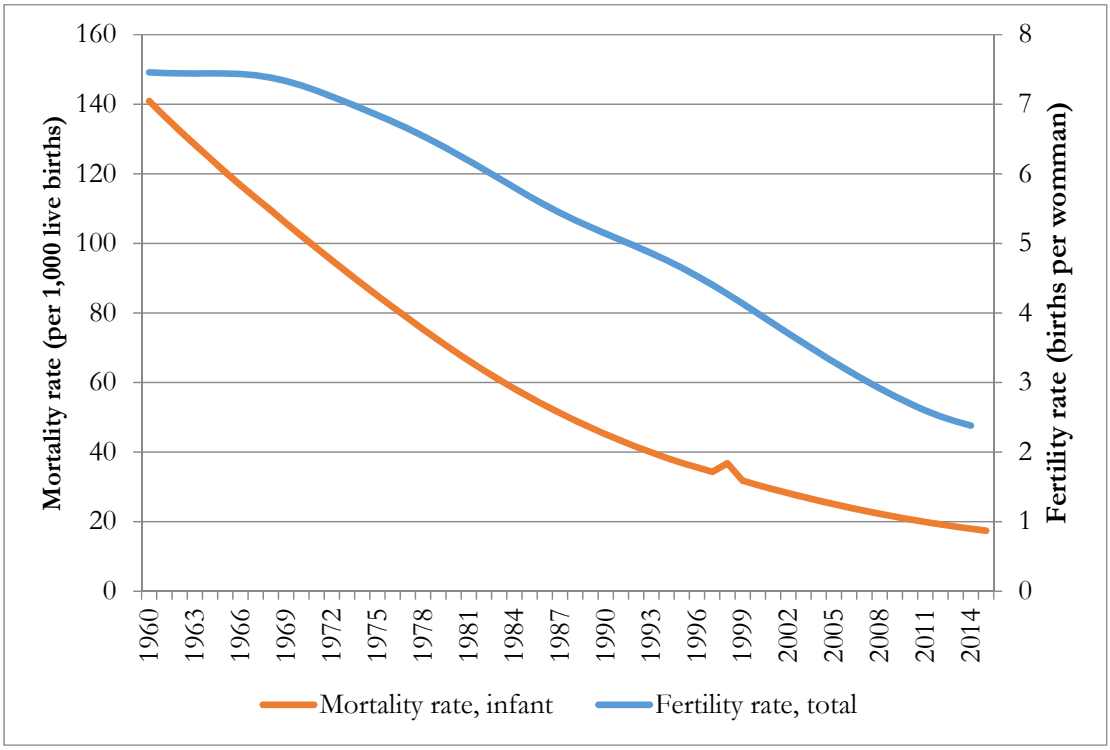
[b] Data from 2014.

In economic terms, Honduras' performance is poorer (lower GDP per capita and higher poverty ratio) than other countries in Latin America and the Caribbean and also worse than the average of low-and-middle-income countries.

Finally, at $399 purchasing power parity (PPP), the country also exhibits a low level of per capita expenditure in health, and at 43.5%, high out-of-pocket expenditure as share of the total health expenditure, resulting in little financial protection in health. The World Health Organization report in 2000 (WHO 2000) ranked the Honduran health system 131 out of 191 countries.

As is occurs even in the poorest countries, both fertility and mortality rates have declined constantly in last decades, as shown in **Figure 1**. These changes have driven the country to a different stage of the demographic transition, with lower population growth and accompanying changes in the age structure of the population (Lee 2003; Bongaarts 2009).

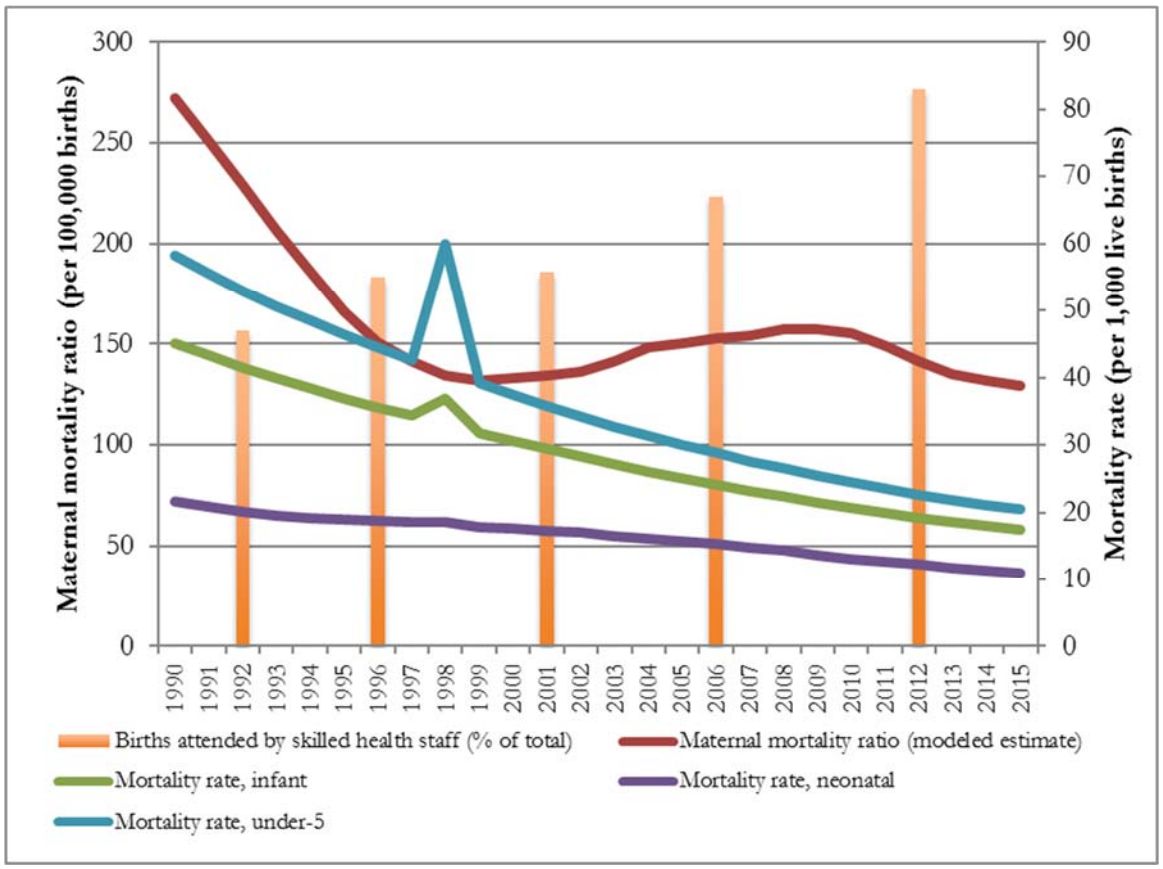
Figure 1. Fertility and infant mortality rate in Honduras (1960-2015)



Source: Authors based on World Bank (2017).

Despite low levels of spending, the country had achieved substantial reductions in mortality rates at different ages and lower maternal mortality, as well as increases in the percentage of birth attended by skilled health staff, as shown in **Figure 2**. The peak in mortality curve observed in 1998 is mostly attributable to the effect of Hurricane Mitch, the worst natural disaster in Honduras' history. The hurricane affected the whole country, leaving more than 7,000 dead throughout Honduras (UN/ ECLAC 1999).

Figure 2. Mortality and birth attendance in Honduras (1990-2015)



Source: Authors based on World Bank (2017).

This was the panorama in the late 1990's when the Quality Assurance Project (QAP) started its operation in Honduras. The project was funded by the United States Agency for International Development (USAID) and managed by the Center for Human Services, the non-profit sister company of University Research Co., LLC (URC). In Honduras, QAP provided technical support to the Honduras Secretariat of Health (SSH) (Lin 2000).

QAP's purpose was to provide technical assistance and conduct research in health care quality improvement, increasing awareness that quality improvement (QI) is needed for health system strengthening in any context. The program intended "to design, introduce, and ensure implementation of clinical guidelines and standards, quality monitoring and assessment methods, continuous QI, and effective training and job aids that contributed to sustainable improvements in the quality of care, improved interpersonal communications and patient satisfaction, and reductions in mortality" (URC 2017a). The program focus was mainly on reducing maternal and child mortality by improving essential obstetric care (Lin 2000). QAP provided assistance in Honduras from 1997-2007 and was followed by assistance from the USAID Health Care Improvement (HCI) Project from 2007-2012 (URC 2003). Following the route of its predecessor, HCI supported the Honduran Government in the implementation of the National Plan for Maternal and Child Mortality Reduction. During 2010 and 2011, HCI also provided technical assistance to develop a National Quality Health System, jointly with the Secretariat of Health (URC 2017b).

The QAP trained and established teams in different health facilities throughout the country –mostly areas with high maternal rates compared to the national average (Marquez 2001). These teams were

responsible for designing quality processes at their respective hospitals according to their own problems, context, and needs (Lin 2000).

The projects reported important achievements such as reducing newborn deaths, increasing efficiency and community participation, increasing patient satisfaction, sustainability, financial support, and creating standards, policies and a culture of quality (Lin 2000; URC 2017b). Many of these impacts were experienced while the projects were still functioning.

This institutionalization/sustainability study was designed to ask how much of the projects' results, funding, policies, and culture continued five years after the resources and technical assistance was withdrawn. It was also expected that the approach implemented during the projects would encourage the adoption of continuous quality improvement by the institutions that were assisted. This report describes the main continuing aspects of the projects implemented by URC in Honduras during the past five years since the funding of HCI ended, identifying achievements and explaining the projects' institutionalization and sustainability.

This report is structured as follows. Section II presents a conceptual framework to understand institutionalization and sustainability, exploring concepts and definitions, and recognizing barriers and enablers for institutionalization and sustainability of externally funded initiatives. Section III describes the methods used in collecting and analyzing information. Section IV introduces the findings of the study, i.e., what were the main achievements of the QAP and HCI projects in Honduras during the project period, what activities and results continued after the end of the projects, and what are the factors (enablers and barriers) that explain sustainability in the Honduran context. Section V reviews the limitations of the study. Finally, Section VI presents the conclusions of the study.

II. ANALYTICAL FRAMEWORK

Since the early 90s, interest in sustainability and institutionalization – i.e., how the activities, funding, policies, and approaches implemented during the life of a project and their impacts can be continued by effective institutions after the project ends- has been growing. As highlighted by several authors, the issues of sustainability and institutionalization are particularly interesting for donors and policy makers, who are concerned about the efficient use of their resources; however, little research-based evidence and consensus is currently available (Bossert 1990; Shediac-Rizkallah and Bone 1998; Sheirer 2005; Sheirer and Dearing 2011; Schell 2013; Iwelunor et al. 2016)[1].

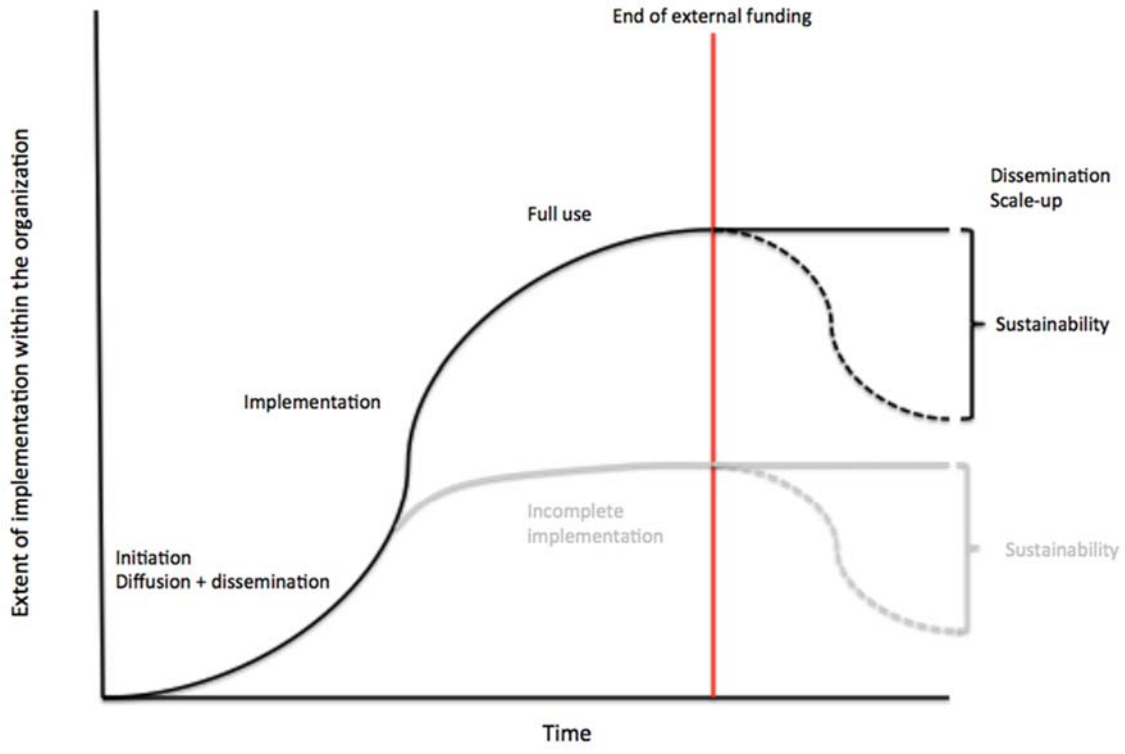
There is also a considerable overlap among areas of study such as implementation science, institutionalization, sustainability, and scale-up. Different terms in the literature such as "sustainability", "confirmation", "institutionalization", "incorporation", "maintenance", "integration", "durability", "routinization", "capacity building", "continuance", and "continuation" are interchangeably used to refer to outcomes of an intervention after external funding ends (Goodman and Steckler 1989b; Shediac-Rizkallah and Bone 1998; Sheirer 2005; Rabin et al. 2008; Sheirer and Dearing 2011; Wiltsey Stirman et al. 2012; Iwelunor et al. 2016). Maintenance, institutionalization and capacity building can be considered as different dimensions—indicators—of sustainability (Rabin et al. 2008; Shediac-Rizkallah and Bone 1998).

[1] As discussed below, the study acknowledges the existence of multiple definitions for the concepts of institutionalization and sustainability. In the case of the USAID-funded quality improvement projects implemented by URC, institutionalization is understood as establishing and maintaining continuous improvement activities, outcomes, policies and culture as an integral, sustainable part of a health system or organization's daily activities, in line with both the concepts of "activities/outcomes" and of "capacity building" discussed further in this section.

As proposed by Shediac-Rizkallah and Bone (1998), Massoud et al. (2006) and Iwelunor et al. (2016), it is crucial to answer several questions when dealing with sustainability and institutionalization: although most studies focus on answering what is sustained, it is also important to look at how or by whom, how much, and by when. The first question—what is sustained—is important to define the characteristics that influence the sustainability of the activities and to measure both activities and impacts. Traditionally, and following the definition proposed by Sheirer (2005), sustainability is defined with respect to three dimensions (perspectives): i) continued (maintenance) of benefits; ii) continued activities; iii) continued capacity, although different authors emphasize these aspects differently. The first two indicators are related to the intervention, while the capacity building is directly related to an actor participating in the process (implementer or recipient of the intervention).

Following the life cycle of an innovation (Rogers 2003; Sheirer 2005; Wiltsey Stirman et al. 2012), sustainability can also be understood as a final stage that follows the stage of implementation. As shown by **Figure 3**, within a given organization, the innovation can be more or less adopted, despite the existence of external funding, a phenomenon related to the implementation itself; a second source that can affect the extent of implementation can be the end of external funding; this event is related to the degree of sustainability of the intervention and can occur anywhere in the lifespan of a program, although it is usually assumed that it happens after full implementation (Wiltsey Stirman et al. 2012). Finally, the intervention can be disseminated or scaled up outside the boundaries of the organization, where a similar pattern can be found, but at a different scale.

Figure 3. Life cycle of an intervention



Source: Authors based on Sheirer (2005) and Rabin (2008).

Continuation of activities is the simpler and most evident form of sustainability, and it is related to the concept of *fidelity*, i.e., the degree to which and intervention is delivered as intended (Carroll et al. 2007). Fidelity is relevant both in the stage of implementation and in the stage of sustainability: changes to the

intervention can lower its benefits—the concept of “program drift” proposed by Chambers et al. (2013), regardless if this happens when the program is first implemented (incomplete use) or once the external funding is withdrawn (Sheirer 2005).

Second, sustainability can be addressed in terms of continuation of benefits of an intervention. As highlighted by Green (1989), Bossert (1990) and Shediac-Rizkallah and Bone (1998), continuation of benefits is key in evaluating sustainability, given that the impact of an intervention should be seen as ‘investment in people rather than investment in programs’, and that continuation of benefits after the end of implementation is a main concern for donors, policymakers, and scholars (Sheirer and Dearing 2011). In this perspective, continuation of activities can be seen as a proxy measure for continuation of benefits, under the assumption that a program that continues doing the same activities generates the same results (Pérez et al. 2015); this assumption is often far from being realistic, which suggests the need to evaluate benefits directly both during and after the donor funding ends (Bossert 1990).

Finally, sustainability and institutionalization can be understood in terms of capacity building, i.e., the building of durable resources within an organization, in order to continue, and positively alter if necessary, the delivery of the intervention. Although capacity building is usually referred to investments in the organization that delivers the intervention, capacity can also be built at the recipient level (community) (Shediac-Rizkallah and Bone 1998; Sheirer 2005; Rabin et al. 2008; Sheirer and Dearing 2011; Iwelunor et al. 2016; Winterton and Chambers 2016). Capacity building should be measured not only because of its relevance as an enabling factor for fidelity and maintenance (Chambers et al. 2013), but as an important outcome *per se* (Green 1989; Shediac-Rizkallah and Bone 1998).

Under this scenario, institutionalization or routinization can be considered as a process that bridge capacity building and continuation of activities and benefits. As stated before, the term as been used differently in different contexts[2], but usually refers to the integration of a program or intervention within an organization (Yin 1979; Steckler and Goodman 1989; Goodman and Steckler 1989a; Rabin et al. 2008).

All these concepts are embodied in **Figure 4**. It includes the definitions/ indicators to measure sustainability, incorporating several concepts usually found in the literature when answering the question of *what* is sustained. The definition of sustainability also should contain a definition of where to measure these indicators (*by whom?*) and *when* to do it.

A second important discussion has to do with the factors that contribute to sustainability; since the early work in the field (Yin 1979, Bossert 1990), and following the framework proposed by Shediac-Rizkallah and Bone (1998), three important factors influencing sustainability have been identified:

1. innovation characteristics,
2. organizational features, and
3. environment.

These characteristics are similar to those described as key for successful implementation (Greenhalgh et al. 2004; Durlak and DuPre 2008; Feldstein and Glasgow 2008; Damschoeder et al. 2009; Damschoeder and Hagedorn, 2011; Chaudoir et al. 2013; Moullin 2015), scale-up (WHO 2004; Massoud et al. 2006; Massoud and Mensah-Abrampah 2014) or quality improvement (Berwick 2004).

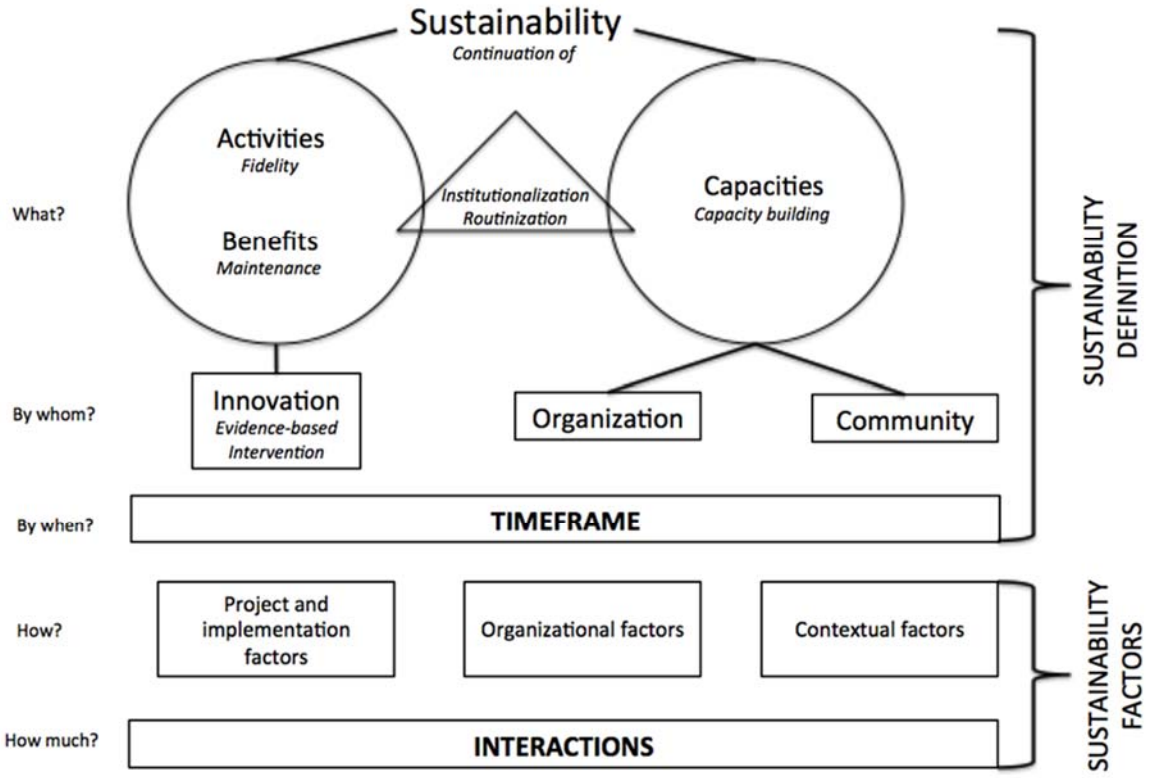
The similarity between sustainability and implementation literature is not surprising, since both identify factors required for implementation. However, sustainability focuses on the challenges of implementation after an externally funded project is terminated. Sustainability can be usually found as a later stage in the

[2] For example, Shediac-Rizkallah and Bone (1998) note that “institutionalization” is more commonly used to describe continuation of programs in a US-based context, while “sustainability” is more often used in international context.

process models (Nilsen 2015), usually related to the term “maintenance” (Glasgow et al. 1999; Rogers 2003; Kilbourne et al. 2007; Feldstein and Glasgow 2008).

These three elements (innovation, organization, and environment) are related to the question *how to sustain?* They have been highlighted as important in several contexts, but there is no consensus about which elements are more important or what specific sub-factor is the more relevant to explain or assure sustainability. As found by Wiltsey Stirman et al. (2012), different factors have different relevance according to the type of intervention, and sustainability also depends on the type of institution and the contextual factors in which the intervention is implemented and on the processes of adoption and implementation. More recent studies have acknowledged this by including explicitly the interactions between factors and processes as a factor itself (Massoud et al. 2006; Wiltsey Stirman et al. 2012; Chambers et al. 2013; Iwelunor et al. 2016). Understanding the links between factors is the key to answer *how much* of each is required to enhance sustainability.

Figure 4. A framework for sustainability and institutionalization

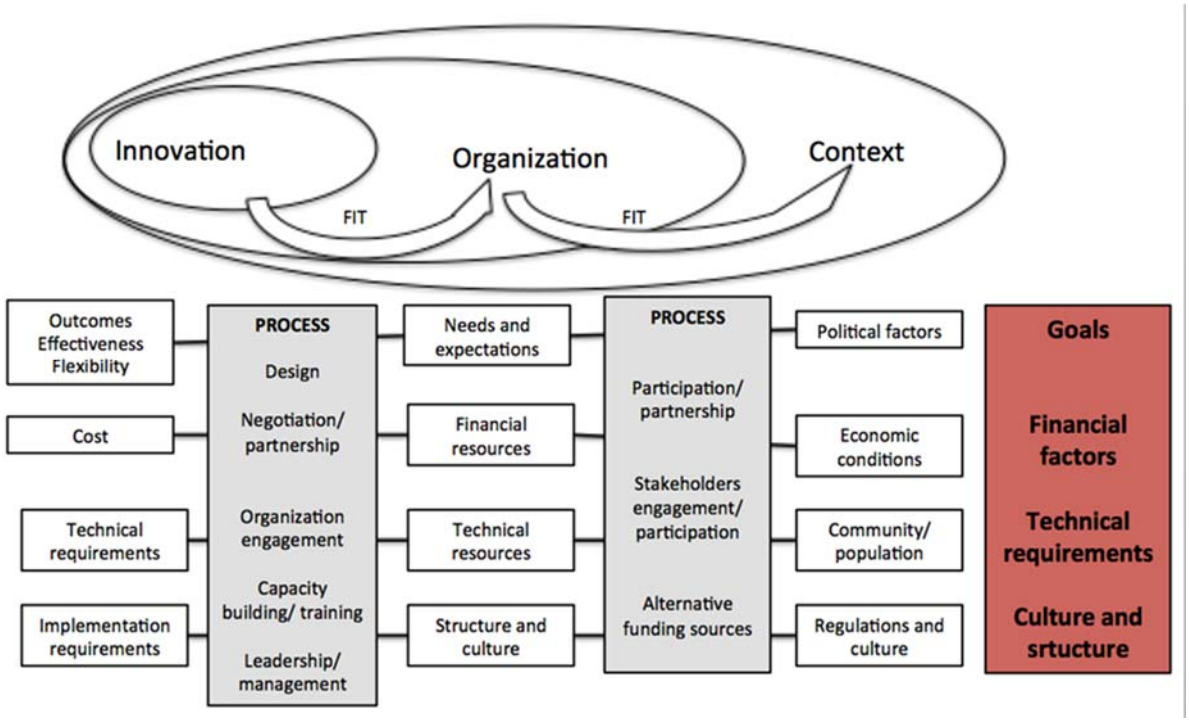


Source: Authors based on Bossert (1990); Shediac-Rizkallah and Bone (1998), Sheirer (2005), Wiltsey Stirman et al. 2012, Chambers et al. (2013), and Iwelunor et al. (2016).

Although simplistically depicted in **Figure 4**, the interactions between these three factors are the key to understand the way in which sustainability works. As shown by Chambers et al. (2013), the fit between elements of the three factors improves sustainability of a given intervention in a particular organization and context.

Figure 5 structures several elements and interactions found in the literature. First, sustainability is dependent on the fit between the **goals** of the project, the host organization, and the community in which it is implemented. A first condition is that the program needs to be perceived as effective (Bossert 1990; Shediac-Rizkallah and Bone 1998; WHO 2004; Massoud et al. 2006; Sheirer 2005; McCannon et al.

Figure 5. Sustainability: Interactions and processes



Source: Authors based on Chambers et al. (2013).

2007; Sheirer and Dearing 2011; Massoud and Mensah-Abrampah 2014), i.e., as able to generate the results it is expected to achieve. In a broader sense, the link between the project and the organization refers to the intervention's results: sustainability increases not only if the intervention is able to prove effectiveness, but also if its results prove to be relevant for the organization's needs and expectations (Berwick 2004). An effective intervention is unlikely to be sustained by an organization that considers it useless; not only effectiveness, but the outcomes themselves and the ability to change them are important for fitting the program into the organization (Chambers et al. 2013). This area is usually linked to the existence of champions inside organizations, people who can convince the whole organization about the usefulness of the intervention (Shediac-Rizkallah and Bone 1998; Berwick 2004; WHO 2004; Sheirer 2005; Massoud et al. 2006; McCannon et al. 2007; Sheirer and Dearing 2011; Massoud and Mensah-Abrampah 2014)[3]. At a different level, both the sustainability of the project and the organization depend on the needs and expectations of the community they are immersed in; political factors are also key to understanding the external support of the project (Bossert 1990; Shediac-Rizkallah and Bone 1998; Berwick 2004; Schell et al. 2013; Landgraf et al. 2016). Even a well-financed project can find opposition if it is not accepted by the organization and the community. On the other hand, a (perceived) good project will find advocates that can help its institutionalization even when other conditions (e.g., financial resources) are not met. Information that can help assess the fit in this dimension can be: Did the project show effective use of resources when applied in other contexts? How does it help in achieving the organization's (community's) goals? Who advocated for it and who resisted it? Was it adaptable to the

[3] This factor has been recently disputed by some authors, based on the idea that teams, not champions are required to make changes (Wiltsey Stirman et al. 2012; Andrews 2013). In fact, the very concept of institutionalization relies on the fact that the project is not individual-dependent.

organization's needs? Were there other alternatives available? Something that has been identified as key in increasing the fit between the intervention outcomes and the organization/community needs is the way the negotiation process is carried out, particularly the degree of engagement and partnership between host (local organization/community) and provider organization (Bossert 1990; Shediac-Rizkallah and Bone 1998; WHO 2004; Rosenberg et al. 2008; Sheirer and Dearing 2011; Wiltsey Stirman et al. 2012; Schell et al. 2013; Winterton and Chambers 2016).

A second fit is related to **financial factors**; the key link is the fit between the intervention's cost and the financial capacity of the organization, which, in turn, depends of the general economic conditions in which the organization is inserted (community, country) (Bossert 1990; Shediac-Rizkallah and Bone 1998; Sheirer and Dearing 2011; Wiltsey Stirman et al. 2012; Schell et al. 2013; Landgraf et al. 2016). The financial features and consequences of the project are always relevant to understand its sustainability, but these features become more salient when either the organization or the country is experiencing some financial stress: *ceteris paribus*, sustainability can be threatened if the project is implemented in a budget-constrained organization or a time of financial austerity. For example, how much of the total budget of the project was financed by the organization and how much by external funds? How much of the organization's annual budget needs to be committed to the project? Does the program require any fiscal adjustments to be implemented (e.g., raise taxes)? In this aspect, a key process is the search and coordination of different sources of funds. Processes that can help in increasing the fit in this dimension can include the diversification of funds (including other external sources) and a participatory process with several stakeholders, to set the organization's and community's priorities, in order to navigate competing demands for limited resources (Bossert 1990; Sheirer and Dearing 2011; Wiltsey Stirman et al. 2012).

A third area of entailment has to do with the **technical requirements** of the project. A sustainable intervention requires a match between the technical needs of the project and the technical capacities (institutional strength) of the organization: trained staff, physical infrastructure (including information technology), among others (Bossert 1990; Shediac-Rizkallah and Bone 1998; Berwick 2004; Massoud et al. 2006; Sheirer and Dearing 2011; Wiltsey Stirman et al. 2012; Chambers et al. 2013; Schell et al. 2013; Landgraf et al 2016; Winterton and Chambers 2016). Sustainability will depend on several issues such as, was this viewed as a complex project? Did it require external technical assistance? Did the organization need to change in order to implement it? As before, this link also depends on the general characteristics of the population and the environment in which the project is being developed. In this respect, fit can be improved through capacity building (staff training, investment in infrastructure) (Bossert 1990; Shediac-Rizkallah and Bone 1998; Wiltsey Stirman et al. 2012; Chambers et al. 2013; Landgraf et al. 2016).

Finally, there are non-technical requisites that are also related to the project implementation and sustainability, linked mainly to the organization's **culture and structure** (Bossert 1990; Wiltsey Stirman et al. 2012; Chambers et al. 2013; Shediac-Rizkallah and Bone 1998; Sheirer 2005; Massoud et al. 2006; Sheirer and Dearing 2011) which, at the same time, is inserted in a broader set of regulations and culture at community level (e.g., red tape and language) (Berwick 2004). The fit between intervention, organization, and community can be evaluated by asking, for example, if the project requires changes in protocols, laws or regulations (e.g., labor or environmental issues); did it generate internal conflicts (e.g., by changing the organization's internal structure or the way it gets things done—changing working hours, for example? Did it produce conflicts with some stakeholders?

In order to improve fit in this dimension, managerial aspects should be taken into account, to integrate the features of the intervention with the rules and culture of the hosting environment (Bossert 1990; Wiltsey Stirman et al. 2012; Landgraf et al. 2016).

III. METHODS

The analysis constitutes a case study, i.e., an intensive study of a single unit, with the purpose of understanding a larger class of similar units (Gerring 2004). As stated previously, the main goal of the paper is to identify achievements and sustainability in the USAID-funded quality improvement projects implemented in Honduras.

The analysis was based on the previous discussion of the analytical framework to answer the research questions of both whether activities, outcomes, policies, and culture were sustained/institutionalized and what factors could explain the sustainability or lack of sustainability:

1. What were the characteristics and achievements of the projects that could be expected to be sustained and institutionalized?
2. What were the structures and processes of adoption and implementation during the life of the projects?
3. What activities, outcomes, policies and culture continued in the five-year period after the projects ended and at what level of fidelity?

The information to perform the analysis was collected through documents, statistics, and interviews. The analysis of documents included the projects' description and evaluations; statistics related to the outcomes and impact of the QAP and HCI projects were used to evaluate their achievements and institutionalization over time; finally, interviews were performed as a complementary strategy to fill informational gaps and capture opinions from different stakeholders.

As for the interviews, in-depth, semi-structured interviews were carried out with different stakeholders in Honduras. As described by Kvale (1996), semi-structured interviews allow enough flexibility to balance two crucial dimensions needed to gather the required information: conversation's fluency and control over the discussion (be able to get information about the topic).

Topic guides based on issues raised by the analytical framework and the list of interviewees were developed jointly with a local team of external consultants. A training session with the local team in charge of doing the interviews was the carried out in Tegucigalpa (Honduras) between November 23 and November 29, 2016. During the sessions, the conceptual framework in Section II was presented to the local team, and the list of interviewees, as well as customized interview guides for different groups, were developed.

Interviewees were selected to represent different actors involved in the design and implementation of the QAP and HCI projects, following a judgment-based sample (Marshall 1996). Three groups of interviewees were defined:

1. National level: including national health authorities and civil servants at the Secretariat of Health (n=4)
2. Local level: including program managers and implementers at health facilities (n=5)
3. External level: international agencies working in quality improvement of maternal and child health in Honduras (n=3)

Twelve interviews were carried out during the months of November and December 2016. A list of potential interviewees was initially provided by URC and revised jointly with the local consulting team. Interviewees were selected based on their involvement in the QAP and HCI projects, the balance between the previously described groups, and availability. Four interviewees were identified as relevant actors at the national level; five interviewees were selected as relevant actors at the local level, all involved in the projects' implementation at different locations; and three interviews were carried out with donors involved in funding quality improvement initiatives in Honduras.

All the interviews were conducted in Spanish, in-person, with at least two members of the team present. Oral consent was asked for every interview to be carried out and recorded. Interviews lasted

approximately one hour each, and the interviewees were asked about different aspects of the projects, depending on their role. Questions included the interviewees' role in the projects as well as their opinion regarding the origin of the interventions, their achievements, and factors influencing changes, institutionalization, and sustainability.

The data analysis was carried out using the thematic network analysis proposed by Attride-Stirling (2001). The method allows organizing the analysis by identifying themes in the conversations and links between them. The semi-structured interview generated expected and unexpected information; thematic network analysis helps to explore and understand this kind of data, since it structures preconceived issues but also highlights new ones. As stated by Braun and Clarke (2006), one of the main advantages of thematic analysis is its flexibility, which matches perfectly with the flexibility proposed by data collection strategy (semi-structured interviews).

The study met the requirements for Institutional Review Board exception, according to the Office of Human Research Administration of the Harvard T. H. Chan School of Public Health (approved on April 20, 2017).

IV. FINDINGS

This section present the findings of the analysis of the QAP and HCI projects in Honduras.

1. What was the context and adoption process of the quality projects in Honduras that might explain the fit and characteristics that contribute to sustainability? (**Table 2**)
2. What changes were introduced by the projects? (**Table 4**)
3. What changes were sustained and institutionalized? (**Table 5**)
4. What factors explain the sustainability of these changes? (**Table 6**)

A. Context, Fit, and Initiation Process of Quality Projects in Honduras

According to the interviews, quality in health care was an issue before the arrival of URC to Honduras. Even before the arrival of QAP, the topic was considered relevant to policy makers in the health system. As an interviewee who worked in the implementation of the projects from the SSH pointed out: "All the speeches, political and technical, have emphasized the importance of delivering health services with quality. Always." Quality was a known concept, but there was no common definition, guidelines for implementation or routine practice. Quality was recognized as important, but no one worked specifically to address it. One of the interviewees who participated at both, the local and central level remembers: "We talked about quality, but it wasn't measured. And we didn't have a clear idea of what we were talking about when we talked about quality… In speeches we sounded pretty, but in practice, we didn't know how to do it."

The first attempts to introduce quality in the Honduran health system started in the 1990s, jointly with a reform process driven by the Secretariat of Health. The reform was focused on reorganizing the country's health administrative units to follow the political divisions in the country. The introduction of QAP coincided with the creation of these smaller "health areas", facilitating delivery of technical assistance and financial support. In this case, the elements explaining the adoption of the QAP approach were two-fold: better fit between the innovation and the host organization via alignment of the project's and the Secretariat of Health's technical requirements (in particular, creating smaller units of intervention); better fit with political factors (the result of a change in government and the initiation of a major health reform). Related to these, some interviewees pointed out that URC's strategy was relatively simple and easy to implement, which could have contributed to its adoption: "I think for everybody this project was easy to implement… we perceived this as something really good, doable, and that could generate almost instantaneous results", said one of the interviewees who worked in the implementation of the project at the local level and is currently working at the SSH.

According to an interviewee, the key element explaining the introduction of quality in the agenda was the individual effort of some authorities at the Secretariat of Health, particularly interested in quality improvement in the sector. Some interviewees situate the starting point of the reform in the late 1990s, under the government of Carlos Roberto Flores (1998-2002) and the arrival of key actors—such as Victor Meléndez—in the SSH. From this perspective, political factors—change in government and arrival of new health authorities concerned with quality in health services—are the main explanation for the adoption of URC's quality projects in the country. Both elements, the arrival of new authorities interested in the issue and the availability of external support, could have contributed to the introduction of quality programs in Honduras in the late 1990s. As described by one of the participants in the process at the national level: "In the 90s, new generations came to replace the traditional figures in politics, and they introduced this idea of quality… from 1996, I believe, they started to design the package of quality of care… after three years, there was political support to start this institutionalization of quality; by the time QAP arrived… also the Spanish Cooperation Agency was very important… and PAHO has also be present with technical support, mainly… other agencies also entered in the country working in quality, but these were small initiatives."

A third factor explaining the introduction of the project during the 90s was the health conditions that prevailed in the country. As discussed in the introduction, Honduras had a history of high maternal and child mortality. This situation was reflected in a general public dissatisfaction with health care in the country. As pointed by one of the interviews at the SSH: "People are demanding quality, and we need to guarantee that… The idea of quality is well positioned. In fact, I think it is the spearhead to foster this institution's development." The good fit between the projects' features and the country's needs at the time facilitated the implementation of URC's quality projects in the country.

The population's concern about quality in health care was evident; satisfaction surveys showed this was a very salient issue in the health system and reflected in the civil society's participation and engagement in QAP and HCI activities. QAP arrived in the middle of a period in which the population started to care and demand better services: "… medical malpractice and the acknowledgment of human rights that started in those years, and the spearhead for all the processes at the SSH was maternal mortality. That was very aligned with quality. Then is when all the agencies came." The project took advantage of this involvement and engaged the community by educating people on the main concepts and goals of the project: "There was some awareness… It was an impact in the community… we created some figures to explain the concept of quality, and we came up with indicators… The community supported the initiative. The more they knew about it, the more they supported it."

Additionally, most interviewees emphasize that the projects' design was discussed with national and local authorities and that key stakeholders were invited to be part of the process; this explains the consensus about focusing the quality projects on maternal and child care. "(at local level) we never perceived the project as something external. We knew there was support and technical assistance… but our relationship was with the SSH's quality unit."

As shown by **Table 2**, several elements influenced the decision of implementing quality projects in Honduras. However, a common factor appeared particularly important: political factors. According to the interviewees, change in government produced changes in goals and capacities that enabled the adoption of these externally driven initiatives. As explained before, the conjunction of both, the availability of resources and technical support from international institutions, and the entering of quality in the political agenda facilitated the implementation of the quality initiatives in the country. From the perspective of one of the stakeholders at the national level: "External agencies brought the quality programs. They put a lot of pressure on the government to work on the topic… Since we had nothing, then we said, well, we have to accept it… local institutions were eager to receive that kind of support… this couldn't have been better."

Using the framework from **Figure 5**, successful implementation of the projects can be explained by a combination of favorable initial conditions that allowed a good fit between the interventions, organization, and environment (alignment between population's, government's and external donors' goals; and a standardized project that facilitated implementation), and the application of processes that enhanced this fit (focus on training and engagement of national stakeholders in the design of the intervention).

Table 2. Factors explaining the adoption of URC's quality projects

Factor	Explanation	Dimension*	Specific channel	Process
Health reform	Smaller administrative health units made a better fit better with the project's features	Technical requirements (innovation-organization) (organization-context)	Match technical requirements and technical resources Change in government	Capacity building/training Project design
New national leadership	New authorities concerned with quality in health	Goals (innovation-context)	Change in government	Stakeholders engagement/ participation
Population discontent	Quality project as response to a long-waited demand	Goals (innovation-organization-context)	Match country's needs requirements and innovation's outcomes Political factors	Stakeholders engagement/ participation Negotiation/ partnership

* Dimension refers to the focus of the factor on either technical requirements or goals.

Source: Authors based on interviews.

B. Changes Produced by QAP and HCI Initiatives

A first step in the analysis of institutionalization and sustainability requires identifying the changes generated by the projects. As described in **Figure 4**, changes can be grouped into activities, benefits, and capacity. Sustainability is then defined as the continuation of these changes.

The quality strategy was implemented through two main areas:

1. Inpatient care: emergency obstetric care, neonatal and child care
2. Outpatient care: prenatal control, family planning, infant nutrition

The projects included several topics, such as relationship with the patient, gender approach and female participation, training of hospital staff and community workers, guidelines development, and organizational development (creation of quality units at the national level and in the facilities).

Using the logical framework analysis (PCI 1979), and the program's self-declared goals (Lin 2000; URC 2017a), the projects are expected to generate results in the following areas:

1. Goal (impact): Reduction in maternal and child mortality; patient satisfaction
2. Purpose (outcome): Sustainable improvement in quality of care (essential obstetric care); improved interpersonal communications
3. Components (outcome): Implementation of QI initiatives (design and implementation of clinical guidelines, quality monitoring and assessment methods, continuous QI, and effective training and job aids)

4. Activities (inputs): QAP and HCI activities (training)

An assessment of the initiatives should look at these indicators. A quantitative evaluation would require detailed data not available at this time. The only data that was available at the time of this study showed the number of facilities in which quality training for the quality committees occurred, for approximately five health professionals each (**Table 3**).

Table 3. Facilities with quality committees that received quality training

Health Region	Hospital	Maternal Center	Health Center
Comayagua	1	3	9
La Paz	1	1	11
Intibucá	1	1	11
Lempira	1	3	5
Copan	1	1	10
Total	5	9	46

The project did not document a clear baseline of data that could be used to scientifically evaluate its impact, especially of health outcomes. Ideally, it should also identify QAP and HCI's specific impact; this task is challenging considering that other similar programs, implemented by different agencies—Japan International Cooperation Agency (JICA), Spanish Cooperation Agency for Development (AECID), Swedish International Development Cooperation Agency (ASDI), Pan American Health Organization (PAHO), and other projects funded by USAID—were implemented in the country at the same time.

The Secretariat of Health led the work of the projects, and it was "institutionalized" at national level through the Quality Management System (*Sistema de Gestión de la Calidad*), designed and implemented by the recently created Quality Management Unit (*Unidad de Gestión de la Calidad*). Although most of the activities of the projects were carried out at the local level—mostly training and technical assistance to develop and implement improvement plans (*planes de mejora*)—the projects' main goals were embraced by authorities at the central level. Political support for the projects and commitment to quality improvement in health care gave rise to the creation of the National Policy for Quality in Health Care (*Política Nacional de Calidad en Salud*), launched in 2011. "When URC ended the [HCI] project, the torch was taken up by the Unit of Quality Management at the SSH… The Unit's technical profile was adequate to continue doing many of the activities of the project. This gave continuity to the process," said one of the coordinators of the project at national level.

At local levels, quality committees were created in each hospital, and quality was implemented though performance improvement plans (*planes de mejora*). Several experiences show that decentralization facilitated the process of institutionalization at local level; although the main guidelines were defined at central level, regions (such as Lempira and Intibucá) and hospitals (such as Intibucá, Lempira, Choluteca) developed their own plans and adapted them to their context and needs.

In terms of what was done and achieved by the projects (**Table 4**), all interviewees highlighted the relevance of the training component as the main activity of the projects and the creation of a culture of quality in the country as the most important results. According to people who participated in the process at national, local and external levels, this culture of quality was achieved through agreeing on a definition at national level, clustering isolated initiatives, and defining metrics. As stated by one of the interviewees "… other projects were previously implemented, but were not focused on the idea of improvement… at the Secretariat of Health, the issue of quality was mentioned, but we didn't know how to work on it". Several interviewees at different levels emphasize this idea, showing that an important result of the QAP and HCI initiatives was to set the basis to continue working on quality in health care: "We perceived this

as something really good, doable, and that generated almost instantaneous results… it is like when you look at the mirror for the first time and you realize your hair is messy, or a woman realizes her make-up is smeared… these quality programs were like that: to look at the mirror and realize that the things we thought were fine were not fine at all."

Table 4. Changes generated by the projects

What was done/ achieved by the projects	Highlighted by
Training (knowledge)	Actors at national level
	Actors at local level
	External actors
Creation of a culture of quality (definition and measurement)	Actors at national level
	Actors at local level
	External actors
Cluster and structure isolated quality initiatives	Actors at national level
	External actors
Extension of quality initiatives to other areas	Actors at local level
	External actors
National Quality Policy	Actors at national level
	External actors
Quality units at central level	Actors at national level
Quality units at local level	Actors at local level
Creation of norms/ measurement standards	Actors at national level
Patient satisfaction measurement/ improvement	Actors at local level
Changes in mortality	Actors at local level

Source: Authors based on interviews.

This creation of a culture of quality came hand-in-hand with the generation of standards and regulations that helped operationalize these concepts, especially at the provider level. As pointed out before, quality seemed to be very important, but a complex and hazy term; the projects created the common language needed to start working in the area: "Quality was not a relevant element in the hospitals' culture… We talked about quality, but it wasn't measured. And we didn't have a clear idea of what we were talking about when we talked about quality… In speeches we sounded pretty, but in practice, we didn't know how to do it." This common culture was not only present at the technical level in the SSH units or the hospitals, but also expanded to the community: "If you go to any provider and ask for quality, they will answer you about quality. And if you go to the community and ask for quality, they will answer you about quality…" But there was no clarity or consensus about what quality meant until the projects began.

Another important contribution of the projects in this dimension was not only the generation of new knowledge and methodologies, but the coordination of existing efforts in the country. As mentioned by a national level stakeholder: "Before QAP, there were no initiatives on quality, just individual efforts, sporadic stuff… With QAP there was an attempt to coordinate initiatives in a complementary way… The SSH took the decision to have just one technical assistance project, and that was URC."

The projects also helped "produce" the National Quality Policy and quality norms and standards (*norma cero*) and installed quality units at central and local levels. Several interviewees highlight the creation of standards and regulations as an important result of the interventions: "… the creation of norms and the introduction of new, modern ways to deliver maternal care services have made the difference. And that, that is the product of the support from (external) agencies… then, we developed the norms—the zero norm—at national level." This was particularly relevant at local levels, were the application of quality concepts and standards helped homogenize health care services throughout the country: "There were important changes, almost instantaneous, mainly in the compliance with the SSH regulations… despite these efforts, this compliance with standards was erratic; it was better in some places and not so in others… results were heavily dependent on individual's actions, and consequently results differed from place to place… encouraging a culture of measurement that people providing services were motivated to try to follow these standards."

Interestingly, interviewees involved in the implementation at local levels also emphasized the application of quality strategies in other areas, as mentioned in one of the interviews "Nowadays, the Secretariat's quality unit has projects related to patient safety, HIV issues, and right now we will start working with Zika, using the same improvement teams already in place" (national level stakeholder).

Local stakeholders also mentioned improvement in patient satisfaction, and the reduction in mortality rates as part of the projects' outcomes. One interviewee (local level) also mentioned increase in community engagement as an outcome of both QAP and HCI projects. However, they were not able to document these results with objective indicators.

As show by **Table 4**, most of the results identified by different stakeholders refer to changes in processes and gains in knowledge, but very few acknowledge its effects on final outcomes. Indeed, people recognized the many challenges still faced by the Honduran health system. In the words of an actor who participated in the project at national and local level: "Personally, I started working in quality to save lives. And to be honest, the country is miles away from that. We cannot think that today any institution will be able to save a life in this country."

C. Changes Sustained over Time

Regarding sustainability, most stakeholders acknowledge that many activities that started with the QAP and HCI projects are still in place (**Table 5**): "I think many things continued. Even with new elements, without the influence of URC… I think the main impact (after the project withdrew) is that we stopped moving forward", said a stakeholder at the SSH.

Interviewees mentioned the same visible products, such as quality units and the National Quality Congress. Although they all agreed that these activities and organizations still exist, some doubts were raised about their functionality. For example, one interviewee who worked with the project at the local level said: "(after the end of the project) the continuous improvement approach, suddenly became… like… automatic. We discovered that teams performing a very "light" auto monitoring. For example, they scored 100% in everything, because they weren't really measuring anymore… and because they realized that when they demanded something based on these assessments, for example, we need an extra nurse or something, no one replied. Then it became just another procedure."

Interviewees also agree that some "capacities" were created by the project and continued after the end of URC's support. They pointed that quality units are still in operation and serve as the main instrument to carry out quality initiatives, both at national and local level. However, as in the case of quality activities, potential concerns about the level of actual functioning (or "fidelity" to the initial objectives and intensity of activities – see Section II) have also been detected by stakeholders when referring to institutions in charge of quality. At national level, there are some apprehensions about the ability to promote changes and innovation in quality: "Quality assurance requires a unit within the institution; one that is technically suitable to do trainings, standards generation, and to define quality… and we are a little bit weak in that

aspect." Another interviewee pointed out that: "There are no people in the organization to create the next step. After this improvement plan, what else? The Quality Unit, that was the mechanism created by URC for sustainability, didn't generate this innovation either. Maybe it is because all these people who were there, and were trained by URC, they retired… most of them."

This situation seems to be also present at the local level, raising concerns about the functionality of the quality units within hospitals. On the one hand, people recognize that institutions have been created: "Every region must have a regional quality coordinator, every hospital needs a quality coordinator, and this coordinator has to organize the continuous improvement teams… All this happened while the projects were still active. We are talking about 2005-2012." However, on the other hand, they point out that the role of these units is not always clear: "At local level, quality units have never been considered. It depends on each hospital director... some people who were at these units, trained by the project, ended up doing something else. For example they say: what if we use this nurse that is here working in quality and we move her to the emergency room? In that case, she goes and fulfill her job at the emergency room, but all her knowledge in quality remains unused."

Table 5. Sustainability in the QAP and HCI projects

What has been sustained?	Dimension of sustainability	Highlighted by
Quality units at local level	Capacities	Actors at national level Actors at local level External actors
Quality unit at local national level	Capacities	Actors at national level External actors
National Quality Congress	Activities	Actors at national level External actors
Quality activities in hospitals: indicator measurement, patient satisfaction surveys	Activities	Actors at national level Actors at local level External actors
Quality culture	Benefits	Actors at national level Actors at local level External actors

Source: Authors based on interviews.

D. Factors Affecting Sustainability

This section seeks to identify enablers and barriers for sustainability present in the QAP and HCI projects. As described in **Figures 4** and **5**, sustainability depends crucially on the presence, fit and interaction of factors at three levels—intervention, organization, and context—in four different scopes—goals, financial factors, technical requirements, and culture and structure.

1. Goals

As described in Section II, the fit between goals can be understood in at least two levels. On the one hand, it is important that the intervention is perceived as effective, i.e., capable of producing the expected changes, while, on the other hand, it needs to be aligned with the needs of organizations and society in a particular period of time.

In terms of its effectiveness, most actors agree that the quality interventions implemented by URC were perceived as useful and able to produce changes.

In terms of alignment with the objectives of the different actors, the fit between the projects' expectations and outcomes and the country's needs seems very strong. This could explain why, for example, similar quality improvement initiatives continued in the country, funded by other donors. First, all interviewees agree that quality was and continued being an important topic. This agreement increased the sustainability of the projects, since people recognized the need to continue: "Quality cannot be ignored. It should always be present, and we cannot say it is not important. In every document, the issue of quality is there. Now, how to implement it? That has been complicated", recognizes an interviewee at the SSH. Second, there was also an important fit between the focus of the program (maternal health) and the needs of the SSH and the Honduran society; this alignment gave support to the projects, increasing their sustainability. As described by one of the interviewees: "… (the focus on maternal mortality) was shocking. Because it is a very sensitive issue it was easy to address, and everybody bought the idea… everybody wanted to cooperate. Community, volunteers… everybody!"

Political factors are potential barriers for sustainability. As explained before, political factors were key in understanding the success of the process at the implementation stage (**Figure 3**), particularly because the support from political authorities at that stage; a project that starts with individual political support will require sustained political support to become institutionalized. An SSH's official comments: "The institution resented the end of QAP. There is no doubt about it. The expectation is that these technical assistance projects withdraw once the institution is already strengthened, but we felt that this was not the case. I think that while the project was active, quality has a boom here at the SSH… but sometimes when this is just a single project, it does not permeate the whole organization… That is what happened: the initiative started to fall and fall, little by little. I think we have ways to continue with this quality measurement at local level, but we feel it has stagnated." This lack of institutionalization left the project adrift and expose to political fluctuations: "… politically, there have been a lot of changes. The State invested resources training people, but when changes come, anyone comes and takes the authority position… for me, that was the main factor to explain the stagnation and decline in all the quality processes."

A second factor undermining sustainability was related to the negotiation process and the way in which the interventions were designed and implemented. There is no consensus in this issue. On the one hand, some actors indicate that the project design was aligned with the country needs at every level (SSH, hospitals, community): "URC suggested some ideas, but we adapted it to our own needs… and the local norms. Each hospital defined support in function of its own needs... then the hospital manager received them with great pleasure, because they understood this was a way to solve their problems… there was agreement. URC came, proposed, convinced. And the local management, adapted it and accepted the external support. URC stayed in line or behind… so the people felt they were supported." However, some interviewees, especially those representing the local level, highlight that negotiations took place at the central level and not necessarily took into account the local hospitals' needs. "They (central level) already had it (the project)… we adopted it as the model." This could explain some resistance to the interventions, threating their sustainability at the local level.

2. Financial factors

A commonly cited factor affecting sustainability is change in financial conditions. This could be particularly important in projects that rely heavily on external donors, as was the case with QAP and HCI in Honduras. As emphasized by one interviewee, despite the apparent relevance of quality for policy makers, resources were scarce: "I cannot tell if there were resources for health; maybe yes, but limited. But for quality, I can tell you resources were zero... what really helped was the external supported, even nowadays."

All interviewees highlight financial factors as barriers, failing to identify any potential sustainability enabler coming from this dimension. When the project withdrew its resources, the Secretariat of Health was supposed to assume that financial burden. However, the SSH budget does not have a specific line for quality, and most activities are funded through the resources coming from the hospitals themselves and other external donors supporting quality improvements initiatives.

At local level, lack of resources, particularly human resources, is also identified as a risk to sustainability and implementation of quality initiatives. The main problem is the lack of personnel dedicated to the tasks required by the projects: "(having quality units in each hospital) is now required by regulation. But what happened is that the staff has moved to other tasks… For the hospital director, human resources assignments are very complex: if I have two nurses in the quality unit, and no nurses in the emergency room, then I'd rather take these nurses to the emergency room, because otherwise I will have deaths, deaths everyday; here, in the quality unit's desk it also means more deaths, but those deaths are not that visible… so, the quality unit is legally established, but sometimes no one is working there." Another interviewee pointed out similar problems when trying to meet the goals and activities of the quality unit within a health center: "… all the people (in charge of quality) have several functions. They cannot be dedicated exclusively to quality... nowadays, we have a quality team, but it has been very hard to arrange meetings. We said we should meet at least every 15 days, every month as maximum. But we haven't been able to meet, not even every month, because of the multiple activities that each one has."

Another critical aspect has to do with the concept of quality as a combination between new ways to do things and resources. Interviews, particularly at local level, highlight this idea: "Sometimes we fill out the papers, and we say: "we follow the standards", but when there are no inputs, it is just to write on papers… we have a lab, here in the health center; it is very good, very efficient, except in those periods in which there are no inputs… we were two years without the machine to do the blood count." The problem of lack of resources is relevant to understand the results, but also the institutionalization of the projects: quality requires changing behaviors, but some of these changes also require resources that weren't available. As pointed out by one interviewee: "(the main barrier)… in the first place: economic resources. As a health center, if we want to keep functioning, we need to buy everything. It is easy to talk about quality in the paper, but what about the rest? What about the patients' needs? For example, that the pregnant woman has her folic acid. We have been for months without folic acid… the BMI was never calculated, because the balance was always out of service… we need economic resources to deliver quality."

However, for some interviewees, financial aspects seem to be irrelevant to explain success or failure of the programs. "It is the lack of technical guidance. Someone leading. I think it is not lack of financial resources. The SSH has resources, but usually are not used efficiently. We need someone who can help breaking the routine… new ideas, new ways to do things… (at hospitals) projects were very low cost. And it wasn't relevant for the hospital directors."

3. Technical requirements

In terms of technical requirements, the main element that improves sustainability of projects is their relatively simplicity. As stated before, several stakeholders agree that the interventions were not technically complex or hard to implement, and that the SSH had enough trained staff to continue leading the process. At local level, quality assurance projects were well understood: "In general, people understood the projects (continuous improvement), I will say in 85%... Standards, indicators, measures. People knew these things… They know the methodology." Other factors previously highlighted refer to the flexibility of the intervention and its ability to be adapted by local teams.

On the other side, technical requirements are also mentioned as one potential barrier to institutionalization and continuation of the activities of the projects. In relation to the lack of resources identified above, several stakeholders flag the lack of monitoring and evaluation systems as critical in explaining the stagnation of the processes initiated by URC. At central level, one interviewee recognizes:

"… we stopped the monitoring process at the central level. Before, every month teams reported their activity, but we are not measuring that anymore… the burden was too much. It was not well structured. People sent files that lasted like an hour only to be attached… people had to go to Internet cafes to send the files… and after all, nothing happened, no one read it. So people decided that measuring was useless if no one is doing anything with the information." At the local level, monitoring of performance indicators seemed to be relevant in explaining the fall of in "fidelity" of the process: "Another key issue is the lack of compliance with the norms… This happened while the projects were in the country, but then, there was more monitoring… people at the local level felt that pressure… sometimes I said I had 100% accomplishment, but someone could arrive to my hospital to verify that." Another interviewee complements this view: "The problem is that we didn't monitor the process. Every process need some feedback… the process started, but need became stagnated… lack of monitoring, lack of resources, support, make sure that teams are working."

Finally, one of the critical aspects identified by several interviewees is the lack of trained human resources to continue the project's activities. This is identified also for some interviewees as related to financial constraints. Interviews highlight that central-level personnel trained during the projects have continued working on promoting quality, but many of them are no longer working at the Secretariat of Health, and several are close to retirement age: "At the central level, the Quality Unit whose role was stimulating the local providers, went through that process. I think 70% of the staff retired." On the other hand, quality leaders at local levels (health centers) usually have little time to dedicate to quality initiatives, and human resources are scarce; since quality is not a permanent full-time position and quality leaders also have other roles at the hospital, they are usually dragged into different tasks, with the time available for quality efforts being residual. A hospital administrator indicates that: " (after the end of the project)… we feel the person in charge was abandoned, she has no support… In this region, only two persons are in charge of all the quality in the region… more than 60 health centers."

4. Culture and structure

The final factor affecting sustainability of the project is related to culture and structure of the organization and the country, relative to the features of the projects. In this vein, the most important enabler identified by several stakeholders is the motivation of the teams regarding the topic of quality (see **Table 6**). As stated before, quality was largely considered as important, and for many interviewees, working on quality was an aspiration: "We never received any training on quality before. That terminology is new… practically from this century, and almost, certainty, from the past decade… before, I assumed that quality and kindness was something inherent to any health service." At central level, the perception was very similar: "… people were very enthusiastic when exposed to this new methodology. I think that at the local level, it was well absorbed. It was a learning process: organize continuous improvement processes; understand how to do the job… (the project) engaged people, in trying to do things better." External actors also highlighted this issue: "In the speeches quality was mentioned, but we didn't know how to work on it." This motivation, in line with the interest on quality highlighted by all the interviews was present from the early days of the project. As one of the implementers recalls: "We organized and trained teams in different hospitals, maternity clinics, and health centers… that was very successful. People were really motivated, and we started to observe all these changes, for good."

On the other hand, interviewees recognized the lack of structure and lack of culture of monitoring as one of the main threats to sustainability: "… we stopped the monitoring process at central level. Before, every month teams reported their activity, but we are not measuring that anymore… the burden was too much. It was not well structured." The same element, highlighted at central level, is present at the local level, were the combination of lack of monitoring and culture is viewed as key in understanding the weak compliance and sustainability: "The problem is that we didn't monitored the process. Every process need some feedback… the process started, but need became stagnated… lack of monitoring, lack of resources, support, and not making sure that teams are working."

Status quo and resistance to change are also identified as important barriers to institutionalization, being particularly strong among physicians: “I heard some saying: why would I devote time to this, which means nothing to the hospital?... In their perspective, it was nothing but problems… if before I had 48 hours to perform a procedure, and now someone is telling me that it needs to be done in 6, well, that generates problems… then people started to resist; they didn’t see any benefit coming from this change… The main opposition came from the medical personnel.”

Finally, people also identified cultural diversity along the country as a potential problem (or enabler depending of the case) for sustainability: “You need to know about our cultural diversity. It is not the same to be in Francisco Morazán as being in La Mosquitia. There, the culture, anthropologically, is harder to enter... There were some difficulties. From language to idiosyncrasy… the barrier is idiosyncrasy… in some places, we just went to the leaders, and they were submissive, receptive, quiet; but in other places, people were more closed, meager, plain. You don’t know how they live their lives.” These differences posed several challenges for designing and implementing standardized interventions from external donors and from the central level.

Table 6. Enablers and barriers to sustainability

	Enablers	Barriers
Goals	URC's project was solid and convincing Quality is a permanent goal / challenge Health indicators, human rights and population's demands/ community involvement at local level	Change in authorities withdrew support/ quality is not important in the SSH structure or budget Initiatives were aligned to national policies, but not necessarily to hospitals' needs; negotiations were at central level
Financial factors		After the end of the project, teams remained, but do not have support to continue their tasks: resources and staff Some activities cannot be implemented because of insufficient inputs
Technical requirements	Model was known and understood, technical support was not needed; model was flexible SSH team are qualified to take the lead	Lack of monitoring and evaluation system Lack of technical support to continue operation/ country has no team to do new trainings
Culture and structure	Motivated teams	Lack of structure (bureaucracy) makes it difficult to continue the activities Resistance to change (mainly from physicians) Language barriers and cultural features made implementation harder in some regions

Source: Authors based on interviews.

V. LIMITATIONS

The results of this study depend heavily on the views of key informants which, although in general there was broad agreement on the findings presented here, there were some inconsistencies. Their views are recognized as subjective and based on their own specific experiences. The existing documents did not provide sufficient corroborating information to have independent and more objective information on indicators of performance. Despite the monitoring during the life of the projects, we were unable to obtain data on the actual levels of activities performed during the life of the projects and there appeared to be no effort to continue monitoring that might have provided valid objective indicators of "continuation of benefits" (see Section II). Nevertheless, we have tried to present the most consistent views expressed by the informants. One lesson from this study is that greater attention should be given to collecting valid data on key indicators of project performance and to have some follow up in subsequent periods to measure changes in performance after projects end.

VI. CONCLUSIONS

The quality interventions implemented by URC in the late 1990s responded to an urgent need and were focused on trying to reduce maternal mortality in the country, in a context of high mortality rates. The aim of this report was to present the results of the projects implemented by URC in Honduras, identifying achievements and explaining the projects' institutionalization and sustainability.

Using a conceptual framework to understand sustainability of externally funded projects and interviewing key stakeholders that participated of the process at different levels and periods, we found that the projects arrived at a time in which population needs and political support were present, facilitating their implementation.

The study found that the propitious opportunities at the beginning of QAP, especially the congruence of the political support, general interest in quality in the SSH and community, and sufficient project funding, gave the projects a very good start and supported the implementation of the projects throughout their duration.

In terms of results, interviewees agree that the main component of the projects was the quality training. This element helped to create a culture of quality in health care, giving policy makers and health professionals tools to work on the priority issue of quality improvement. The projects also generated important administrative changes, such as the creation of quality units at the central and local levels.

Interviewees also recognized that there are still many improvements required to produce impacts in maternal and child mortality in the country and that quality itself is a never-ending process. This is a key element of the projects' approach—that improvement is a continual process of adaptation.

However, there was a repeated theme that despite the successes of the projects during their life, there has been a fall-off in the following period in terms of sustaining the same level of activity as had been implemented during the life of the projects. As noted above in **Figure 3**, some of the projects' activities were sustained but not at the same level as during implementation. This is similar to the concepts of "fidelity" noted in our Theoretical Framework (Section II) and of "program drift" proposed by Chambers et al. (2013). Despite the projects' orientation that emphasized the need to move on from achieving improvements in one quality area to improve other quality problems, it is clear that after the projects ended, moving on to other quality issues did not occur. The activities that were achieved during life of the projects were partly sustained, but not at the same level as during the projects.

Interviewees attributed this deterioration to the decline in key resources—mainly trained human resources and financing. Lack of resources and technical guidance dedicated to quality thwarted implementation and the continuation of some activities, turning important processes into mere formalities and preventing ongoing changes and impact. There was a failure to monitor and follow up, and there were insufficient

incentives to overcome the tendency for staff to prioritize other activities. In addition, the staff which had been trained during the project moved on to other activities or retired, and there was little attention to sustaining the training of new staff.

As the lack of funding and the lack of follow-up took their toll, the quality program stagnated and then failed to renew itself and begin to solve the emerging problems. As highlighted by several stakeholders, the quality improvement process lost its initiatives after external funds were withdrawn, although the project left capabilities installed in the country, and some activities are still being developed. The creation of quality units at the SSH and hospitals was an important step to institutionalize quality, but it needed to be complemented with resources to make the process fully functional and avoid the appearance that they only exist on paper. This may be a case identified by some authors as potential “capability traps”, in which the organization’s capabilities are limited or improve at slow pace (Pritchett et al. 2010; 2013). According to the authors, these traps lead to a process of persistent failure, which is facilitated by techniques like “isomorphic mimicry”, i.e., the ability of organizations to sustain legitimacy through imitation of forms without functionality.

Quality improvement will continue to be demanded in the future. There is interest and need to continue quality improvement initiatives. The projects implemented by URC in the country for more than a decade set the basis to maintain a process of continuous improvement in Honduras.

The next stage will require planning how quality will be understood and implemented in the following years. Information and monitoring and evaluation systems need to be put in place to ensure its correct application and inform the decision-making processes for policy and daily implementation. This report presents relevant information about what happened to the quality initiatives in the past and some guidelines about how to continue moving forward.

Some major lessons for future projects are that project design should take into account the multiple factors involved in the institutionalization and sustainability framework used in this study. Especially in the beginning of a project, paying attention to the fit between the project objectives and the organizations and communities in which it is to be implemented is very important. Strong attention to developing effective organizations like the committees at the national and local level was also important, and instilling a strong culture around the objectives and activities of the project also appear important.

While the Honduras experience shows thoughtful attention to these key factors, it also shows how important it is to attempt to develop ongoing financial support from multiple sources (perhaps including other external funders), to emphasize the importance of ongoing training programs to replace the trained staff who retire or move on to other activities, and to develop incentives and commitment to maintaining a high level of monitoring. Finally, in order to generate better information on sustainability, it would be good to finance baseline and follow-on studies to evaluate the changes in impact indicators after projects end.

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