



Programa de Extensión de Cobertura (PEC) in Guatemala

Secondary Case Study

Daniela Gutiérrez (Results for Development)
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Context

Guatemala's population is almost evenly distributed among urban and rural areas. Yet compared to urban areas, rural areas face significant disparities in economic development, access to health care services, and health outcome indicators. The rural population is made up of poor and primarily Indigenous peoples from among the country's 24 ethnic groups who often rely on traditional medical services (including traditional midwives and healers) and distrust modern medicine (Avila et al. 2015).

Guatemala endured over three decades of armed conflict and civil unrest until 1996, when the Guatemalan government initiated talks and eventually signed Peace Accords to officially end the civil war. In 1997, the government, with support from the Inter-American Development Bank (IDB), began to roll out the Extension of Coverage Program (Programa de Extensión de Cobertura or PEC, by its initials in Spanish) in three departments in recognition of the urgent need to extend coverage of basic health services to impoverished rural and primarily Indigenous communities after the civil war. The PEC ultimately aimed to improve child and maternal health by increasing coverage (access and utilization) of basic health services. To do so, the Ministry of Health (Ministerio de Salud Pública y Asistencia Social or MSPAS, by its initials in Spanish) contracted private, nongovernmental organizations (NGOs) to deliver a basic package of child and maternal health services (**Box 1**) to rural, poor, and primarily Indigenous communities (Cristia et al. 2015a).

The MSPAS engaged NGOs through two types of contract-like instruments called *convenios*, or agreements, which were signed annually. In the contracting-out model, NGOs were hired to deliver and manage the basic health care package through mobile medical teams to 10,000 individuals in an assigned catchment area or jurisdiction. NGOs hired and supervised staff, made payments, purchased inputs, and organized services. Each health team included a physician, an auxiliary nurse, and an institutional facilitator (rural health technician or nurse) that traveled at least once a month to "convergence centers" or meeting places for the local population to provide services. In addition, NGOs provided community-based facilitators who would recruit and supervise traditional midwives and community health promoters who helped with logistics. The MSPAS then disbursed funds quarterly to NGOs on a per capita basis¹ and according to performance measures based on service delivery outputs (Cristia et al. 2011; Cristia et al. 2015a).

In the contracting-in model, NGOs served as health service administrators and only provided financial and logistics support to operate a mobile medical team, so they received a lower capitation rate compared to the contracting-out modality. These types of contracts, however, were only used until 2004 (Cristia et al. 2015b).

The PEC underwent several expansion phases and eventually covered 20 of Guatemala's 22 departments. The first expansion phase occurred between the start of the program in 1996 and 2000. By 2002, the MSPAS had 160 contracts with 88 NGOs, reaching approximately 3 million individuals (Danel and La Forgia 2005). The second expansion phase began in 2004 and by 2007 the PEC provided coverage to 4.3 million individuals, or one third of Guatemala's population (Cristia et al. 2015a). The program continued until legislation passed in 2013 prohibited the outsourcing of health care services to NGOs, officially ending the PEC in the fall of 2014 (Avila et al. 2015).

¹ This per capita payment fluctuated over time (6-9 USD) but amounted to 8 USD in 2000 (Cristia et al. 2015a).

Box 1. PEC Basic Health Care Package 1996-2004

Maternal care

1. Pre-natal care
2. Delivery care
3. Tetanus toxoid
4. Iron and folate supplementation during pregnancy
5. Postpartum care
6. Child spacing: education and referral

Care of illnesses and emergencies

12. Cholera
13. Dengue
14. Malaria
15. Tuberculosis
16. Rabies
17. Sexually transmitted diseases
18. Emergencies (fractures, burns)

Infant and child care

7. Immunizations
8. Care of acute respiratory infections
9. Care of diarrhea, cholera
10. Prevention, treatment of nutritional deficiencies
11. Growth and development monitoring of children younger than 2 years

Environmental health

19. Vector control
20. Zoonosis control
21. Sanitation
22. Water quality surveillance
23. Food hygiene
24. Improved household sanitary conditions

Source: *Cristia et al. 2015a*

This case study explores the implementation and results of the PEC, including whether and how it achieved its intended outcomes and the factors that may have helped or hindered the effectiveness of this public-private engagement (PPE). The remainder of the case study is organized into the following sections: Methods; Results; Key Success Factors; and Discussion.

Methods

This case study is one of six developed for the Strengthening Mixed Health Systems (SMHS) project that presents analysis from existing evaluations of public-private engagements for health and new interviews and review of the data. The secondary case data collection and analysis for all six cases uses both existing research and supplemental primary data collection to answer the questions: (1) is there evidence that this public private engagement (PPE) is associated with improved outcomes, and (2) what factors are associated with helping and/or hindering the success of the engagement. After identifying the PPEs for these case studies, we undertook a structured search of the literature to compile existing peer-reviewed and grey literature about the PPE that would help us to answer the above questions. In addition, we attempted to interview researchers of PPE evaluations and PPE implementers/partners, when they could be identified, to collect supplementary data on the two questions. The resulting documents and transcripts were then coded and analyzed using a set of closed codes centering on four themes: PPE context and background, theory of change, process evaluation results (activities, outputs, and outcomes), and helping/hindering factors. The qualitative analysis of the process evaluation results and factors coding is presented in the Results section of the case study. For the factor coding specifically, we utilized a set of codes designed based on the PPE Factor Ecosystem that was developed as part of the SMHS project; a description of the ten factors is included in Box 2.

Box 2. PPE Factor Ecosystem

The factors presented in the Results were developed as part of a systematic evidence review conducted by the research team. This review surfaced common factors in the published literature that were cited as playing a role in either helping or hurting the success of PPEs, resulting in the development of a new ecosystem framework. The factors in the ecosystem include Environmental, Structural, and Engagement factors, specifically:

- Environmental – shaping the environment in which a PPE operates (including political, financial, legal and organizational).
- Structural – defining the architecture of a PPE (including engagement models, formality, and resources for engagement).
- Will to engage - the intention, interest, or commitment of individual PPE actor and their institutions to enter and sustain the engagement.
- Trust - the belief that the opposite sector is acting in good faith and has the goodwill and integrity to effectively participate in an engagement.
- Mutual understanding – the understanding of the opposite sector’s capacities, motivations, resources, and role in the health system.
- Communication – the process and approach used by sector partners to exchange information and participate in dialogue.
- Engagement rationale – the basis of and motivation for the engagement.
- Technical and managerial capacities – the capacities of PPE actors related to the technical area of PPE focus as well as project management and joint leadership.
- Accountability – the process and approach used by sector partners to hold one another accountable for carrying out their roles and responsibilities in the PPE.
- Other – while the above types represent factors that emerged from the literature, we allowed for open coding of factors that arose in evaluations, documentation or interviews of the focus PPE that did not otherwise fit into the above categories.

For this case study on the PEC, a total of 6 articles were identified, reviewed, and three of these articles were coded. Interviews using structured interview protocols were conducted with two key informants, including one researcher and one implementer from the public sector. Transcripts from these interviews were coded using the same set of closed codes centered around key themes. A limitation to note is that no interviews with implementers from the private sector side were obtained. It is important to note the limitation that existing studies may not have sought to explicitly measure factors; as such, those identified through the coding of existing evaluations may not provide a fully representative view of the factors that influenced the effectiveness or lack thereof of the engagement.

Results

Due to data limitations, no evaluation has been conducted on the impact of the PEC from the beginning to the end of its implementation, though several studies have been conducted on short-term utilization outcomes. Cristia et al. (2015a) conducted an evaluation focused on comparing the contracting-in and contracting-out model and used data from 1995 and 2002. Evidence from this study showed an increase of around 10-11 percentage points in the first doses of vaccines (BCG, DPT, and Polio) for the contracting-out model and 9-12 percentage points for the contracting-in model, though neither reached levels close to 100%. For the third doses of DPT and Polio there were statistically significant positive effects for the contracting-in model, with an increase of 12 percentage points. Results also showed that the contracting-in model led to an increase of 12 percentage points in the coverage of the first dose of the tetanus vaccine and a similar percentage point reduction in women reporting that their prenatal care check-ups took place at their homes or at the homes of traditional birth attendants. This may point to women having been provided prenatal care from more skilled service providers. However, the study found no evidence that the contracting out model had any statistically significant effects on prenatal care or family planning (Cristia et al. 2015a).

Cristia et al. (2015b) also conducted an evaluation on the contracting-out model used in the PEC with household survey data from 2000 and 2006. The study similarly found significant increases in immunization coverage. For the first dose of vaccines, evidence pointed to an increase of 32 percentage points for BCG, 41 percentage points for DPT and 45 percentage points for Polio in areas with the contracting out model. The study also found that the program produced an increase of 30 percentage points in prenatal care by a physician or nurse, at the expense of traditional midwives, but did not influence the proportion of women with any prenatal care or on the number of visits. Similar to the other evaluation, the study found no significant effect on the knowledge or use of family planning methods among women ages 15–49 that had given birth in the last five years (Cristia et al. 2015b).

A cross-sectional study by Danel and La Forgia (2005) that used household survey data to compare the contracting-in and contracting-out models used in the PEC to the traditional MSPAS model found that the contracting-in model led to increased coverage of immunization services and increased odds of use of prenatal care (1 visit) when compared to the traditional model. However, the study did not find evidence of significant differences for the contracting-out model (Danel and La Forgia 2005). Due to the cross-sectional nature of this study, it was also unknown whether these effects could be attributed solely to the program.

Overall, the existing evidence suggests the implementation of the PEC led to some positive effects on immunization coverage and prenatal care but ultimately these studies did not assess effects on final health outcomes such as child and infant mortality.

Key Success Factors

The available evidence highlights several factors that may have helped or hindered the effective implementation of the PEC. These included factors related to the political context; the contracting structure; technical and managerial capacities of the MSPAS and NGOs; engagement rationale and trust between the sectors; and the program's intended beneficiaries.

Environmental factors. Several political, financial, and legal factors affected this PPE throughout its implementation. One key factor that both helped and hindered the PEC was the fluctuation in political support for the program. A new government launched the program in 1996 as a symbol of its commitment to extend coverage to the rural Guatemalan population. Elections in 2000, however, led to a new national administration which deprioritized the PEC through 2004. This resulted in staff turnover and deep budget cuts to the program which affected enrollment rates. From 2004 to 2008, a newly elected government decided to revamp the PEC as one of its key programs, increasing funding to it and hiring back many of the MSPAS staff who were involved in its launch. This phase led to increased population coverage and per capita spending recovered. From 2008 to the end of the program, political support for the PEC declined once again leading to severe budget cuts and delays in payments to the contracted NGOs (Cristia et al. 2015a). Health unions were strongly against the PEC which prevented it from growing and improving as well (SMHS key informant interviews 2020).

During the first years of the PEC, another barrier to its implementation was the weak infrastructure and regulatory framework to support the public contracting of NGOs. Existing contracting instruments were burdensome and not tailored to contracting (or paying) nonprofit health service providers. By 1998, the MSPAS modified the legal and regulatory framework to include specific guidance on contracting out of health services and set up finance management and payment systems. These two actions from the MSPAS led to a faster scale-up of contracting efforts with NGOs (Danel and La Forgia 2005).

A key factor that also supported the implementation of the PEC was the engagement of the intended beneficiaries. Before implementing the program in a rural area, NGOs engaged community leaders and members to involve them as volunteers or health workers. The community support and buy-in for the program was highlighted as a critical factor (SMHS key informant interviews 2020).

Structural factors. The strength of the PEC's contracting arrangements and processes greatly influenced the effectiveness of this PPE. During the early years of the program, several aspects of effective contracting were absent, such as competitive selection processes, clear roles and responsibilities for NGOs, performance indicators, and contract management and monitoring functions (Danel and La Forgia 2005).

The formality of the contracts was particularly important for NGOs because it clearly stipulated tasks, payment, and legal terms that the MSPAS was required to abide by which minimized the risk for the NGOs (SMHS key informant interviews 2020). Second, the reactions to the guidance provided by MSPAS to the NGOs around providing the services in the basic health care package were mixed. While some less experienced NGOs welcomed the guidelines, others considered these to be a "straitjacket model" that were not appropriate for all situations (Danel

and La Forgia 2005).

The contracting-in model performed slightly better than the contracting-out model. In the contracting-in model, MSPAS workers were a part of the mobile medical teams which led to improved supervision of health service delivery (Cristia et al. 2015a).

As previously mentioned, the fluctuations in political support also influenced the availability of funds and resources for the PEC. More money allowed the program to add more interventions to the basic health package and to reach more people, as observed during the second expansion phase (SMHS key informant interviews 2020).

Engagement factors

Several foundational and operational engagement factors were perceived to have influenced the effective implementation of the PEC.

Will to engage and engagement rationale. A key factor that helped the PPE was that NGOs were already providing health care services in many of the rural areas that the PEC was targeting. Most NGOs were well-regarded and committed to helping the people in their communities, so they were keen to grow their base. This was important for the MSPAS because they wanted to expand the program rapidly and engaging with NGOs was the most efficient option as the public sector is often less amenable to changing staff levels and employment terms. The MSPAS commitment to pay the NGOs per capita also incentivized NGOs (SMHS key informant interviews 2020). The MSPAS and NGO's complementary motives to implement the PEC ultimately launched the engagement.

Mutual understanding. In the initial stages of the PEC, however, evidence suggests the MSPAS did not greatly involve NGOs in the design of activities due to time pressure and because the program was still a work in progress. The limited understanding of the NGOs regarding the expectations of the MSPAS led to discrepancies in the frequency and types of services provided as part of the basic health care package in the first years of the program (Danel and La Forgia 2005). Evidence also showed that NGOs did not trust the MSPAS's intentions or capacity to implement the PEC because there were no structures in place for government to contract services. The Health Area Directorates (DAS, by its initials in Spanish), which represented the MSPAS at the sub-national level and oversaw supervising the NGOs, resented the MSPAS for implementing the PEC and "imposing" a new system. Some DAS felt that the per capita payment to NGOs was too high and that they would profit from the program. There were even reported instances of DAS holding back supplies or payments of NGOs due to this concern (Daniel and La Forgia 2005).

Communication. After that initial period, there was an increase in communication and upfront involvement from both sectors. The MSPAS met with NGO leaders on a yearly basis to develop a mutual understanding of the guidelines, rules and services that would be offered that year (SMHS key informant interviews 2020). The MSPAS would also actively course-correct and adjusted processes and instruments, including developing specific volume and service indicators. This may have appeared to slow down the process but ultimately improved effective implementation (Danel and La Forgia 2005).

Communication between the MSPAS and NGOs varied depending on the contracting model. Under the contracting-in model, some NGOs had offices in MSPAS buildings and interacted regularly with MSPAS managers. This may have helped the NGOs to align more with MSPAS goals than the NGOs hired under the contracting-out model. Evidence on the contracting-out model highlighted a lack of coordination between MSPAS and NGO personnel which led to provision of services outside of MSPAS guidelines and rivalries between the sectors (Cristia et al. 2015a)

Technical and managerial capacities. The NGOs' technical experience providing and hiring for basic health services varied in each region, with some having substantial experience in areas covered by the PEC. Some NGOs faced issues in hiring health personnel in remote areas but the MSPAS began to pay providers in these areas more as an incentive (SMHS key informant interviews 2020). In general, the MSPAS had strong capacities in the technical areas of maternal and child health, community engagement, and primary care to effectively guide and train doctors from the NGOs. The NGOs would then train the community health workers in these areas. This knowledge translation and support from the MSPAS technical staff was noted as key to the PEC's effectiveness as well. (SMHS key informant interviews 2020).

As previously mentioned, however, the MSPAS lacked the capacity to manage and implement contracts at the beginning of the PEC which stifled the initial expansion. In fact, the seemingly low effectiveness of the contracting-out model may have been the result of the limited capacities of the MSPAS. By the second phase, however, evidence showed that the MSPAS improved its capacity for selecting providers, specifying contract terms, negotiating and processing contracts, issuing payments, producing and analyzing production data, and monitoring NGO performance (Cristia et al. 2015a). In terms of monitoring, the technical and financial staff at the MSPAS worked together to review technical and financial data and provide feedback to NGOs (SMHS key informant interviews 2020).

Delayed payments to NGOs were another major issue that affected this PPE. The MSPAS could not demand reliable services from NGOs when they were not providing payments on time. These delays often resulted in limited medical drug supplies for mobile medical teams (SMHS key informant interviews 2020; Danel and La Forgia 2005).

Accountability. At the beginning of the PEC, the MSPAS did not include performance measures in the contracts with NGOs. According to the MSPAS guidelines, "NGOs had to comply with three measures: (1) regularly send demographic, service production, financial, and some epidemiological information to the MSPAS; (2) provide all the interventions contained in the [basic health care package]; and (3) cover the entire population in the assigned catchment area (Danel and La Forgia 2005)." However, the MSPAS only monitored the first requirement in the first three years of the PEC. By the second expansion phase (2004), the MSPAS made critical improvements in the monitoring of the PEC. First, they began to include NGO performance indicators related to community organization, training, service coverage and financial management into the contracting process and used these to determine annual renewal (Danel and La Forgia 2005). Second, they introduced an individual-level electronic medical record system and increased funding to NGOs to hire personnel for data-entry functions. Third, they established a strong supervision system where MSPAS managers would visit NGOs and compare electronic records to data obtained from beneficiaries to check for over-reporting of outputs (Cristia et al. 2015a). Even so, after several years of implementation of the PEC, there were several incidents of corruption among a few NGOs which prompted congress to pass a law limiting the amount of funds that an NGO can receive from the government. These incidents damaged the trust between the MSPAS and the NGOs. Once the IDB stopped supporting the MSPAS with the PEC, mismanagement and corruption among the government was a major contributing factor to the program being shut down in 2014 (SMHS key informant interviews 2020).

Discussion

Overall, the evidence explored in this case study indicates that the PEC was effective in improving access to health services. Though the PEC's effects on final health outcomes such as child and infant mortality have not been assessed, the program's impact on improved utilization of health services led to favorable results in immunization coverage and prenatal care provider choices.

The PEC offers several lessons about PPEs in health. Community involvement emerged as an important factor in these results. The PEC's implementation model sought to involve local communities by communicating its purpose and functioning to local authorities, hiring workers, and recruiting volunteers from the community (SMHS key informant interviews 2020). Lessons related to the interrelationships between factors also surfaced. Changes in political support for the program had great consequences on the structural factors—mainly the financial resources available to determine which services to provide and per capita payment amounts to NGOs, and to strengthen systems and capacity for managing and monitoring the program. Changes to the legal and regulatory framework also led to improvements in the contracting process, including financing systems which influenced the engagement between the sectors. The engagement rationale and the will to engage between the sectors also emerged as closely related as both sectors were committed to the objectives of the program and had complementary motives for engaging.

Finally, even though the program benefitted from external support from IDB and high community involvement, factors around corruption issues, delayed payments, and government turnover led to mistrust between the public and private sectors. This ultimately hindered the capacity of the public sector to effectively scale-up and sustain the implementation of the program as envisioned.

References

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This case study is one of a series of six secondary cases written for the Strengthening Mixed Health Systems program, analyzing the factors helping and hindering the effectiveness of public-private engagements for health in low- and middle-income countries. All case studies, as well as a report presenting cross-cutting findings, can be found on the Strengthening Mixed Health Systems project website.

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