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Strengthening Mixed Health Systems for Maternal Health

Project Learning Report

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Abbreviations

AHI	ACCESS Health International
BPL	Below-poverty-line
CY	Chiranjeevi Yojana (India)
CHAM	Christian Health Association of Malawi
DHO	District Health Office
GOM	Government of Malawi
IHA	Insight Health Advisors
L-M	LaQysha-Manyata
LMIC	low- and middle-income countries
MNCH	Maternal, newborn and child health
MSPAS	Ministerio de Salud Publica y Asistencia Social (Guatemala)
MOH	Ministry of Health
MHS	mixed health systems
NGO	Non-governmental organization
PHC	primary health care
PEC	Programa de Extension de Cobertura (Guatemala)
PPE	public-private engagement
R4D	Results for Development
SLA	Service level agreement (Malawi)
SMHS	Strengthening Mixed Health Systems project
SDG	Sustainable Development Goals
TBY	Thayi Bhagya Yojana (India)
UHC	universal health coverage
UPHCP-II	Urban Primary Healthcare Project (Phase II) (Bangladesh)

Executive Summary

The Strengthening Mixed Health Systems (SMHS) project, led by Results for Development (R4D) and funded by Merck for Mothers, was designed to demonstrate and document practical and actionable processes for integrating quality private maternity care into government-stewarded health systems. The project paired direct support for public-private engagements (PPEs) in maternal and newborn health in two countries with a robust and innovative learning and evaluation approach. The research from the project sought to contribute to answering the following key questions:

1. Is the approach of supporting public-private engagements to strengthen maternal and newborn health and UHC associated with **outcomes** including improved quality of engagement between the sectors and improvements in relevant health service outcomes?
2. What **factors** are associated with helping to achieve intended outcomes, and what factors are associated with hindering engagements?
3. What **approaches can engagement brokers or supporters take** to facilitate factors that help engagements, mitigate factors that hurt, and ultimately help engagements achieve better health outcomes?

Leveraging findings from a systematic evidence review, primary case studies, and secondary case reviews, the project identified the following results and recommendations for strengthening mixed health systems for maternal and newborn health and universal health coverages:

PPE impact on maternal health outcomes. There is enough evidence to confirm that PPEs can improve health outcomes; however, not all projects seeking to strengthen mixed health systems are associated with improved outcomes. One gap in the literature is the lack of research on how engagements strengthen system outcomes, which may hold important answers to why some PPEs effectively influence ultimate health outcomes and other do not. While there is no silver bullet in the design of PPEs, there is evidence that those engagements that are successful are flexible to the shocks and changes that most programs face; several elements, including effective third-party support for engagements, can help programs adapt to changes as they occur.

Factors that help and hinder PPEs. There are key structural, environmental and engagement factors that show evidence of influencing the success of PPEs, and these factors are highly interrelated. In particular, structural factors (such as PPE guidance and policies) and engagement factors (such as will to engage, trust, and mutual understanding) can help or hinder engagement outcomes and importantly can also be strengthened by PPE partners and third-party brokers to make engagements more successful. We find several actionable recommendations for leveraging and/or mitigating factors, including addressing engagement and structural factors to “set the stage” for an effective launch of new engagements.

The role of third-party support. While evidence is limited, research has demonstrated several cases in which third-party brokers can help public and private sector partners identify and overcome obstacles they face in the successful design and implementation of a PPE. However, there is limited evidence regarding the characteristics of third-party support that are most effective, highlighting three questions that would benefit from additional research: (1) what types of actors are best placed to provide support for different PPEs, (2) what types of support (such as technical, financial, or relational) are most critical, and (3) when in their lifecycles are PPEs best placed to start and stop third party support.

Introduction to the SMHS Project

Background

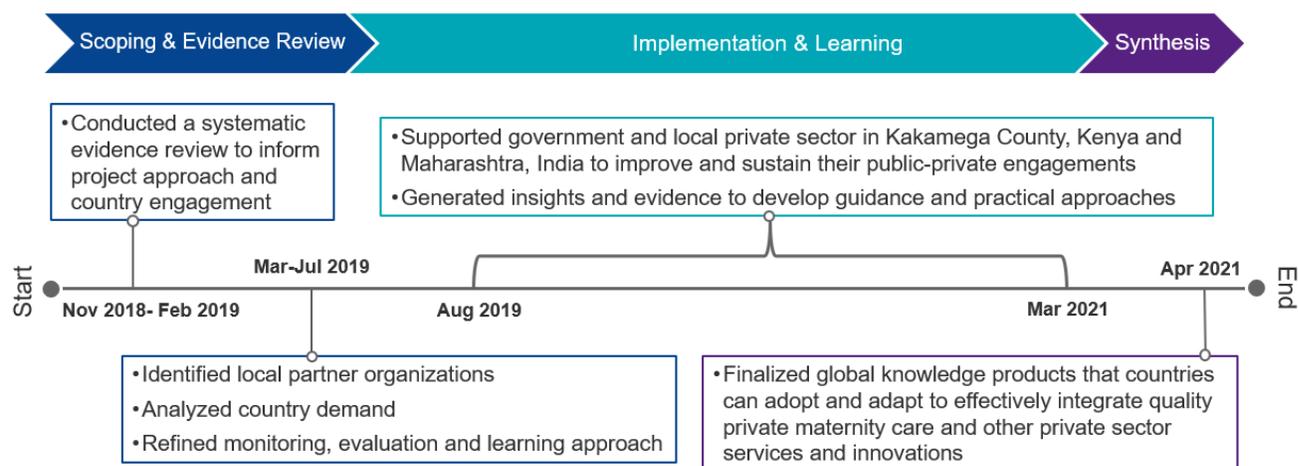
Many countries recognize their limitations in achieving the Sustainable Development Goals (SDGs) and universal health coverage (UHC) through public provision of health services alone — and wish to better engage the private sector to do so. However, country governments often lack information about local private providers and solutions in their countries, do not have a defined stewardship role, and/or are not supported by the appropriate institutional systems and processes to engage private providers in a mixed (public-private) health system (MHS).¹ Similarly, the local private sector in many countries wants to engage with the public sector, but they need government direction on how to engage and how to identify strategic opportunities.

In low and middle-income countries around the world, an estimated 40% of women seek maternal and reproductive health care from the private health sector.² This makes cooperation between the sectors vital to improving maternal health and ultimately achieving the SDG targets to lower maternal mortality.

About the SMHS Project

The Strengthening Mixed Health Systems (SMHS) project, led by Results for Development (R4D) and funded by Merck for Mothers, was designed to demonstrate and document practical and actionable processes for integrating quality private maternity care into government-stewarded health systems (**Figure 1**). R4D partnered with [Insight Health Advisors](#) (IHA) in Kenya and [ACCESS Health International](#) (AHI) in India to support project implementation.

Figure 1. *The SMHS project timeline*



Starting in November 2018, the project conducted a systematic evidence review to inform the project approach, conducted extensive country scoping and demand analysis – including local

¹ Defined as “a system with goods and services provide by the public and private sector, and health consumers requesting these services from both sectors.”

World Health Organization. 2019. The private sector and universal health coverage.

<https://www.who.int/bulletin/volumes/97/6/18-225540/en/> (29 April 2021, date last accessed).

² Campbell OM, Benova L, MacLeod D et al. 2016. Family planning, antenatal and delivery care: cross-sectional survey evidence on levels of coverage and inequalities by public and private sector in 57 low- and middle-income countries. *Tropical Medicine and International Health*. Apr;21(4):486-503.

partner identification, and developed and refined the project's facilitation and monitoring, evaluation and learning approach. From August 2019 to April 2021, in collaboration with local partners, the project supported governments and local private sector in Kakamega County, Kenya and Maharashtra, India to improve and sustain their public-private engagements (PPEs)³. In Kenya, R4D partnered with Insight Health Advisors (IHA) and in India, ACCESS Health International (AHI). Throughout implementation, the project generated insights and evidence with the aim of producing global knowledge on the practical approaches that countries can adopt and adapt to effectively integrate quality private maternity care and other private sector services and innovations.

The project was designed around two interrelated but distinct approaches: (1) the provision of direct support and process facilitation for PPEs in two low and middle income countries (LMICs) to strengthen the integration of quality private maternal care in these locations and (2) an adaptive learning agenda to integrate both implementation learnings and results from these two cases with the broader evidence base from existing public-private engagements.

The first approach was piloted in Kakamega County in Kenya for a new engagement between the sectors and in Maharashtra State in India on a newly launched program (LaQysha Manyata) seeking to assure and improve the quality of maternity services in the private sector across the state. Ultimately, the processes for improving PPE, facilitated by R4D, IHA, and AHI, sought to help country actors move towards achieving UHC and improved maternal health outcomes and was tested as a potential model for supporting other countries with the same goals.

The second approach – the project's learning agenda – was designed iteratively to identify and fill evidence gaps in both the existing academic literature and the guidance for policymakers, development partners, and private sector actors seeking to develop or strengthen mixed health systems. Ultimately, the learning agenda was developed to include three key pieces of research: (1) a systematic review of the existing evidence of whether and how MHS can improve health outcomes, (2) two primary cases studies analyzing the programs undertaken in Kenya and India as part of the SMHS project, and (3) secondary analysis of six existing public-private engagements that have been evaluated as part of the existing literature.

³ Note that we use PPE throughout the report as an abbreviation for Public-Private Engagements. This is an important distinction from Public-Private Partnerships, which is a narrower type of engagement between the sectors. Any reference to Personal Protective Equipment is spelled out and not abbreviated.

Introduction to SMHS Learning Approach

From the launch of the SMHS project, there has been an equal emphasis on direct support for the two engagements and broader learning to guide not just the primary work undertaken as part of this project, but also the global evidence and experience base. As such, every part of the project was designed to help provide insight into three major questions to inform the practice of strengthening mixed health systems:

1. Is the approach of supporting public-private engagements to strengthen maternal and newborn health and UHC associated with **outcomes** including improved quality of engagement between the sectors and improvements in relevant health service outcomes?
2. What **factors** are associated with helping to achieve intended outcomes, and what factors are associated with hindering engagements?
3. What **approaches can engagement brokers or supporters take** to facilitate factors that help engagements, mitigate factors that hurt, and ultimately help engagements achieve better health outcomes?

This learning report is designed to present evidence for each of these questions from several different sources (presented in Figure 2). Specifically, we relied on the three key pieces of research to inform these questions:

- *Systematic evidence review.* Beginning with an extensive review of the literature during the early phases of the project, we sought to understand what the existing evidence can reveal regarding the effectiveness of mixed health systems.
- *Primary case studies.* In parallel to the implementation of an approach to foster new and existing engagements in Kenya and India, we designed and undertook primary research to better understand these engagements (described in Annexes 1 and 2).
- *Secondary case review.* To augment the findings from the primary cases and help to better understand the universality of trends related to outcomes and factors, we identified and undertook new analysis of six existing PPEs that had been rigorously evaluated in the peer-reviewed literature.

While each of these pieces of research has its own detailed and valuable sets of findings, we see one of the greatest contributions of the SMHS products as its cross-cutting analysis and learning across a myriad of new and existing sources. As such, we created this larger Learning Report to achieve three key objectives:

1. *Present cross-cutting learnings and results from the project that center on answering the three research questions regarding outcomes, factors, and approaches to supporting or brokering MHS.* Each piece of research only presents one important but narrow piece of these stories, and we seek to use this product to bring together the learnings in a way that reveals a more whole picture.
2. *Begin to understand the “so what.”* While these research questions have clear relevance to the design and implementation of new and existing PPEs, research findings themselves alone are often not enough to provide actionable guidance to those working on these types of initiatives. Building off of the literature, we have developed both recommendations and tools in the form of assessments and curated guidance that can

be applied to help partners transition from “what the evidence says” to “how can we apply this.”

3. *Identify what more is needed to improve the integration and effectiveness of mixed health systems.* Our goal for this project was to begin filling some of the myriad gaps that exist in the growing literature and experience related to mixed health systems; however, as with any project, our research and practice both filled gaps and revealed new ones that are critical for policymakers, domestic private sector stakeholders, development partners, and international stakeholders wanting to support this work. In this report, we provide some potential next steps to continue to move the field forward.

Figure 2. Evidence Sources and Research Questions

		Research Questions		
		Can PPEs improve Outcomes?	What Factors influence PPEs?	Role of Third-Party Brokers?
Current Evidence	Evidence review	X	X	X
	Kenya Case Study	X	X	X
	India Case Study		X	
	Secondary Case Review	X	X	
Practical Guidance		<i>Journey Guide: PPE Facilitation Approach</i>	<i>Journey Guide: Resource Compendium, Rapid System Integration Assessment, & Engagement Self-Assessment Tool</i>	<i>Journey Guide: PPE Facilitation Approach</i>

The rest of this report is divided into three sections, presenting a review of learnings on each of the three research questions – **PPE Outcomes**, **Helping and Hinder Factors**, and **Approaches to Support PPEs**. Within each of these sections, we provide an introduction to why this issue matters, followed by what we know from our research (objective 1) and how this new evidence can improve design and practice of MHS as well as where further analysis or work is needed (objectives 2 and 3).

Outcomes: How effective are PPEs in improving health

Every investment – whether time, money, or other resources – has to be weighed against a question of the likely return on this investment, and this is true for PPEs as well. Designing and implementing PPEs in many places requires a significant move from the status quo in which public and private providers may engage in limited collaboration or mutual support; in turn, those seeking to make this change should and do question whether undertaking a deliberate approach to integrating the sectors on a range of health service delivery, financing, or other issues is likely to result in better outcomes. Along these lines, every PPE that incorporates an evaluation of its success in contributing to or being associated with better outcomes provides an important data point that can be used in implementation and advocacy for MHS, whether that data point shows improvements in outcomes or no changes. These data points on results also provide an important lens for looking at why and how an engagement works, something we will look at in more depth in the next section.

What does the existing evidence tell us

In our systematic review of the literature, we found that a relatively small fraction of studies focusing on PPEs for maternal and newborn health seek to measure or estimate outcomes in a rigorous way; only 27 of the 101 articles that we ultimately included in the review were evaluations of PPE outcomes, suggesting that there are many programs being implemented that would benefit from further study.

These studies reveal several collective insights as to what we know – and what we do not know – regarding the effectiveness of PPEs:

- **There are positive signs that PPEs can improve health outcomes.** While the literature is still growing, the existing evaluations of PPEs reveal that many programs seeking to strengthen mixed health systems can be associated with improvements in beneficiary health outcomes as well as health systems and engagement-related outcomes. These early studies should be seen as a signal that PPEs are worth further investment, especially when paired with simultaneous research.
- **However, the research is not conclusive – and not as comprehensive as it could be.** There are inherent challenges in conducting impact evaluations of large-scale PPEs. From a methodological standpoint, there are obstacles and ethical questions related to randomizing delivery, which may be why we were unable to identify a randomized controlled trial among the literature we reviewed. At the same time, approaches to evaluating the changes (or lack thereof) in the larger and complex health system associated with a PPE are promising but also more challenging.
- **The effectiveness of PPEs relies on several interrelated outputs and outcomes being triggered, and future research should look more at these interconnections.** While many of the studies we reviewed showed positive outcomes, we also know from experience and from secondary case studies that not all engagements ultimately improve beneficiary outcomes. For those seeking to invest in and/or undertake future engagements, one important question is “why.” Our review of the evidence suggests that much of the research on PPEs could provide greater insights if it focused on the larger theory of change driving a PPE rather than focusing on a single outcome.

What does SMHS primary research reveal

In parallel to the evidence review, we sought to surface new evidence regarding the role of PPEs in improving health outcomes in two ways: (1) through embedded research testing and evaluating our approach to supporting a new engagement between the public and private sectors in Kakamega county in Kenya and (2) as part of a secondary review of six existing PPEs that had been rigorously evaluated⁴.

Kakamega County (Kenya). The case of SMHS project support for new PPE in Kakamega County in Kenya provides evidence that largely validates the results of the systematic evidence review. While not directly comparable to the studies cited above, the SMHS approach in Kenya and the process evaluation revealed significant progress on several key actions and outcomes, including several that were originally seen as outside of the scope of the project. Specifically, the work in Kenya revealed:

- **Support for a new PPE was associated with progress on many actions.** Public and private sector partners who were engaged in the co-creation workshop identified several problems with maternal and newborn health in the county, unpacked root causes for these, and ultimately designed twelve actions to address these root causes. Of these twelve actions, the process evaluation revealed that there was evidence of progress on eight of these. This progress was made in challenging circumstances, with a global pandemic and political transitions, and was done over a relatively short timeline (12 months). While not conclusive evidence of impact, this evaluation provides strong signs that even relatively short-term investments have the potential to improve engagement and health.
- **Engagement outcomes were more apparent than health outcomes.** Among the actions undertaken, four targeted outcomes that directly sought to improve engagement between the sectors while eight worked toward health outcomes, with cross-sector engagement as a mechanism to improve health. We did observe greater progress on average on engagement actions and outcomes, and there are several reasons why this might be the case.
- **Even negative shocks can be leveraged by partners to strengthen outcomes.** As noted above, the project faced many shocks over the sources of the engagement, including the pandemic, political transitions, and a medical worker strike, any of which could have upended the PPE progress. While it is absolutely true that COVID-19 at least was cited as a challenge by many partners, there is also evidence that partners utilized these shocks in some ways to actually strengthen the engagement. In the case of COVID-19, several respondents noted that the pressure of the pandemic gave diverse actors an incentive to work together and reprioritize, which may have ultimately helped the engagement.
- **Unintended positive consequences.** Beyond outcomes that we predicted might come out of the engagement, we also saw both small and large changes that evidence suggests are associated with this work. These changes include the increase and improvement in referrals between the sectors; greater MNCH commodity and supply sharing from the public to the private sector; the appointment of a private-sector liaison in the government who is already connecting the private sector association to donors and partners to support their work; and catalyzing the expansion of creating private sector association across all countries in Kenya.

⁴ In our original project design, we also planned to evaluate outcomes as part of the approach supporting the LaQysha Manyata program in India; however, due to delays related to the COVID-19 pandemic, our time working with partners was shortened such that we were unable to observe outcomes in the period associated with this project.

Secondary case review. The review and analysis of six secondary cases reveals a somewhat positive, if more mixed and dynamic picture, of whether strengthening mixed health systems can ultimately improve maternal and newborn health outcomes and universal health coverage. The six cases studies represent a diverse range of engagements (representing five countries in three regions), with some common features or trends. A basic description of the outcomes from the six programs is presented in Table 1, with some of the overarching insights noted below:

- **The programs reviewed in the secondary case analysis achieved some of their goals, to differing degrees.** In some cases (such as the Urban Primary Health Care Project in Bangladesh and the Extended Coverage Program (PEC) in Guatemala, evaluations reveal great improvements in many of the outcomes of interest, including several maternal, newborn, and child health indicators and health-seeking behavior. Alternatively, programs like Chiranjeevi Yojana and Thayi Bhagya Yojana in India provide cases where improvements in maternal and newborn health indicators may have reflected national trends more than specific program interventions.
- **The dynamic nature of PPEs.** In addition to the diversity in outcomes, one trend that the secondary cases reveal is the ways in which the implementation, support for, and effectiveness of PPEs change over the duration of the programs. These changes can work in favor of the engagement – or against it.

Table 1. Description of Six Secondary Case PPEs

PPE	Goal	Mechanism	Results
<p><u>Chiranjeevi Yojana (India)</u></p>	<p>To harness the resources and skills in the private sector to provide free obstetric care services to poor and tribal women, especially in rural areas, with the goal of increasing institutional delivery rates and improving maternal and neonatal health outcomes (de Costa et al., 2014; Mohanan et al., 2016).</p>	<p>The program utilized demand-side financing through which the state recruits, contracts, and pays empaneled private obstetricians at a defined rate to provide free delivery services for poor and tribal women (de Costa et al., 2014; Mohanan and La Forgia, 2016).</p>	<p>The CY program showed some signs of limited improvements in outcomes, including reduction (but not elimination) of out of pocket expenses for women below the poverty line and access to private sector care that was perceived as being of better quality. These outcomes, however, are limited and in many cases have some contradictory evidence across different studies, and there is no evidence that the program impacted institutional delivery rates or maternal and neonatal health outcomes.</p>
<p><u>Contracting out in São Paulo (Brazil).</u></p>	<p>To improve access to free health care at all levels of complexity (primary, secondary, and tertiary) in the state of Sao Paulo.</p>	<p>Public authorities from the municipalities engaged health personnel or NGOs through indirect contracting. In indirect contracting with NGOs, NGOs supplied health personnel to provide PHC services in basic health units through <i>convenios</i>, or loose contracts or NGOs supplied health personnel or management services to operate a basic health unit through performance-related contracts where duties were specified in a mutually agreed action plan (Greve & Coelho, 2017).</p>	<p>There was significant variation in how municipalities implemented the program and thus outcomes experiences across São Paulo. Overall, contracting out did lead to increases in PHC appointments, reduction in hospitalizations, and several transparency/governance outcomes. However, there were no changes observed in higher level outcomes such as child mortality.</p>
<p><u>Government of Malawi (GOM)-CHAM partnership (Malawi).</u></p>	<p>To increase coverage of health services for the rural poor.</p>	<p>The Government of Malawi put in place a national policy to encourage Service Level Agreements (SLAs) with Christian Health Association of Malawi (CHAM) facilities. This included: a broad memorandum of understanding, with SLAs administered through a decentralized structure at the district level and with the relevant district health office (DHO) taking charge of the implementation process (Chirwa et al. 2013).</p>	<p>The GOM-CHAM partnership in Malawi showed initial signs of effectiveness, with evidence that the introduction of service level agreements increased access to health services for those below the poverty. However, over time problems with the agreements led to frustration on the part of both private providers and the government, resulting in the disappearance of these gains in access when service level agreements were disintegrated.</p>

PPE	Goal	Mechanism	Results
<p><u>Thayi Bhagya Yojana (India)</u></p>	<p>To increase the proportion of institutional deliveries and reduce maternal and infant mortality rates.</p>	<p>Implementing district governments entered into a partnership with public and private hospitals with the objective of providing poor and tribal women access to free obstetric care services (Mohanani et al., 2016).</p>	<p>Evaluations showed that TBY districts experienced slightly faster improvement rates for institutional deliveries; however, this has to be considered in light of improving rates across the entire state during the time of the program. This translated into minor improvements in private sector delivery rates and reduced out-of-pocket expenses in TBY districts—though attribution to TBY alone is doubtful—but no evidence of improved maternal and child health outcomes.</p>
<p><u>Extended Coverage Program (PEC) in Guatemala.</u></p>	<p>To extend coverage of basic health services to impoverished rural and primarily Indigenous communities after the civil war (PEC launched in 1997).</p>	<p>The PEC focused on a partnership between the Ministry of Health (Ministerio de Salud Pública y Asistencia Social or MSPAS, by its initials in Spanish) and private NGOs, where the MSPAS contracted NGOs to deliver a basic package of child and maternal health services to rural, poor, and primarily Indigenous communities. The MSPAS engaged NGOs through two types of contract-like instruments called <i>convenios</i> or agreements (contracting-in and contracting-out).</p>	<p>During the period that PEC was studied, there is evidence that the program is associated with increased health coverage (particularly of indigenous populations) as well as several target outcomes (including improvement in vaccination rates and reported antenatal care visits in a health facility in the case of both contracting models). However, no change was observed in family planning use or knowledge, and there is evidence that outcomes may have ebbed and flowed during different phases of the program.</p>
<p><u>Second Urban Primary Health Care Project in Bangladesh.</u></p>	<p>To improve health coverage for the country's rapidly growing population of urban poor, who were increasingly facing difficulties accessing affordable health services.</p>	<p>The core of the program focused on a partnership between the central Ministry of Health, Urban Local Bodies, and local urban NGOs whereby the MOH and Urban Local Bodies contracted NGOs to provide primary healthcare services in an effort to expand coverage of government-funded care.</p>	<p>Perhaps the most positive of the six cases, UPHCP-II did show evidence of increasing coverage of and accessibility to healthcare for people below the poverty line living in urban settings, as well as increases in several maternal, neonatal and child health indicators. Respondents still noted several ways in which the program could have been improved between scale-up phases, discussed in more detail in the results below.</p>

So what do we make of this evidence? *Recommendations for PPEs*

In reviewing this evidence, we also want to explore the question of how public and private sector practitioners and those supporting mixed health systems use this information to make decisions and improve their work. While more research is needed on the issue of whether PPEs improve health outcomes, some practical implications do emerge from the evidence presented above:

- **There is enough evidence to suggest that PPEs can improve health outcomes.** While not every PPE that has been extensively evaluated can point to conclusive causal evidence of impact, there have been enough studies that have found improvements in outcomes to advocate for more investment in this approach.
- **Support of engagements should seek to strengthen – and research – how PPE supports system outcomes.** For many reasons, research often focuses on whether a program or intervention influences a change in high-level indicators such as mortality and morbidity rates; however, PPEs are designed to address gaps in the health system that ultimately support these outcomes such policy or operational reforms. As such, both the design of programs and the research that helps us understand how they are working or where they are breaking down should take a stronger systems approach to ultimately improve the design of these engagements.
- **PPEs should plan for changes and shocks – and provide resources to allow for adaptations when they are needed.** Several of the cases described above highlight the ways in which both exogenous and endogenous factors and shocks may change the effectiveness of PPEs in both good and bad ways. While those leading and supporting PPEs cannot always predict what shocks will happen, they can be aware that a program is likely to face some change that will require flexibility in the approach and that these changes may require resources to help address these changing needs.
- **Guidance for facilitating stronger engagements.** As part of the work in Kenya and India, the SMHS project has developed guidance for how PPEs can be facilitated to make progress toward critical engagement outcomes. This guidance can be taken up and adapted by those supporting PPEs to create a strong foundation for this work.

Actions that PPE supporters can take now

- *Provide support to strengthen engagements outcomes.* While health outcomes take time to improve, there is evidence that strengthening trust and engagement between partners can be an important foundation to better health outcomes.
- *Change how we speak about mixed health systems.* The first step in improving engagement outcomes is making it clear that these are an important step to achieving health outcomes, and thus a critical set of outcomes in and of itself. Changing how we support PPEs starts with changing how we talk about them.
- *Support more research on systems outcomes.* The literature provides strong, if not fully consistent, evidence that PPEs can improve health, but more research is needed on how PPEs influence health systems. This information may hold the key to understanding why some PPEs succeed while others do not.
- *Design support to be flexible.* Some of the biggest changes that we observed were in relation to unexpected shocks (such as COVID-19) and resulted in unplanned outcomes (such as improved referral systems). These outcomes are only possible if support is deliberately designed to identify and adapt to changes.

Factors: what helps and hinders the effectiveness of PPEs?

Armed with the evidence that PPEs can be an important and effective mechanism to improve health outcomes but that not all engagements have the intended impact, the next piece of the puzzle is what drives – or at least predicts – the effectiveness of an engagement. Understanding these factors has the potential to allow sector actors and PPE supporters to assess the readiness of a particular context for a mixed health systems approach, to identify champions and structures for such an approach that set it up for success, and to avoid engagement traps that may ultimately harm the ability of the sectors to partner. Identifying and then studying these factors became an important part of the SMHS project that we wove into all aspects of this work.

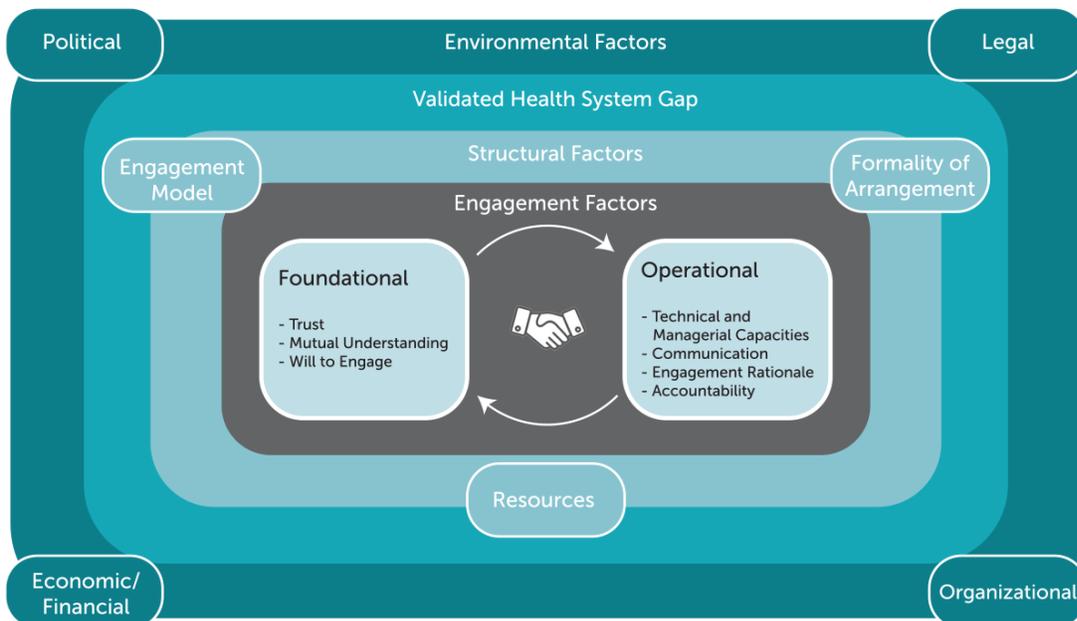
What does the existing evidence tell us

While only a subset of the 101 studies in the review explicitly sought to answer these questions, a much larger sample provided insights either directly or indirectly into the role that different factors might play in PPE effectiveness. Ultimately, one of the key contributions of the evidence review to our work – and to the larger literature – was that it helped us to surface and categorize a potential set of factors that deserve attention as potential drivers or predictors of PPE success. Specifically, we found:

- **Some of the factors cited in the literature as having a large potential role in PPE success are ones that are largely outside of the sphere of influence of PPE actors.** These factors are related to the enabling environment in which a PPE is formed and operates – and include things like the overarching political system, legal structure in which the private sector operates, and larger health system characteristics like the existence of health information and monitoring systems and national health insurance schemes.
- **The infrastructure and “hardware” of a PPE itself may also play a role in how well it operates.** All formal characteristics of a PPE, from partnership arrangements to contracting mechanisms to resources for operation, have the potential to influence the outcomes of the engagement itself, as does the formality of the PPE itself. These are important factors to consider because both engagement partners and those seeking to support PPEs may have a greater say in determining the design of these features at the start of the engagement and in adapting these features as the PPE matures.
- **As important as environmental and hardware factors are, PPE “software” arises even more consistently in the literature.** As stated in one reviewed article, “partnerships are not arm’s-length contractual agreements but are more like marriages, requiring a high degree of trust and an appreciation for the incentives and motivations of the other party” (Sekhri et al. 2011). A major contribution of the evidence review was identifying both the importance and diversity of these softer factors in a range of different studies, even when much of the guidance for PPE development and creation focuses more on infrastructure of engagements and context in which they operate.

- **There is a need for an overarching framework that looks at the factors themselves and the interlinkages between them.** While the majority of articles that we analyzed as part of the evidence review highlighted factors helping or hindering PPEs, there was no framework in the literature that sought to bring these factors together. Leveraging our analysis as well as experiential and tacit knowledge from working on mixed health systems, we sought to fill this gap by proposing an ecosystem that highlights factors and their relationships; this is explored in more detail in the subsection below on actionable evidence and guidance for PPE factors. This Ecosystem is presented in brief in Figure 3 and Box 4, and more detail is available in the SMHS PPE Ecosystem Brief.
- **While the literature says a lot about “what factors,” there is a significant gap in understanding how and to what degree factors influence PPE outcomes – and each other.** The factors identified in the evidence review are dynamic and operate as part of a larger system – the political will, resources for engagement, and trust between partners that exists today may change drastically tomorrow or next year. While the literature points to the importance of environmental and structural and engagement factors, it has less consistent (and in some cases non-existent) evidence regarding how important the factors are in determining outcomes, how they may also influence other factors (in good and bad ways), and how PPEs can adapt to the changing nature of the factors. This set of evidence is key to providing more nuanced guidance as to how PPEs can be designed, implemented, and adapted in complex and changing environments.

Figure 3. Public-Private Sector Ecosystem: factors for effective engagement



What does SMHS primary research reveal

Kakamega County (Kenya). The primary case in Kenya provided a unique opportunity to collect and analyze data on what partners anticipated would be challenges and helping factors at the start of the engagement (February 2020) as well as their reflections on factors that helped and hindered after a year of support.

- **Environmental factors such as political support and bureaucracy play moderate roles in PPEs.** Several factors were cited as helping the engagement, including high-level political support for this work and the organization of the private sector in Kakamega (also a result of PPE actions). The issue of political bureaucracy, which was raised as a likely challenge during the baseline, was cited as a hindering factor by several respondents at the end of the project; however, this factor did not come up as strongly in the endline, which may signal that this either was not as widespread as respondents expected or that PPE actions adapted to this challenge.
- **Structural factors are cited regularly as critical important helping and hindering factors.** These were among the most frequently cited factors, something we also observe in the secondary case review. Most of the feedback on structural factors focused on resource constraints of different types including resources for engagement-specific actions and communication noted as a factor that hindered the engagement. As with several engagement factors, the lack of guidance and policies for PPEs in the county was expected to be a hindering factor, but this was also cited by several endline respondents as something that the engagement explicitly and directly improved.
- **Foundational Engagement factors (Will to Engage, Trust, and Mutual Understanding) began as challenges but improve through engagement.** One defining characteristic of these factors in the Kenya case is the difference between baseline and endline findings. In the baseline, these factors when raised were overwhelmingly discussed as likely challenges. This included several sources stating their perceptions that will to engage of the other sector is low and providing quotes that demonstrated misunderstandings and mistrust of the other sector. The responses at the endline were much more positive, with partners from all sectors stating that will to engage was strong and in fact had improved over the course of the project support. While the majority of responses were positive, there were still some partners who stated directly or indirectly that trust and mutual understanding continue to lag to some degree.
- **Operational Engagement factors (Communication, Engagement Rationale, Technical and Managerial Capacities, and Accountability) play a mixed role in how engagements progress.** Engagement rationale was largely viewed as a positive factor, with the majority of respondents providing statements suggesting that partners had either a common goal or complementary goals that helped the PPE be more effective. Communication and Capacities revealed a more mixed experience. Interestingly, accountability did not arise as a significant factor in either the baseline or endline.
- **Among other factors, COVID-19 greatly affected partner actions and outcomes.** While the majority of factors fit into the framework developed, one issue unsurprisingly was raised by the majority of respondents that did not fit into the existing ecosystem: COVID-19. While not surprising, the specific responses regarding how the pandemic influenced the project provide useful insights. The vast majority of responses noted that

the pandemic hindered engagement by requiring virtual communications and cancellation of key activities. However, a limited number of responses also noted that the pandemic may have helped to bring partners together by helping them recognize that they needed to band together against the larger challenge of COVID-19.

LaQysha-Manyata (Maharashtra, India). While originally designed to be directly comparable to the Kenyan case, SMHS project support had to be adapted and scaled down significantly due to the onset and timing of COVID-19 in India. This had several implications on the project activities, including evaluation and learning; however, SMHS support was provided to help partners in the LaQysha-Manyata program identify, validate, and in the future develop actions to address challenges with engagement factors among program partners. While this analysis cannot provide information on what ultimately helped or hurt this engagement (as this is still an ongoing initiative), it does provide insight into what partners perceived as factors that would help and hinder the engagement:

- **Helping factors outweigh hindering.** Partners from all sectors have a largely positive view and experience with the LaQysha-Manyata engagement. For all of the factors analyzed, there was no case in which the sector-factor average dropped below a middle Likert-style score. Further, in sector-specific focus group discussions conducted after results were shared with the partners, even those lower scores in many cases were met with questions and explanations that present the findings in a more optimistic light. Overall, while these findings alone cannot verify that all aspects of the engagement are functioning perfectly, they do suggest a largely positive engagement.
- **Public respondents have a more positive view than others.** Despite these largely positive findings, there is much to be learned by trends related to less positive results, and one clear trend is that public sector respondents consistently had more positive assessments of the engagement than the private sector or technical/development partners.
- **Communications, Accountability, Understanding of Roles, and Engagement Rationale are factors where there may be opportunities to improve.** Several factors did emerge as having gaps that could be addressed to strengthen the engagement as a whole. In the case of communications, there is feedback that frequency and effective mechanisms for communication between partners may be lacking; while this is a challenge, it is also potentially easier to address than challenges related to quality of communications, which in large part did not arise as a factor to address. Accountability, alternatively, may present a larger obstacle. This factor was the lowest scored by both the private sector and technical/development partners, suggesting at the least that these are issues to better understand. Finally, two points regarding roles and goals of the private sector arose that are worth further exploration. The first finding was a somewhat low self-assessment from private sector respondents regarding their understanding of their own roles in the engagement. The second highlighted that approximately half of private sector respondents saw their goals for LaQysha-Manyata as being complementary to those of other partners as opposed to the same.

Secondary case review. The review of the six secondary cases sought to identify factors that are cited both within the existing literature as well as through interviews with researchers and implementers who were involved in the engagements. We were not able to secure interviews for all six cases, and it is important to note that input on factors that was drawn from existing literature and research may not have focused explicitly on gaining insight into what contributed

to effectiveness of the PPE or lack thereof. While these limitations do mean that there may be bias in what factors were not presented in the literature, it does not diminish the value in assessing factors that emerged in articles and interviews regarding what helped and hurt these cases:

- **All factors play a significant and complex role across multiple engagements.** The six secondary cases highlight how all factors play some role in some engagements, but this is not consistent across all factors or cases. Some factors (Structural, Technical and Managerial Capacity, and Accountability) were raised in all six cases, with most other appearing in four or five of the cases. It is also worth noting that all of the factors arise as helping in some cases and hindering in others, making clear that no one factor is a silver bullet that either needs to be leveraged or mitigated. The complexity of these factors suggests the need for further study.
- **Many factors are interrelated, with some showing signs of directionality of one factors influencing another.** One critical and consistent finding is related to the interrelatedness of factors. In particular, two common factor clusters emerge. First, capacities and structural factors are closely linked in that the structure of management and financial systems are a key tool needed for capacity to manage these aspects of a PPE. Second, engagement rationale, accountability and structural factors often appear in tandem, where structural factors (especially when not functioning well) may result in changes in both perceptions of accountability (inadequate systems and structures resulting in partners not feeling accountable) and engagement rationale (both structural and accountability hindrances associated with poor lower motivation and perception of shared goals).
- **Factors, like outcomes, are dynamic in nature and can trigger changes in how engagements progress.** While this is not surprising, it is informative for those designing and implementing engagements; PPEs should acknowledge and plan for changes that may occur over time and variation within groups that can influence how the program progresses or stalls. This issue arises in particular in relation to environmental factors (especially higher-level political support), will to engage, and technical and managerial capacities (which may be positively influenced by engagement activities).
- **The importance of starting the engagement off on the right note.** While the previous bullets recognize that factors are not static throughout an engagement, there was also acknowledgement that a strong or weak foundation can play an important role in how an engagement progresses. In the case of Environmental factors, examples of existing laws and regulations as well as the history of sector engagements can play an important role in setting the stage for PPEs. Similar findings emerge related to structural factors, especially related to the need to put PPE policies and guidelines in place from the start of the program.

So what do we make of this evidence? *Recommendations for PPEs*

Building on the learning regarding PPE outcomes, the evidence on factors can provide even more actionable guidance for PPE practitioners and supporters seeking to design and adapt engagements that are responsive to factors that can help or hinder their progress:

- **The Ecosystem factors all show signs of playing a significant role in engagement outcomes.** This is an area that deserves more research and analysis; however, a review of eight individual cases and a larger pool of research from the evidence review reveals that these factors emerge again and again as playing an important role in PPEs. The factors and their roles are complex, but acknowledging, assessing and planning for these factors at a minimum is likely to help engagements be more effective.
- **If factors are designed to help engagements from the start of the PPE, this can have positive long-lasting effects.** One finding from the secondary case review is that the “starting point” for factors may have long-lasting positive or negative repercussions for an engagement. We similarly observed in Kenya that the factors that were quickly addressed in the early months of the project may have provided an important foundation for engagement. The SMHS project compiled existing practical guidance along with new project-developed tools in a PPE Resource Compendium that can be utilized to help partners understand the status of factors at the beginning of an engagement.
- **Specific decisions regarding structural factors and context (environmental factors) are associated with better PPE outcomes.** While the evidence does reveal the importance of engagement factors which require greater research and understanding, it does also validate the importance of PPE structures as well as legislation, financing, and policies. As part of this project, we developed a Rapid Health Systems Integration Tool that can help users better understand the environmental context and “hardware” of PPEs.
- **The “software” of engagements both influences and is influenced by other factors, making engagement factors important to get right.** Engagement factors like mutual understanding and trust and accountability emerge as critical across all of the cases included in this project; however, the guidance on how to foster these factors or mitigate challenges is limited. The learning from this project reveals some important findings that can be integrated into engagements, including emerging understanding of how different engagement factors can be supported or harmed by changes in other factors. To aid in the consideration of engagement factors, the SMHS project developed the Engagement Factors Self-assessment Tool to help users identify areas for improvement.

Actions that PPE supporters can take now

- *Assess factors at the start of engagements.* Knowing where partners are starting with important engagement, structural and environmental factors is critical for partners and third-party supporter to diagnose which factors to work to address.
- *Build engagement strengthening directly into PPE support.* Our research suggested how factors that PPE partners may have less influence over (such as political will, bureaucracy and resources for PPEs) can influence and be influenced by engagement factors, which are within the sphere of influence of partners.
- *Support more research on how factors are interrelated.* While there is not a single silver bullet for how to improve PPEs, having more evidence on how different factors influence each other and ultimately outcomes can provide a stronger roadmap for effective PPE support.

Third-Party Support: how can third-party actors strengthen PPEs?

Thus far, this report has focused on the main actors involved in PPEs – public and private sector actors in the country, state, or district(s) in which an engagement is being implemented. However, the SMHS project itself reflects the fact that there are often other actors that are supporting PPE design and implementation in a myriad of ways, including financial support, brokering of engagements, and technical assistance. As such, we sought to identify lessons and learning from the academic and grey literature – as well as our own experience – that could inform best practices for third parties supporting PPEs.

What does the existing evidence tell us

Unlike the previous two research questions focusing on PPE outcomes and factors, our systematic review of the peer-reviewed literature provided relatively minimal insight into the roles and influence of third-party actors on PPEs. As such, the literature provides more information on the existence and potential roles of third-party actors than on the effectiveness of these roles and models:

- **Studies that feature third-party support in PPEs demonstrate the diversity of those third-party supporters.** Fifteen of 47 articles that assess a specific PPE provide a description of a multilateral partnership that includes representatives that we would consider “third party.” However, these partners are diverse and include international development partners, local NGOs (non-service providers) and multilateral organizations. It is also worth noting that this is likely an underestimate, as some studies may focus on the core public and private sector partners of a PPE that does receive support from third party actors that are not described in the article.
- **The type of support provided by third-party actors is diverse and multifaceted.** The studies reviewed did present a myriad of support types, including: partner facilitation and brokering, technical assistance, contract management, financial supporter, and service quality assurance.
- **What the literature does not explore is how third-party support interacts with PPE outcomes as well as factors themselves.** We did not identify any studies that sought to analyze the correlation between third-party actors and PPE effectiveness, which is an important gap in the literature. Understanding who, how, and when third-party actors help and hinder PPEs could provide actionable recommendations for a range of different actors that seek to enhance and improve engagements, and greater research on this topic is needed.

What does SMHS primary research reveal

As with the evidence review, the primary and secondary cases have somewhat less to reveal on the issue of how to support and broker PPEs. The secondary case analysis in particular did not

provide much insight into the question of third-party brokers. This may be because the engagements did not include these actors substantively or because those actors, while present, were not perceived as playing a major role in the engagement. What is more likely is that the role of third-party actors may not have been a primary focus for researchers, suggesting that we should not interpret a lack of evidence on third-party brokers to mean that they did not play a role in these engagements.

Kakamega County (Kenya). While questions about the R4D/IHA role in the engagement in Kenya were not the primary focus of the learning and evaluation, the research conducted about this case does provide some valuable insights into the SMHS team's role – as well as support from other actors.

- **Importance of third party support.** While key informant interviews did not explicitly ask for feedback on the role of IHA's support in the effectiveness of the engagement, unprompted responses make it clear that the continued capacity building, facilitation, and technical support provided by IHA was perceived as critical to this work. These responses ranged from partners citing the importance of IHA in continuing to bring together and facilitate dialogue between partners who had previously not engaged to specific instances of support for actions such as working with a lawyer to facilitate the registration of the private sector association.
- **Challenges to third party support to be considered in designing other programs.** While there were also a smaller set of comments highlighting challenges with IHA's engagement, these overwhelmingly linked to two issues outside of the control of the project support through IHA: (1) the fact that IHA was not based in Kakamega and thus was not always in the county and (2) limits on financial resources for some components of the engagement (such as some restrictions on funding of meetings). These challenges highlight the need for additional resources (including time, technical support, and in some cases financial) to create the foundation for new PPEs.
- **The need for flexibility – and further research.** Together, this input (both supportive and constructive) points to the immense value for flexible and intensive third-party facilitation and support to foster new engagements. The role of independent broker is one that does not exist in many PPEs, but it is one that is worthy of further piloting and study, given the promise that emerged from the SMHS engagement.

So what do we make of this evidence? *Recommendations for PPEs*

Unlike evidence on outcomes and factors, the evidence on third party support reveals more gaps in knowledge than concrete recommendations:

- **Third party brokering holds great promise to help PPEs overcome obstacles they may face without outside support.** While we cannot say that this is always necessary or even the best form it can take, the experience in Kenya reveals how important it was to have a neutral third party broker who could play multiple roles in this engagement – including provision of process facilitation, technical support and capacity building, facilitation of discussions, and linking to resources (financial and non-financial). This may have been especially necessary given the disruption of COVID-19 early in the project; however, it is likely that this type of support would always provide a value proposition for a new PPE.

- **There is a need for more evidence on who, how, and when.** Much of the evidence presented in this section comes from a single case – the SMHS work in Kakamega county. While this highlights the promise of the role of third-party brokers, it also raises questions. First, what are the advantages and disadvantages of support being provided by different types of organizations, including local facilitators, INGOs, or donors? Second, how is support best provided, and how can we ensure it matches both the needs and demands of public and private partners? Finally, when and for how long should third party support be integrated into engagements, and what “exit strategies” can be employed to foster independence and local ownership?

Actions that PPE supporters can take now

- *Support local PPE brokers.* While international support is important, the value of having local third-party brokers to provide context-specific and real-time support to PPEs is critical.
- *Build flexibility into third-party support.* Just as PPE partners need to be flexible to shocks and changes, third-party support is most effective if it recognizes and adapts to both external (contextual) changes and internal (within PPE) changes. Flexibility requires some additional effort but can have great rewards in terms of helping public and private sector partners overcome shocks.
- *Support more research on the “who,” “how,” and “when” of third-party support.* We know third-party support can be critical, but there is little other reliable evidence regarding how to design the most effective third-party support. This is a question that is ripe for further research and that would provide highly actionable findings for those seeking to strengthen mixed health systems.

References

- Acharya A, McNacmee P. 2009. *Can Public-Private Partnership Reduce Maternal Mortality? Assessing Efforts Made by the 'Chiranjeevi' Scheme in Gujrat*. [online] Available at: https://econpapers.repec.org/paper/esswpaper/id_3a2285.htm [Accessed 24 Oct. 2019].
- Adzei, FA. 2014. *Public-Private Partnership in the Context of Ghana's Health Sector Reform: A Case Study of Private Not-For-Profit Organisations in the Volta Region of Ghana*. PhD. University of Ghana.
- Albis MLF, Bhadra SK, Chin B. Impact evaluation of contracting primary health care services in urban Bangladesh. *BMC Health Serv Res*. 2019;19(1):854. doi: 10.1186/s12913-019-4406-5
- Anyaehe U, Nwakoby B, Chikwendu C et al. 2014. Constraints, challenges and prospects of public-private partnership in health-care delivery in a developing economy. *Annals of medical and health sciences research*, 4(1), 61–66.
- Asian Development Bank. Bangladesh: Second Urban Primary Health Care Project. Completion report. 2014
- Avila, C., Bright R., Gutierrez, J., Hoadley, K. Manuel, C., Romero, N. & Rodriguez M.P. (2015). Guatemala Health System Assessment. Health Finance & Governance Project. Abt Associates Inc, Bethesda, MD.
- Banerjee SK, Andersen KL, Navin D et al. 2015. Expanding availability of safe abortion services through private sector accreditation: a case study of the Yukti Yojana program in Bihar, India. *Reproductive health*, 12, 104.
- el Bcheraoui C, Kamath AM, Dansereau E et al. 2018. Results-based aid with lasting effects: sustainability in the Salud Mesoamérica Initiative. *Globalization and health*, 14(1), 97.
- Chirwa, M.L., Kazanga, I., Faedo, G. et al. Promoting universal financial protection: contracting faith-based health facilities to expand access – lessons learned from Malawi. *Health Res Policy Sys* 11, 27 (2013). <https://doi.org/10.1186/1478-4505-11-27>
- Coelho, V. S & Greve, J. (2016). As Organizações Sociais de Saúde e o Desempenho do SUS: Um Estudo sobre a Atenção Básica em São Paulo. *DADOS – Revista de Ciências Sociais*, 57(3), 867-901. doi:10.1590/00115258201694
- Cristia, J., Prado, A. G., & Peluffo, C. (2015a). The Impact of Contracting in and Contracting out Basic Health Services: The Guatemalan Experience. *World Development*, 70, 215-227. doi:10.1016/j.worlddev.2015.02.003
- Cristia, J., Evans, W. N., & Kim, B. (2015b). Improving the Health Coverage of the Rural Poor: Does Contracting-Out Mobile Medical Teams Work? *The Journal of Development Studies*, 1-15. doi:10.1080/00220388.2014.976617

- Cristia, J., Evans, W. N., & Kim, B. (2011). Does Contracting-Out Primary Care Services Work? The Case of Rural Guatemala. *IDB Working Paper Series, No. IDB-WP-273*. Inter-American Development Bank (IDB), Washington, DC.
- Danel, I., La Forgia, G. (2005). Contracting for Basic Health Care in Rural Guatemala-- Comparison of the Performance of Three Delivery Models. *Health System Innovations in Central America: Lessons and Impact of New Approaches*, 49-87.
- De Costa, A., Vora, K. S., Ryan, K., Sankara Raman, P., Santacatterina, M., & Mavalankar, D. (2014). The state-led large scale public private partnership 'Chiranjeevi Program' to increase access to institutional delivery among poor women in Gujarat, India: How has it done? What can we learn?. *PloS one*, 9(5), e95704. <https://doi.org/10.1371/journal.pone.0095704>
- De Costa, A., Vora, K., Schneider, E., Mavalankar, D. (2015). Gujarat's Chiranjeevi Yojana - a difficult assessment in retrospect. *Bull World Health Organ.* 93(6):436. doi: 10.2471/BLT.14.137745. Epub 2015 May 5. PMID: 26240467; PMCID: PMC4450700.
- Farahbakhsh M, Sadeghi-Bazargani H, Nikniaz A et al. 2012. Iran's Experience of Health Cooperatives as a Public-Private Partnership Model in Primary Health Care: A Comparative Study in East Azerbaijan. *Health promotion perspectives*, 2(2), 287-298.
- Field E, Abo D, Samiak L et al. 2018. A Partnership Model for Improving Service Delivery in Remote Papua New Guinea: A Mixed Methods Evaluation. *International journal of health policy and management*, 7(10), 923–933.
- Ganguly, P., Jehan, K., de Costa, A. et al. (2014). Considerations of private sector obstetricians on participation in the state led "Chiranjeevi Yojana" scheme to promote institutional delivery in Gujarat, India: a qualitative study. *BMC Pregnancy Childbirth* 14, 352. <https://doi.org/10.1186/1471-2393-14-352>
- Gautham M, Spicer N, Subharwal M et al. 2016. District decision-making for health in low-income settings: a qualitative study in Uttar Pradesh, India, on engaging the private health sector in sharing health-related data. *Health policy and planning*, 31 Suppl 2(Suppl 2), ii35–ii46.
- Greve J, Schattan Ruas Pereira Coelho V. 2017. Evaluating the impact of contracting out basic health care services in the state of São Paulo, Brazil. *Health policy and planning*, 32(7), 923–933.
- Imtiaz A, Farooq G, Haq ZU et al. 2017. Public Private Partnership And Utilization Of Maternal And Child Health Services In District Abbottabad, Pakistan. *Journal of Ayub Medical College, Abbottabad : JAMC*, 29(2), 275–279.
- Islam R, Hossain S, Bashar F, et al. Contracting-out urban primary health care in Bangladesh: a qualitative exploration of implementation processes and experience. *Int J Equity Health*. 2018;17(1):93. doi:10.1186/s12939-018-0805-1
- Iyer, V., Sidney, K., Mehta, R., & Mavalankar, D. (2016). Availability and provision of emergency obstetric care under a public-private partnership in three districts of Gujarat, India:

- lessons for Universal Health Coverage. *BMJ global health*, 1(1), e000019.
<https://doi.org/10.1136/bmjgh-2015-000019>
- Iyer, V., Sidney, K., Mehta, R., Mavalankar, D., & De Costa, A. (2017). Characteristics of private partners in Chiranjeevi Yojana, a public-private-partnership to promote institutional births in Gujarat, India - Lessons for universal health coverage. *PloS one*, 12(10), e0185739.
<https://doi.org/10.1371/journal.pone.0185739>
- Jacobs B, Thomé JM, Overtoom R et al. 2010. From public to private and back again: sustaining a high service-delivery level during transition of management authority: a Cambodia case study. *Health policy and planning*, 25(3), 197–208.
- Jayashri, M. (2015). An analysis of expenditure and service delivery with reference to public health in Karnataka. Department of Economics and Cooperation, University of Mysore.
<https://hdl.handle.net/10603/150441>
- Kamugumya D, Olivier J. 2016. Health system's barriers hindering implementation of public-private partnership at the district level: a case study of partnership for improved reproductive and child health services provision in Tanzania. *BMC health services research*, 16(1), 596.
- Kilaru, A., Saligram, P., Giske, A. & Nagavarapu, S. (2013). State insurance schemes in Karnataka and users' experiences – Issues and concerns.
<https://www.ippapublicpolicy.org/file/paper/1435207141.pdf>
- Mohanan M, Bauhoff S, La Forgia G et al. 2014. Effect of Chiranjeevi Yojana on institutional deliveries and neonatal and maternal outcomes in Gujarat, India: a difference-in-differences analysis. *Bulletin of the World Health Organization*, 92(3), 187–194.
- Mohanan, M., Miller, G., La Forgia, G., Shekhar, S. & Singh, K. (2016). Improving maternal and child health in India: evaluating demand and supply strategies, 3ie Impact Evaluation Report 30. New Delhi: International Initiative for Impact Evaluation (3ie).
- Mpakati Gama, E., McPake, B., and Newlands, D. The implication of contracting out health care services: The case of service level agreements in Malawi. MPRA Paper. (2013).
- Mshana HY, Aagard M, Cullen C et al. 2018. Leadership in Community Public-Private Partnership Health And Social Care Initiatives. *Journal of Social Change*, 10(1), 134–44.
- Ng M, Shanker-Raman P, Mehta R et al. 2013. Initial Results on the Impact of Chiranjeevi Yojana: A Public–Private Partnership Programme for Maternal Health in Gujarat, India. *The Lancet*. 381: S98.
- Salazar, M., Vora, K., Sidney Annerstedt, K., & De Costa, A. (2019). Caesarean sections in the in the context of the Chiranjeevi Yojana public private partnership program to promote institutional birth in Gujarat, India; does the embedded disincentive for caesarean section work?. *International journal for equity in health*, 18(1), 17.
<https://doi.org/10.1186/s12939-019-0922-5>
- Sekhri N, Feachem R, Ni A. 2011. Public-private integrated partnerships demonstrate the potential to improve health care access, quality, and efficiency. *Health affairs (Project*

Hope, 30(8), 1498–1507.

- Siaulys MM, da Cunha LB, Torloni MR et al. 2019. Obstetric emergency simulation training course: experience of a private-public partnership in Brazil. *Reproductive health*, 16(1), 24.
- Sidney, K., Iyer, V., Vora, K., Mavalankar, D., & De Costa, A. (2016). Statewide program to promote institutional delivery in Gujarat, India: who participates and the degree of financial subsidy provided by the Chiranjeevi Yojana program. *Journal of health, population, and nutrition*, 35, 2. <https://doi.org/10.1186/s41043-016-0039-z>
- Sidney K, Ryan K, Diwan V et al. 2014. Utilization of a state run public private emergency transportation service exclusively for childbirth: the Janani (maternal) Express program in Madhya Pradesh, India. *PloS one*, 9(5), e96287.
- Singh, P.V., & Chavali, A. (2012). Rapid Assessment; Thaiy Bhagya Scheme, Karnataka. ACCESS Health International in collaboration with Karnataka State Health Systems Resource Center.
- Temin, M. (2016). Learning from Disappointment: Reducing the Cost of Institutional Delivery in Gujarat, India. Glassman, A. & Temin, M. (Ed.). *Millions Saved: New Cases of Proven Success in Global Health*. Center for Global Development.
- Vora, K. S., Koblinsky, S. A., & Koblinsky, M. A. (2015). Predictors of maternal health services utilization by poor, rural women: a comparative study in Indian States of Gujarat and Tamil Nadu. *Journal of health, population, and nutrition*, 33, 9. <https://doi.org/10.1186/s41043-015-0025-x>
- Vora, K. S., Saiyed, S. L., & Mavalankar, D. V. (2018). Quality of Free Delivery Care among Poor Mothers in Gujarat, India: A Community-Based Study. *Indian journal of community medicine : official publication of Indian Association of Preventive & Social Medicine*, 43(3), 224–228. https://doi.org/10.4103/ijcm.IJCM_51_18
- Vora KS, Yasobant S, Patel A et al. 2015. Has Chiranjeevi Yojana changed the geographic availability of free comprehensive emergency obstetric care services in Gujarat, India?. *Global health action*, 8, 28977.
- Yasobant, S., Shewade, H.D., Vora, K.S. et al. (2017). Effect of previous utilization and out-of-pocket expenditure on subsequent utilization of a state led public-private partnership scheme “Chiranjeevi Yojana” to promote facility births in Gujarat, India. *BMC Health Serv Res* 17, 302. <https://doi.org/10.1186/s12913-017-2256-6>
- Yasobant, S., Vora, K.S., Shewade, H.D. et al. Utilization of the state led public private partnership program “Chiranjeevi Yojana” to promote facility births in Gujarat, India: a cross sectional community based study. *BMC Health Serv Res* 16, 266 (2016). <https://doi.org/10.1186/s12913-016-1510-7>
- Zaidi S, Mayhew SH, Cleland J et al. 2012. Context matters in NGO-government contracting for health service delivery: a case study from Pakistan. *Health policy and planning*, 27(7), 570–581.

Annex 1. SMHS Project Support for Kakamega County (Kenya)

The SMHS approach integrated three distinct but overlapping steps:

- Sector specific meetings with representatives from the public and private sector in the county – the objective of these meetings was to provide a space in which each sector could provide open and direct input as to the challenges facing both the county health system as a whole and specifically the ability of the different sector representatives to engage with each other to strengthen the overall system
- Co-creation workshops to analyze and improve engagement and system challenges – the objectives of this workshop were twofold: (1) to build trust and a shared vision across sector representatives to serve as a foundation for further engagement and (2) to support the development of an action plan that partners would carry out based on health and engagement breakdowns that they identified as high-priority during the workshop.
- Ongoing technical assistance to partners to take actions on engagement and system challenges over the subsequent 12 months.

A more detailed description of the approach is available in the SMHS PPE Approach Brief.

Annex 2. SMHS Project Support for LaQysha-Manyata program (Maharashtra State, India)

The SMHS approach for LaQysha-Manyata (L-M) integrated four distinct but overlapping steps:

- Key informant interviews with L-M partners and stakeholders to better understand engagement and systems issues.
- Analysis of L-M engagement and system factors using a set of assessments – (1) a rapid systems integration assessment that sought to understand the current status of issues such as the health system gap and environmental and structural factors influencing the engagement and (2) a self-assessment that collects data on the experience of partners related to seven engagement factors identified as critical for a strong PPE.
- Focus group discussions to validate preliminary assessment findings with partners.
- Support for solution identification based on validated findings.

It is important to note that the final step of the engagement had to be adapted significantly, in part due to delays and changes in prioritization related to the COVID-19 pandemic. Rather than facilitating this meeting, the SMHS team provided detailed materials and guidance to L-M program leadership to support their facilitation of this step, in the event that this occurs after the SMHS project closes.

A more detailed description of the approach is available in the SMHS PPE Approach Brief.

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