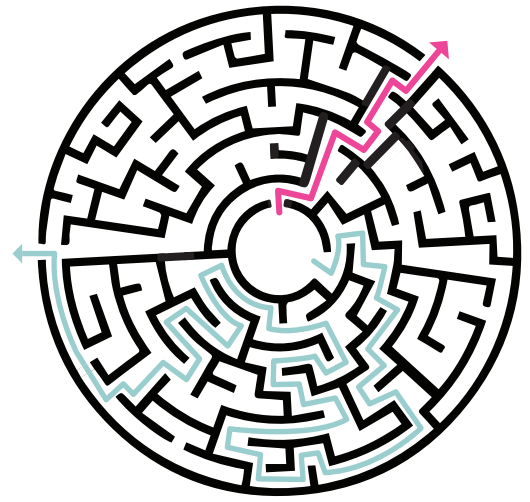


BETTER DATA FOR STRONGER HEALTH SYSTEMS

PART I: ADVANCING REPORTING FROM PRIVATE SECTOR PROVIDERS



INTRODUCTION AND BACKGROUND

The private sector¹ in low-resource settings has significant potential to complement the public sector in building thriving mixed health systems² if governments can successfully engage and coordinate with private actors. In many countries, the private sector already provides more than half of all inpatient and outpatient health services (1). Advancing progress toward universal health coverage—which includes access to a full range of health services when and where people need them—will require coordination between the public and private sectors. Many governments in low- and middle-income countries (LMICs), however, face significant challenges in engaging with the private health sector and struggle to obtain even basic data on private sector care provision.

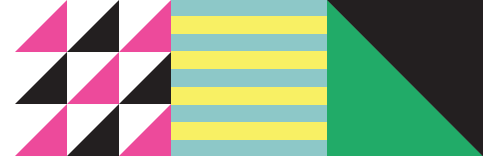
Although the nature of engagement with the private health sector varies across LMICs, in most settings challenges are significant. A landscape analysis conducted by WHO found that even though most countries in the study recognized the importance of involving the private health sector in their national health plans or policies, the level of dialogue and information exchange with the private sector varied greatly (2). In many LMICs, existing governance structures and regulatory frameworks do not allow for a well-regulated and engaged private sector, resulting in fragmentation and poor coordination within the health system (3). Specific policies and platforms for public-private engagement are often limited (2,4).

Data systems and data reporting structures that allow for a line of sight across the public and private sectors are central to an effectively functioning mixed health system. The availability of high quality, timely data is essential for informed decision-making and resource allocation across different health system functions to effectively address the health needs and preferences of the population. Data is also key to monitoring the performance of a mixed health system relative to achieving national priorities and universal health coverage, ensuring that consumers receive the necessary care when and where they need it and facilitating easier navigation through a complex mixed health system.

Few LMICs have successfully established routine reporting systems for private providers. Collecting accurate and timely data from a large number of private providers of different cadres, who in most cases operate independently from government reporting systems, comes with significant challenges. As a result, countries often lack data on the scope, scale, and quality of their private health sector, which limits the ability of public health authorities to successfully steward both the public and private sectors (2,5). The scope of data collected from the private sector varies greatly among countries. Many countries still have significant gaps in core data from the private sector—including data on health infrastructure, licensed healthcare professionals, vital statistics and reportable

1. The private sector is highly heterogeneous and includes a diverse array of private providers. PSI has actively engaged with both formal and non-formal private sector providers in its projects. These providers include, for example, private clinicians, pharmacists, drug shop proprietors, and mobile drug vendors.

2. We use the term “mixed health system” to refer to a system in which health services and products are provided by both the public and private sectors. We also envision a thriving mixed health system to include diverse channels of healthcare delivery so that people can access care when and where they need it, through clinics, pharmacies, in their communities, and self-care when appropriate.



diseases, and key vertical programs. Once systems to collect, integrate, and use core data are in place, countries can shift their attention to the integration of more complex private sector data on service delivery through health management information systems (HMIS) and subsequently on financing, healthcare quality and outcomes data (**HSS Insights – Big Ideas Small Bites**). Digitization and other digital solutions hold significant promise in addressing some of these challenges and have been increasingly adopted across multiple LMICs for collecting data from the private sector.

This technical brief provides an overview of some of the main challenges in integrating private sector data into national HMIS. We draw on both the recent published literature and PSI's programmatic experiences to synthesize the latest evidence and present promising solutions for enhancing the integration of private sector health data into national systems

KEY CHALLENGES

The challenges to integrating private sector data into national HMIS are complex and include issues related to policy and governance, technical infrastructure and capacity limitations, data privacy concerns, and trust.

POLICY AND GOVERNANCE

Inadequate enforcement of policies and regulations governing private sector reporting, absence of clear and comprehensive data sharing and usage policies, and limited engagement of the private sector in HMIS decision-making processes have been identified as significant barriers to private sector data integration (5). In Somalia for example, the private sector operates in isolation from the public sector and is not integrated into the HMIS, largely due to the government's limited regulatory capacity despite interest in greater engagement on both sides (6). Even when some private sector data is present in the HMIS, certain cadres of private providers may not be included in the system, leaving a substantial gap in understanding services delivered by these providers. For example, a landscape analysis conducted by WHO across 18 countries found that private pharmacies were rarely included in health information exchange (2).

TECHNICAL INFRASTRUCTURE AND CAPACITY LIMITATIONS

Inadequate information and technology systems within the private sector pose significant challenges to the use of digital data solutions, hindering successful public-private partnerships in primary care delivery (7) and preventing accurate and timely reporting (8,9). Additionally, a shortage of trained and skilled staff within the private sector constrains data collection and reporting, requiring sustained capacity-building efforts (9-13). The perceived burden of government reporting requirements, which may not always align with the specific services provided by certain private providers, adds to these challenges (5). Even when data is collected, the effective use of data remains a challenge due to limited capabilities for data analysis, interpretation, and utilization. Ministries of Health may lack the personnel and capacity needed to analyze private sector data and use it for better governance (14). The perception that the data that is reported is rarely used for decision making by the public sector further discourages data sharing (15,12).

DATA PRIVACY CONCERNS

Data confidentiality should be a key consideration when designing data systems that private sector actors will use. Although data is usually aggregated, in some settings private sector actors are concerned about their clients' privacy when sharing data. Consumers' own concerns about privacy can limit data reporting altogether when they decline to provide identifying information, such as cell phone numbers, that may be required to complete case notifications for reportable diseases such as tuberculosis (13). Private providers may also have concerns that sharing service delivery data with the government could expose them to tax or other liabilities. These concerns about information confidentiality were reported in a qualitative study conducted in Uttar Pradesh, India, on data sharing related to maternal, newborn, and child health (MNCH) services in the private sector. As one private facility owner explained, "whatever data is being submitted to government should be confined to them only. Government should not share the [data] with the income tax department, which probably

is the main fear” (15). Other concerns expressed include that the information shared could result in sanctions or closure of facilities (14), all of which could disincentivize reporting.

TRUST

Lack of mutual trust further complicates the integration of private sector data into national HMIS. Lessons from Ethiopia in strengthening data reporting by the private sector demonstrate that in some cases, the government and other stakeholders perceive private providers to be solely motivated by profit, deterring engagement with them (14). PSI’s experience, particularly through the GEMS program, has also highlighted that governments are often concerned about the quality of care provided by private providers, especially when monitoring and regulatory enforcement mechanisms are lacking, particularly for smaller, informal, or unregistered providers. Furthermore, even when private providers share data, concerns regarding its quality can undermine the confidence and value attributed to it by public health authorities (16). A lack of trust is not limited to the public sector’s perception of the private sector. Equally important is for the private sector to have confidence in the intentions and actions of the public

sector. Mutual mistrust also emerged in the MNCH study conducted in Uttar Pradesh (15). Therefore, building trust between both sectors will be imperative for fostering effective collaboration and engagement within mixed health systems.

KEY LEARNINGS AND PROMISING SOLUTIONS

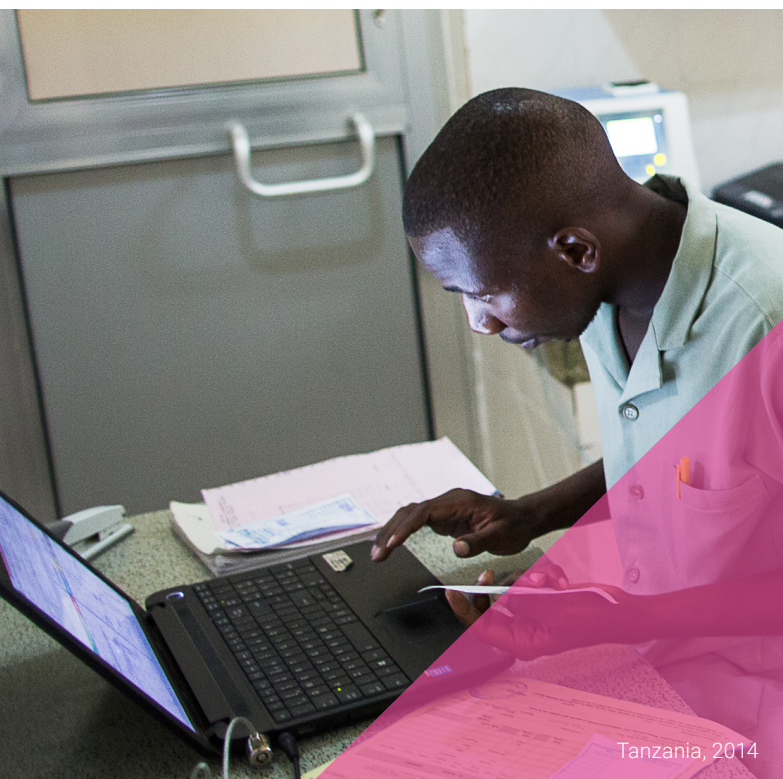
A multifaceted approach to addressing the challenges of integrating private sector data into national HMIS is needed. The private sector in LMICs is complex, comprising a diverse range of providers, including frontline workers, pharmacies, drug shops, and informal providers who differ in their technical capacity, motivations, and resources to engage in data reporting. A singular, one-size-fits-all solution is therefore inadequate in such a diverse landscape, and potential solutions and interventions should be tailored to the unique context within each country.

The following section will provide an overview of promising solutions and key insights under three main levels of intervention:

- a. building strong partnerships and regulatory frameworks;
- b. enhancing data quality and establishing trust; and
- c. introducing the right incentives.

BUILDING STRONG PARTNERSHIPS AND REGULATORY FRAMEWORKS

Creating an enabling environment through “policies, regulation, dialogue and the development of a road map for integration” is crucial for establishing a strong foundation for promoting data integration and use (17 pp.15). Several countries have made significant progress toward incorporating private sector data into the HMIS. For example, by establishing forums in which representatives from the public and private sectors can discuss data reporting approaches, processes, and tools. As reported by the USAID-funded Sustaining Health Outcomes through the Private Sector (SHOPS) Plus project, countries including Ghana, Laos, Nigeria, South Africa, Tanzania, and Uganda have formed public-private HMIS steering committees that develop policies and procedures to enhance routine reporting by private





providers. Additionally, establishing a private sector community of practice (COP) can promote knowledge exchange, collaborative problem-solving and feedback sharing between the public and private sectors (5). In Ethiopia, for example, promising initiatives have been implemented to improve reporting from the private

sector. An interim dialogue was established by the MOH, and the private sector formed an umbrella body. Key departments within the MOH are convening monthly meetings with relevant private sector stakeholders to involve them in discussion related to new policies and strategies (14 pp.37).

BOX 1

FOSTERING AN ENABLING ENVIRONMENT

The Strengthening HIV Self-Testing in the Private Sector (SHIPS) project, led by PSI, and implemented by Population Services Kenya in Kenya, by PSI in Uganda, and by the Society for Family Health in Nigeria, serves as an example of how these countries have begun to grow the private sector HIV self-testing (HIVST) market. Kenya is currently in the process of developing a private sector engagement framework and an HIVST roadmap through a collaborative approach involving both public and private sector stakeholders. A critical aspect of this initiative is the integration of private sector reporting into the HMIS, among other essential components. While the focus is on one particular health product (namely HIVST), this collaborative approach and the data integration component will set the stage for a broader public-private partnership.

The MOMENTUM Private Healthcare Delivery project, led by PSI and funded by USAID, also exemplifies promising initiatives to enhance private sector reporting. The project harnesses the potential of the private sector to expand access to and usage of high-quality, evidence-based maternal, newborn, and child health services, voluntary family planning, and reproductive healthcare in low-resource settings across 11 countries in Asia and Africa. As part of MOMENTUM, local partners receive support to enhance their institutional capacity for reporting service delivery data, including data from private sector providers, into the national HMIS. For example, in Uganda, PSI partnered with the Uganda Private Midwives Association, which operates a network of over 500 facilities across the country, to improve HMIS data capture and reporting. As part of this collaboration, PSI provided training to private providers to ensure they had access to up-to-date HMIS tools. Additionally, PSI conducted supportive supervision activities to guide data capture and implemented quarterly data quality assurance visits in coordination with the Ministry of Health for the facilities involved. Similarly, in Burundi, PSI conducted training for private sector providers on reporting protocols, data analysis and use, routine data quality assessment, and facilitated platforms to strengthen the public-private partnership for more visibility of the private sector's contribution. These endeavors have not only improved data quality and reporting, but also cultivated strong partnerships with the Ministry of Health, paving the way for potential long-term sustainability.

ENHANCING DATA QUALITY AND ESTABLISHING TRUST IN PRIVATE SECTOR DATA

Government recognition of both the quality and the value of private sector data is an important precondition for the integration of private sector data into the national HMIS. This starts with identifying entry points to assess the quality of private sector data and establishing effective verification processes to address data quality. One possible approach for

the government to acknowledge data quality and the private sector's contribution involves the issuance of certificates of recognition to high performing providers and informing providers that their data has been verified and integrated into the national reporting system, ensuring a clear feedback mechanism (see Boxes 2 and 4).

CHALLENGES IN GETTING PRIVATE SECTOR DATA INTO THE HMIS

PSI's private sector engagement project to support surveillance for malaria elimination – the Greater Mekong Subregion Elimination of Malaria through Surveillance (GEMS) program, funded by the Bill & Melinda Gates Foundation, highlighted the challenges faced when trying to integrate private sector data into government systems. PSI's data systems were designed to be interoperable with national HMISs, and the challenges faced when trying to integrate private sector data into government systems were often more political and procedural than technical in nature. A critical first step was for the National Malaria Programs to recognize the value of private sector malaria surveillance data, which required building confidence in the data quality. To this end, PSI supported government efforts by establishing data verification processes to determine the trustworthiness of data and facilitated opportunities for stakeholders from different provinces to share experiences and lessons learned. Active participation of district and national staff in data quality reviews, data analysis, and triangulation allowed local authorities to have a better understanding and take ownership of the engagement of the private sector in malaria elimination.

INTRODUCING THE RIGHT INCENTIVES

HEALTH FINANCING AS A LEVER

Incentives play a critical role in motivating private healthcare providers to actively engage in data reporting. While enacting mandatory reporting policies and guidelines is a necessary step, it may not be sufficient to ensure timely and high-quality data reporting from the private sector, particularly if private providers do not perceive tangible value and benefits (18). Health financing can serve as a powerful lever for influence on the behavior of private providers by allowing third-party payers to link payments directly to data submission. For example, in India the implementation of a digital platform, Hausala Sajheedari or “Courageous Partnership,” to better integrate private providers for the provision of quality family planning products and services into public health financing arrangements has enabled sustained data reporting from the private sector on family planning in Uttar Pradesh (see Box 3). The number of LMICs that have effective health financing mechanisms in place allowing the contracting and purchasing of health services from private providers, while expected to grow, is still relatively limited.

Accreditation, which may occur as part of or separate from health financing arrangements, is another point of intersection between the public and private sectors that can be leveraged to improve data reporting systems. Governments can require that these providers have robust data reporting systems in place to obtain accreditation or to renew their license to operate.

For example, in Kenya the National Health Insurance Fund requires reporting into the national HMIS as a precondition for private facility accreditation (19), acting as an incentive for private sector reporting (20). Similarly, in Nigeria and Ghana private facilities are required to meet compliance rates for the reporting of data into the government's HMIS as a prerequisite for renewing their license to operate (21).



BUILDING TRUST FOR EFFECTIVE PRIVATE SECTOR ENGAGEMENT IN HEALTH FINANCING: THE CASE OF HAUSALA SAJHEEDARI

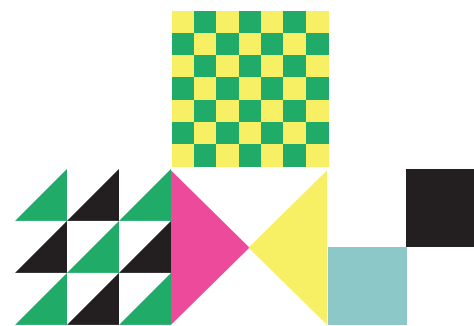
The implementation of the Hausala Sajheedari digital platform has enabled sustained reporting from the private sector in Uttar Pradesh, India. With technical support from PSI, the platform has effectively streamlined various processes, including facility accreditation, provider empanelment, claims submission, quality assurance, and reimbursement of claims. As a result, it has significantly improved efficiency and reduced administrative burden for both private sector providers and public health authorities. Moreover, it has fostered increased transparency and trust between the private and public sectors, which has been a key factor in enabling private providers to report data on IUD provision and sterilizations and receive reimbursement without delays.

Building trust between the public and private sectors was crucial for the successful implementation of the digital platform. Protecting private providers from the financial risks of the government failing to reimburse them on time, conducting service delivery audits, and ensuring transparent collaboration through task forces were instrumental in establishing trust and fostering an effective public-private partnership. Initially, there was a trust deficit between private providers and the public sector. To address this challenge, PSI provided technical assistance to district medical officers, supporting them in systematically validating reported data. While data validation was initially conducted for 100% of services provided, this process helped build trust and confidence in the accuracy and integrity of the private sector's reporting, subsequently reducing the validation requirement to 10%. Importantly, the integration of private sector data has been sustained even after PSI's involvement. The initiative has continued to grow, with the government accrediting more facilities, empaneling additional providers, and continuing to receive data from private sector providers. The successful integration of private sector data for family planning services has created opportunities for further expansion into other health areas. The initiative now aims to also engage private sector pharmacies and include maternal and child health services, thereby extending the reach and impact of Hausala Sajheedari.

LEVERAGE INTRINSIC MOTIVATORS

Private sector providers have diverse motivations that extend beyond financial incentives. A study conducted by PSI among private sector providers engaged in providing malaria testing and treatment services suggests that private sector providers are also driven by a range of factors, both internal and external, such as a commitment to serving their communities, enhancing their professional reputation, gaining access to professional development opportunities, and receiving free or subsidized commodities (22).

In Kenya, access to family planning commodities has been cited as a motivating factor for private sector providers to submit monthly reports (20). Private providers may be more likely to engage in reporting if they understand its importance and receive recognition for their efforts. Recognizing and harnessing these intrinsic motivators, ideally combined with appropriate financial incentives, has the potential to enhance the quality and sustainability of data reporting (see Box 4).



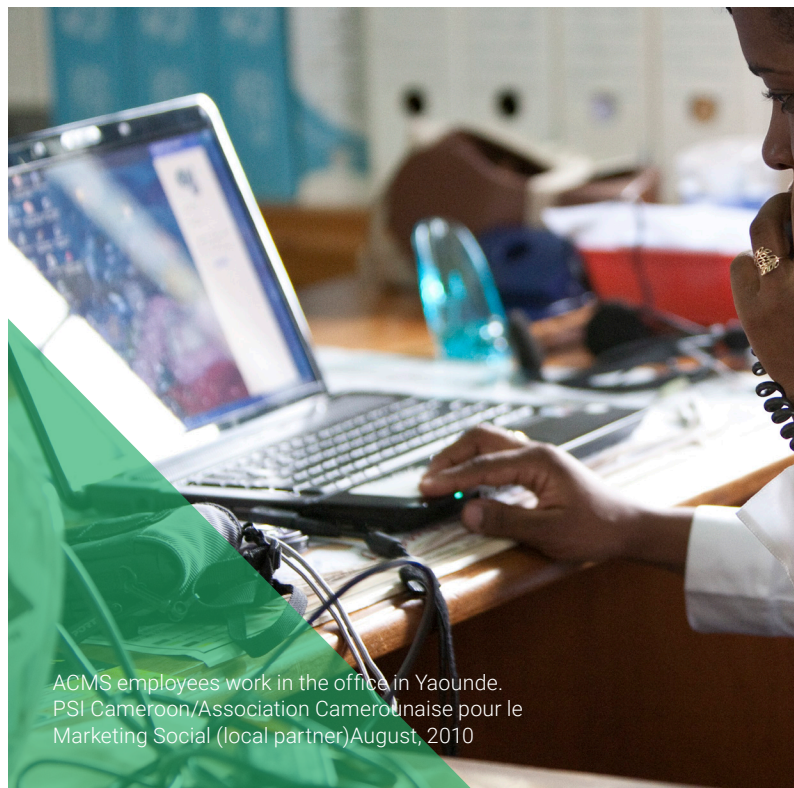
TAPPING INTO THE MOTIVATION OF PROVIDERS TO BOOST PRIVATE SECTOR ENGAGEMENT

Under the GEMS+ project, PSI conducted a study that examined private providers' motivations to report malaria surveillance data. In response to the study findings, the team introduced several activities, including: i) updating the training and support plan for providers to better tailor the program to actual provider motivations; ii) creating opportunities for private providers to interact with each other and share experiences; iii) providing government recognition through Certificates of Recognition for high performers; and iv) informing providers that their data had been verified and integrated into the national reporting system.

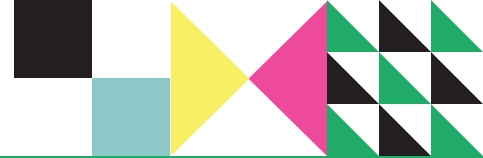
These simple activities made providers feel more respected. It made them feel that their efforts were recognized and valued, and that they were contributing to an important national goal. Bringing providers together to share their experiences also created a sense of belonging and friendly competition. Overall, these activities contributed to improved provider performance, as measured by subsequent quality assessments (16).

LEVERAGE USER-FRIENDLY REPORTING SYSTEMS BASED ON PROVIDERS' NEEDS AND PREFERENCES AND ENGAGE IN TWO-WAY COMMUNICATION

The success of data reporting initiatives also relies on the user-friendliness of reporting systems. In a qualitative study of MNCH data reporting from private facilities in Uttar Pradesh, India, participants highlighted a need for a simpler, more user-friendly data reporting system (15). Allowing private providers to report via widely used social media platforms such as WhatsApp or Telegram has the potential to increase timely report submissions, as suggested by program experience from the SHOPS Plus project (5). Additionally, experience from the PSI GEMS+ project shows that with a user-friendly system to report basic data (see Box 5), private providers were willing and able to regularly report data, which data quality audits found to be of high quality in terms of accuracy, completeness, and timeliness. Developing these systems may require going through some trial-and-error and initially offering multiple options in terms of reporting methods, just to get providers on board. Even though GEMS+ focused solely on malaria, the model was subsequently expanded to also include private sector data from other health areas, thereby strengthening the broader health system (see Box 6).



ACMS employees work in the office in Yaounde.
PSI Cameroon/Association Camerounaise pour le
Marketing Social (local partner) August, 2010



BOX 5

MAKING IT EASIER FOR PROVIDERS TO REPORT DATA WITH USER-CENTERED OPTIONS BASED ON THEIR PREFERENCES

The GEMS/GEMS+ projects started out with paper-based reporting systems for private sector providers to share information about malaria cases in the Greater Mekong Subregion. Digital tools were subsequently developed and integrated into the system. Recognizing the need for simplicity and user-friendliness, the team then further transitioned to using chatbots accessible through social media platforms such as Facebook, WhatsApp or Viber. Through an iterative process, the team worked with providers to develop several solutions that met providers' needs and preferences. These solutions capture structured data in a format that is aligned with MOH requirements and feed directly into dynamic dashboards, supporting interpretation and facilitating prompt action. Thanks to these user-friendly solutions, private providers were willing and able to regularly report malaria testing and case data. The data was found to be of high quality in terms of accuracy, completeness, and timeliness (16).

Private sector actors should be given the opportunity, when feasible, to report cases in their preferred format, whether digital or analog (9). In some cases, private healthcare professionals use parallel paper-based systems when technical infrastructure is insufficient to support digital reporting systems (10,11,23). While paper-based systems come with tradeoffs, including accuracy and speed of data collection and transmission, maintaining choice in how to report data will likely be necessary in many settings to prevent underreporting and nonreporting. A review of the role of the private sector in routine disease surveillance in LMICs also emphasized the need to engage in two-way communication with private sector actors, following case reporting, including follow-up with data reporters and affected communities (9). This finding further underscores the importance of providing timely feedback to private sector providers on how their data has been utilized.

The data integration process should start by engaging decision makers and understanding what data the Ministry of Health needs from the private health sector to carry out governance functions. For example, to better understand what data is most needed by decision-makers, PSI utilizes Data-to-Action (D2A) frameworks to work backward from national program requirements. This approach helps identify the decisions that different stakeholders at various levels need to make and the corresponding data required to inform those decisions. Further discussion on this topic will be provided in the second part of the "Better Data for Stronger Health Systems" brief, which specifically focuses on enhancing data use and addressing the fragmentation of information systems.

PUBLIC-PRIVATE SECTOR ENGAGEMENT FOR IMPROVED NATIONAL SURVEILLANCE SYSTEMS

The GEMS/GEMS+ projects showcase how PSI has built on a disease-specific donor-supported program to engage the private sector more broadly in notifiable disease surveillance. By leveraging PSI's existing presence and extensive network of providers that were engaged in malaria elimination and adopting a localized approach with support from community members like medical detailers, the project successfully expanded the use of digital tools for notifiable disease surveillance at scale. Once private sector data integration is wanted, trusted, and established for one purpose, it can then serve as a model for other diseases or health areas, with established relationships and adaptable standard operating procedures (SOPs). In the case of the GEMS/GEMS+ projects, platforms for engagement built during the malaria elimination project were leveraged to establish Public Health Emergency Operations Centers (PHEOCs), scale up national disease surveillance systems, and respond to the COVID-19 pandemic.

In Vietnam a social media reporting app from GEMS/GEMS+ facilitated the submission of fever case reports from a vast network of pharmacies, thus acting as an additional data source for COVID-19 event-based surveillance. Similarly, the early contribution of private sector data into Lao PDR's PHEOC enabled the integration of data from the private sector into the country's COVID-19 response. Currently, PSI is supporting the Ministry of Health in Laos to incorporate notifiable disease surveillance data from private hospitals into the HMIS.

CONCLUSION

The integration of private sector health data into national HMIS is a complex undertaking and comes with challenges related to governance, regulatory gaps, weak enforcement mechanisms, inadequate incentives, and limited private sector engagement with HMIS decision processes. Nonetheless, promising solutions do exist and cost-effective tools and strategies, such as the adoption of widely used social media platforms, can facilitate sustained private sector engagement, even in resource-constrained settings.

Achieving comprehensive and timely data submission from private providers will require a multifaceted approach. While elements like mandatory reporting policies, dialogue, trust, and transparency are crucial components, they may not suffice on their own to ensure timely and high quality data reporting if private providers do not perceive clear benefits. Incentives are a driving force for private sector engagement and data reporting, and health financing can serve as a powerful lever.

Given the diversity of providers within the private sector, support and incentives must be tailored to

the unique context of each country, its regulatory and governance framework, level of IT infrastructure development, and the types of private sector providers.

Donor funding has supported much of the recent progress in strengthening health systems through better integration of private sector data, including many of those described here. Attention must now turn to translating these successes into long-lasting impacts and sustained private sector engagement. While these examples are promising, further investments will be needed in long-term solutions that enable the sustained integration of private sector data into national systems to strengthen the governance of the mixed health system.

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