

# Strengthening the national immunization system by reinforcing data quality and governance

#### **COUNTRY-DEFINED CHALLENGE**

In Honduras, the lack of availability and use of timely data from different systems in the health and vaccination sector has been a barrier to effective decision-making. While the Ministry of Health (MOH) has made significant efforts to make local- and regional-level vaccine information available to facilitate informed decision-making, they had not been able to implement a comprehensive universal vaccine tracking system. Instead, the MOH relied on a mix of paper-based forms, Excel files, and different electronic tools for each health facility and vaccine post. This multifaceted approach has exacerbated access to accurate and up-to-date vaccination data, thereby limiting the MOH's opportunities to improve equity of and access to vaccines and adequate health services for all Hondurans, especially those in remote health catchment areas.

These challenges underscored the importance of strengthening national digital information systems. These challenges underscored the importance of strengthening national digital information systems to help ensure an equitable and efficient response and distribution of vaccines and prepare for future public health emergencies. In response, the Secretariat of Health (SESAL) invested in strategic information systems with the support of the Data for Implementation Project (Data.FI), which is funded by the United States Agency for International Development (USAID). In 2022, SESAL convened workshops to co-create a COVID-19-related data use strategy. This strategy was implemented in pilot health regions in 2022 and 2023 with positive results.









Given The Rockefeller Foundation's existing work with the Clinton Health Access Initiative (CHAI) in Honduras, DRIVE Demand partnered with CHAI to amplify support to SESAL. Through DRIVE Demand, SESAL requested CHAI to define and develop a data governance structure in two additional regions with low vaccination coverage, Gracias a Dios (GAD) and Colón.

#### SOLUTION

### Assessing the digital health ecosystem in Honduras

In December 2023, as part of DRIVE Demand, CHAI completed an assessment of the existing regional infrastructure, hardware, connectivity, personnel, and data processes related to digital immunization tools in Honduras. The MOH uses the Plataforma de Sistema Vacunación (SIVAC) as the primary national immunization digital health platform. However, five other digital systems collect vaccine data, both digitally and manually, leading to duplication and suboptimal use of the information.

Earlier in 2023, Data.FI had consolidated SIVAC with two of the platforms—the Plataforma en línea del Sistema Vigilancia de la Salud (SVS) and a COVID-19 Excel sheet on hospital capacity—into a PowerBi-based dashboard. This COVID-19 dashboard allows government officials to review and update data, develop analytics on current immunization rates, and understand where resources are most needed. Even with this update, the tools still had several limitations and were not being utilized to their full potential to inform decision-making.

Figure 1. DRIVE Demand Honduras focused efforts on the Gracias a Dios and Colón regions given their low vaccination rates.



The assessment highlighted five areas for improvement to effectively leverage digital tools such as SIVAC and SVS:

- **1.** Inability to triangulate information across different systems.
- 2. Lack of access to data analysis.
- 3. Lack of a real-time display.
- **4.** Lack of accountability mechanisms.
- **5.** Lack of equipment availability in certain regions.

Following the assessment, further adaptation of the COVID-19 dashboard was transitioned to DRIVE Demand to support continued feature development and refinement through May 2024. The MOH, Data.Fl, and CHAI held many consultative discussions in subsequent months to exchange information and system documentation to support these processes. Ownership of the dashboard remained with the MOH throughout the project.



Example of a static "situation room" mural in Gracias a Dios. Photo: CHAI

#### **SOLUTION**

## Training health workers in data entry and supervision

To make assessment findings actionable, DRIVE Demand Honduras focused on capacity strengthening at the regional level by training health clinic workers who interact with data entry and supervision of data personnel. To do this, CHAI leveraged an MOH-approved methodology developed by Data.FI that uses "situation rooms assisted by technology" (SSAT), an adaptation of health-oriented "situation rooms." The concept of situation rooms is derived from military or emergency response situations where high-level decision-makers meet in one location and are provided with updated data and

analyses, enabling them to make critical decisions jointly based on the best available information.<sup>2</sup> The MOH has promoted the use of situation rooms as a key tool for health data discussion since 2014.<sup>3</sup> However, due to the lack of technological access given some health centers' remote locations or lack of consistent connectivity infrastructure, these "rooms" often remained as static murals where graphs were shared on paper.

Developed with the MOH in 2022, Data.FI's methodology consists of four components: (1) identification of target health clinics or municipalities; (2) methodology and training; (3) implementation of SSATs in a virtual space to allow interaction with data; and (4) supervision visits. The MOH continued to use this approach and supported DRIVE Demand to investigate its use in GAD and Colón.



SSAT training workshops in Gracias a Dios (top) and Colón (bottom). Photo: CHAI



#### Identifying target locations for SSATs

In December 2023, DRIVE Demand Honduras held meetings with regional MOH stakeholders to exchange knowledge of current data flows, review and correct data, and identify target data users at the regional level. Based on the findings, CHAI provided computers and access to official systems and training to help update systems in GAD municipalities and health surveillance units in both regions.



#### **Developing methodology and training**

Having identified the target areas for training, DRIVE Demand Honduras developed a standardized operating procedure (SOP) for vaccination data management and governance to enhance data analysis and decision-making for regional officials around COVID-19 immunization. Finalized in January 2024 and approved in April 2024, the SOP outlined roles and responsibilities for each position in local health facilities regarding the Data.FI methodology and SSATs.

CHAI conducted SSAT strategy training workshops in December 2023 in Colón, GAD, Puerto Lempira, and Trujillo. In January 2024, SESAL requested that DRIVE Demand resume these workshops in order to add two hospitals in Colón. Throughout these workshops, interviews were carried out with key informants who helped the team understand the intricacies of information flow at the regional and local levels, the roles and responsibilities of each team member, and the most significant gaps in data management in both regions. These details facilitated the organization of information analysis meetings, ensured the completion of missing data for analyses, and arranged team discussions regarding the data. In total, 39 health workers across six health facilities were trained.



#### Implementing SSATs

Following the training workshops, CHAI implemented an SSAT for the six health facilities where trainers were expected to apply the methodology. From January to April 2024, CHAI established a series of SSATs in Brus Laguna, Puerto Lempira, Tocoa, and Trujillo municipalities. The purpose of the SSATs was to establish a structured methodology for the regular and rapid review of data to support decision-making. These participatory sessions helped identify inefficiencies in outbreak response efforts, clarify reasons for poor performance, and procure appropriate services for the population. A total of 27 health facility staff members participated in the SSATs in Colón and GAD regions.



#### **Conducting supervision visits**

The final component was supervision visits, which occurred one month after the SSATs were implemented. MOH and CHAI traveled to each health facility to determine the uptake of methodology and where reinforcement was required. The supervision visits highlighted the need to further define the roles of each team member, have a clearer sustainability plan, and document preliminary results and improvements more thoroughly.

#### **ENSURING PROJECT SUSTAINABILITY**

To help ensure that the project's efforts were institutionalized and carried on beyond the lifespan of the project, DRIVE Demand Honduras maintained a close partnership with USAID's Data.FI project and leveraged support from The Rockefeller Foundation for ongoing work supporting the Honduras MOH. These partnerships resulted in a highly complementary scope of work to continue existing efforts to advance Honduras' digital health environment. CHAI also leveraged its participation in various related Technical Working Groups to socialize DRIVE Demand's activities and include feedback to the country's Digital Health Roadmap (2024–2028).

As part of the project sustainability efforts, DRIVE Demand Honduras created a repository for all project documentation, including SOPs and sustainability plans. The repository was made available through a publicly available website<sup>4</sup> in April 2024. The website will be maintained by MOH following the end of the project in June 2024.

Finally, the team developed a project sustainability plan. The plan detailed assessment findings, gaps, and information needed to continue to hold training workshops and maintain the situation rooms. By providing strategic recommendations and all project resources to the MOH, DRIVE Demand aimed to equip the MOH with the tools and knowledge needed to sustain the project's efforts under fully country-led ownership.

### STRATEGIC RECOMMENDATIONS FOR THE MINISTRY OF HEALTH

- 1. Strengthen political commitment: Ensure continued support from leaders and policies that prioritize the integration of information technologies in public health.
- 2. Integrate with existing programs:
  Incorporate SSATs into other health
  programs to maximize resources and
  broaden impact.
- 3. Optimize procurement and regulatory mechanisms: Establish transparent and efficient processes for technology acquisition and define clear regulatory standards for SSAT operations.
- 4. Continuous training and capacity building: Improve the training and skills of health care personnel in data analysis and health technology management.
- 5. Foster strategic partnerships:
  Collaborate with key partners such as local governments, the private sector, and public health agencies for technical, financial, and operational support.

#### References

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#### **About DRIVE Demand**