



# CHISU Results in Action

## Optimizing Health System Resources in Haiti Through the Carte Sanitaire

### BACKGROUND

Over the past ten years, the landscape of the health information system (HIS) in Haiti has evolved toward a more integrated ecosystem. The Unit of Evaluation and Planning/ Programming in the Ministry of Public Health and Population (UEP-MSPP) has laid the foundation of a strong HIS by digitizing its processes, focusing on data quality, and adopting and supporting sustainable digital solutions such as District Health Information Software, Version 2 (DHIS2). The UEP manages the National Unified Health Information System (*Système d'Information Sanitaire National Unique*) or SISNU, which runs on the DHIS2 platform. The MSPP is also responsible for the Carte Sanitaire—a publicly available web tool for the geolocation of health institutions of the MSPP. This tool uses up-to-date data from the *Évaluation de la Prestation des Soins et Services de Santé* (Evaluation of the Provision of Health Care and Services) carried out every five years by the MSPP and must be updated regularly by the Departmental Directorates.

A major problem the MSPP encountered was that geolocation data from SISNU could not be displayed in the Carte Sanitaire, and the information was restricted to SISNU users. This effectively restricted the MSPP's goal of having the Carte Sanitaire serve as a public web portal for access to SISNU data.

### STEPS TAKEN

The USAID-funded Country Health Information Systems and Data Use (CHISU) program has been supporting the MSPP to make critical upgrades to the Carte Sanitaire. In

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Country Health Information Systems and Data Use (CHISU) is USAID's flagship data and information system program to strengthen host country capacity and leadership to manage and use health information systems to improve evidence-based decision-making. [www.chisuprogram.org](http://www.chisuprogram.org)

addition to pulling geolocated data on health facilities from SISNU, Carte Sanitaire is now able to offer the following functionalities:

- Ability to filter institutions by type, service, and infrastructure
- Ability to generate a report by filtering the type of institution
- Comprehensive information on a health institution

The screenshot displays the 'CARTOGRAPHIE SANITAIRE D'HAÏTI' web application interface. The header includes the logo and name of the 'UNITÉ D'ÉTUDES ET DE PROGRAMMATION' and the 'RÉPUBLIQUE D'HAÏTI MINISTÈRE DE LA SANTÉ PUBLIQUE ET DE LA POPULATION'. The navigation menu contains 'Accueil', 'Cartographie', 'Recherche', and 'Rapports'. The main content area is titled 'Sélectionnez Les Filtres de Rapport' and is divided into several sections:

- Choisir Département:** A dropdown menu set to 'Haïti'.
- Sélectionnez le Format:** Radio buttons for 'PDF' (selected) and 'Excel'.
- Types d'institutions:** Checkboxes for 'CAL', 'CSL', 'Hopital', 'HCR', 'HU', 'Dispensaire', and 'Hop. départemental'.
- Sélectionnez les Services:** Checkboxes for 'Planification familiale', 'Accouchement', 'Prise en charge TB', 'Transfusion sanguine', 'Hopitalisation', 'Soins prénataux', 'Prise en charge malaria', 'Soin traitement VIH', and 'Médecine générale'.
- Sélectionnez Infrastructures:** Input fields for 'Nombre de lits disponibles' and 'Nombre de lit d'accouchement'.
- Sélectionnez le Format:** Input field for 'Nombre de lit maternité'.

Below this is the 'Sélectionnez Formatage du Rapport' section, which includes:

- Sélectionnez groupement:** Radio buttons for 'Aucun Groupement' (selected), 'Par Département', 'Par Type', and 'Par Service Fourni'.
- Colonnes Disponibles:** A list of columns including 'Gestion autorité', 'Commune', 'Latitude', 'Longitude', 'Hospitalisation', 'Planification familiale', 'Soins prénataux', 'Accouchement', 'Prise en charge Malaria', 'Prise en charge TB', 'Nombre de lits disponible', 'Nombre de lits d'accouchement', and 'Nombre de lits maternité'.
- Colonnes Sélectionnées:** A list of selected columns including 'Code Institution', 'Nom', 'Type', and 'Département'.
- Navigation:** Arrow buttons (>, >>, <<, <) for moving columns between the two lists.
- Buttons:** A 'Generer Rapport' button.

The CHISU team also supported the development of a COVID-19 tracker, another tool that stemmed from the health mapping. The tool was developed to monitor the evolution of the COVID-19 pandemic in real time.



The COVID-19 dashboard in Carte Sanitaire shows the total number of confirmed COVID-19 cases, case breakdown by municipality, the number of deaths, and the number of recoveries.

## RESULTS + NEXT STEPS

In addition to providing geolocated information on health facilities, the upgrades to the Carte Sanitaire now allow the MSPP to provide information on community health workers (CHWs). Mapping the coverage of CHWs is key to implementing Haiti's Community Health Strategy, officially launched by the MSPP in 2015. This information provides health system stakeholders with critical information on gaps in health coverage, which will permit accurate targeting of interventions to maximize impact. Furthermore, adding the CHWs' geolocalization data into the health facility catchment area in the Carte Sanitaire will improve program management and coordination of the extension of facility services to the community. The Carte Sanitaire will be critical to making this information accessible to these stakeholders.

The COVID-19 tracker in Carte Sanitaire now helps ensure dissemination of this information beyond SISNU users. Since a robust COVID-19 response is multi-sectorial, enabling access for a broader range of stakeholders beyond the health sector will improve Haiti's ability to respond to COVID-19 and future epidemics.

The recent improvements by CHISU to the Carte Sanitaire have bolstered critical data access for the MSPP and other health system stakeholders within Haiti's HIS ecosystem.

Notably, the additional data points, enhanced geolocation, CHWs mapping, and reporting have allowed for more informed and timely decision making when it comes to serving the Haitian population and supporting healthcare workers.

Additionally, the upgraded Carte Sanitaire demonstrates the importance of constant HIS optimization and innovation to meet the current needs of a country, especially at critical moments when access to quality health data and mapping is vital. It can play a critical role in advancing public health initiatives, enhancing service delivery, and improving health outcomes for communities. CHISU will continue to work with the government of Haiti to address further improvements and additions to the system. Ensuring the sustainability of this platform will help ensure service coverage and data completeness, creating a lasting exchange of reliable health information to citizens and policymakers.



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