

## DATA-DRIVEN APPROACHES SUPPORT GLOBAL HEALTH SUPPLY CHAINS

In an age of quickly evolving digital development, countries can leverage the power of technology to strengthen their health systems. The design and roll out of custom, centralized information systems provide health data reporting and analytics capabilities for informed and timely decision-making. Data on health workers can ensure countries have the right numbers and kinds of health workers with the appropriate skills where and when they are needed most. Health commodity consumption and stock-level data can facilitate supply chain forecasting and demand modeling so the availability of life-saving medicines, at an affordable cost, is not disrupted for the people that need them.



At Chemonics, we support different aspects of digital health including creating interoperability architecture and business intelligence platforms for tracking health commodities across the supply chain; providing change management services and in-country training of stakeholders and government officials to build a culture of data use for decision making; and promoting the use of innovative tools and technology to reach both programmatic and national global health goals.

### Optimizing Indonesia's Health Workforce through Data

The Human Resources for Health in 2030 (HRH2030) [Indonesia activity](#), funded by USAID, is working to increase the availability and use of quality, real-time data to respond to health workforce challenges, with the goal of improving maternal and newborn health outcomes. HRH2030 has been supporting Indonesia's Ministry of Health Board of Human Resources for Health Empowerment and Development (BPPSDMK) to build a connected ecosystem of health workforce data, leveraging the principles for digital development to 1) strengthen the functionality of the country's main human resources information system, SI-SDMK, 2) use an open-source system to integrate data and develop an interoperability architecture and business intelligence platform, and 3) build capacity within the central level Ministry of Health to maintain the data warehouse, further develop the interoperability architecture, manage the business intelligence platform, and carry out systematic data analysis and visualization.

» [Learn more: Enhancing Strategic Use of Human Resources for Health Workforce Data in Indonesia](#)

### Revitalizing Senegal's HRH Information System Creates Culture of Data Use

Senegal is committed to universal health coverage, with the aim of ensuring the availability of quality health services. However, the country faces significant HRH challenges characterized by a shortage of skilled health workers in rural areas, and an inadequate distribution of public and private sector health workers. To address

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these issues, the Ministry of Health and Social Action (MSAS) has recognized the need to better exploit and use HRH data. With the support of the [HRH2030 activity in Senegal](#), MSAS has made a commitment to revitalize the country's HRH information system, iHRIS, by improving its functionality and fully integrating the system into MSAS operations. Capacity building, advocacy, and coordination around the use of iHRIS are essential in creating a culture of data use.

» [Learn more: HRH2030 Supports Health Worker Data Training in Senegal](#)

## **Improving Supply Planning in Pakistan through Vertical Health Logistics Information Systems**

In Pakistan, Chemonics supports the integration of multiple vertical health logistics information systems in the Sindh and Punjab provinces. In 2019-20, we led a UNICEF-funded activity to build the capacity of provincial and district level staff in operating a health logistics management information system for essential medicines. This activity improved the ability of the province decision-makers and supply chain managers to record consumption data and improve forecasting and supply planning.

» [Learn more: UNICEF Pakistan Health Logistics Management Information Systems Project](#)

## **Reducing Costs and Increasing Efficiencies in Global Health Supply Chains**

To improve access to high-quality health products worldwide, the USAID Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) project employs cutting-edge technologies and industry best practices to make global health supply chains more efficient, ultimately increasing access to life-saving health commodities to a wider population.

» [Learn more: Cutting-edge Technologies in Global Health Supply Chains](#)

## **GHSC-PSM's Supporting Country Access to Contraceptives through Data Collection**

Contraceptive Security Indicators toolkit presents tools and resources on family planning and reproductive health intended for a wide audience, including public and private entities, social actors, family planning services donors, among others. The toolkit content ranges from a high-level perspective on contraceptive security and background on the origins, objectives, and methodology of the Contraceptive Security Indicators survey to actionable and interactive resources.

» [Learn more: Contraceptive Security Indicators Survey](#)

## **Strengthening Kenya's Health Supply Chain through Data Management of Commodities**

GHSC-PSM's Afya Ugavi activity in Kenya supports the strengthening of the country's health commodities management systems through strategic planning and design, in-country supply chain logistics, capacity building, and the creation of an enabling environment.

» [Learn more: Kenya Afya Ugavi](#)

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## Utilizing a Cloud-Based Commodity Order Management System in Nigeria

In 2019, GHSC-PSM developed and deployed a cloud-based Commodity Order Management System (COMS) that provides end-to-end visibility into several commodity lines. COMS allows users to monitor deliveries in real-time as commodities are distributed to facilities.

» [Learn more: Tracking Health Commodities Down to the Last Mile](#)

## Powering an Innovative Forecasting and Supply Planning Tool with Data Access and System Interoperability

Our Quantification Analytics Tool (QAT) aims to facilitate the complex process of forecasting and supply planning by providing a modernized solution for country-led supply planning. QAT is an open source, web-enabled software that leverages new technologies and enhances the existing supply planning tool, PipeLine, to improve data access and system interoperability. With an enhanced user interface and usability, greater analytical capabilities and automated data exchange, this new tool enables program managers to optimize commodity procurement and delivery schedules, monitor the stock status of products, and share data with external platforms and key stakeholders.

» [Learn more: An Overview of QAT](#)

## Supporting Ghana's Supply Chain Master Plan with High-Quality Data

The Ghanaian Ministry of Health's five-year Supply Chain Master Plan calls for strong supply chain systems that enable effective management of health commodities. The Global Fund's Ghana Logistics Management Information Systems (LMIS), Regional Logistics Officers (RLO), and Last Mile Delivery (LMD) Support program focuses on realizing this vision by strengthening the country's LMIS, LMD, and warehousing and distribution services, as well as expanding engagement with the private sector, to expedite the procurement of essential medicines.

» [Learn more: Global Fund Ghana LMIS, Regional Logistics Officers, and Last Mile Delivery Support](#)