

# Supporting Vaccine Management and the Cold Chain



**R**ecent factors in the vaccine and immunization environment—such as advocacy (e.g., the Decade of Vaccines); the introduction of higher cost and bulkier vaccines (e.g., rotavirus and pneumococcal); and stagnant immunization coverage in many developing countries—have led to a new emphasis on strengthening global and in-country supply chains for vaccines and related products.

## Immunization Program Support

Over many years and in roughly 55 countries, JSI has provided technical assistance (TA) to introduce new vaccines and strengthen routine immunization (RI) as an integral part of the broader health system. This has included TA to develop the capacity of Ministries of Health, international partners, and community-service organizations; and to improve equitable coverage, quality, and sustainable RI services at scale. JSI has been awarded all of USAID's global flagship immunization programs.

JSI's experience with supply chain management is equally significant. With a portfolio of more than 125 public health supply chain projects in over 100 countries across three decades, JSI's experience—from the top of the supply chain to the last kilometer—is unparalleled. JSI's Center for Health Logistics comprises well-known USAID-funded projects such as the USAID | DELIVER PROJECT and Supply Chain Management System (SCMS). JSI also supports several integrated health supply chains that include vaccines and related products.

## Immunization Supply Chain Support

JSI customizes program solutions to national and local circumstances. Our maternal and child health, immunization, and supply chain specialists bring technical leadership, program expertise, and deep field experience in such areas as:

- Data quality improvement and use
- New vaccine introduction
- Capacity development and team building
- Supply chain assessments, cold chain management, and vaccine storage and delivery
- System design, optimization, and strengthening
- Information system design and implementation
- Community-based delivery, information management, and monitoring

---

## WHERE YOU LIVE SHOULDN'T DETERMINE YOUR ACCESS TO LIFE-SAVING VACCINES.

---

*For more than 35 years, JSI has been working to strengthen public health programs in more than 100 countries. JSI's 2,000+ employees have managed over 3,000 projects from eight U.S. and 43 international offices. JSI areas of project and program support include immunization; maternal, neonatal and child health; family planning; HIV/AIDS and nutrition; health systems strengthening; supply chain management; and monitoring and evaluation.*

### Gavi Supply Chain Landscape Analysis

In 2013, JSI, in partnership with McKinsey & Co., supported Gavi with a supply chain management landscape analysis. Project deliverables included:

- Stakeholder mapping to identify key players and roles in vaccine supply chain and logistics
- Process mapping to visually depict all activities involved end-to-end in the vaccine supply chain
- Analysis to locate key system stress points/bottlenecks within the process mapping

### NUVI Supply Chain Support: Madagascar, South Sudan, Niger

The Gavi-supported NUVI project has provided supply chain TA since September 2013 to support country readiness to receive, handle, and distribute new vaccines correctly, including:

- Assessing the overall cold chain and vaccine management
- Conducting a national cold chain inventory
- Developing a vaccine distribution plan

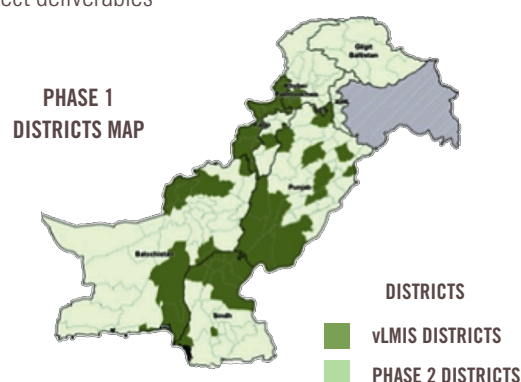
## COUNTRY-LEVEL PROJECTS

### Pakistan - Improving Commodity Availability to Support Family Planning and Routine Immunization Coverage

The USAID | DELIVER PROJECT is working in Pakistan to automate, improve, and strengthen inventory management of vaccines and cold chain from the planning phase to last-mile delivery. Project deliverables include the development of a vaccine logistics management information system (vLMIS) that supports crucial data streams:

- Warehouse management system
- Consumption for routine and campaign-based immunization services
- Cold chain asset management

In Phase 1, vLMIS was implemented in 54 high-risk polio and provincial priority districts of Pakistan, including the national and five provincial warehouses.



### Ethiopia - Supporting the Transition of Vaccine Management from the FMOH to PFSA

In 2013, the Federal Ministry of Health agreed to begin the formal transfer of responsibility for the management of vaccines and cold chain to the Pharmaceutical Fund and Supply Agency (PFSA). JSI is providing technical support to this transition with financial backing from the Bill & Melinda Gates Foundation. Key aspects of the transition program include:

- Detailed planning and organizing for the oversight and management of vaccines and the cold chain by PFSA
- Operational system and network design improvements and capacity building with PFSA
- Addressing needs within PFSA's information systems, including an EPI dashboard
- Developing and utilizing monitoring mechanisms for vaccine availability and cold chain effectiveness
- Network and transport modeling and costing analysis to provide PFSA with efficient and cost-effective approaches to vaccine distribution

### Tanzania - Integrating Vaccines into Existing Data Systems

JSI is working with the Ministry of Health and Social Welfare and partners to develop a vaccine module that will allow the electronic LMIS (eLMIS) to track immunization-related indicators at all levels of the Tanzanian health system. In addition to capturing key logistics data (e.g., stock-keeping, and transaction and consumption records) for all commodities under the existing eLMIS, this module will provide a dashboard of programmatic indicators of immunization, such as:

- Vaccine coverage by target population and type of vaccine
- Un-immunized children and dropouts
- Vaccine utilization performance trends
- Availability of vaccines and safe injection equipment