



# Logistics & Supply Chain Management

Axios builds sustainable supply and distribution systems to ensure uninterrupted supplies of life saving drugs and medical commodities.

The Axios Foundation and its associated organization Axios International have extensive experience and a solid track record in all aspects of strengthening of health systems to improve the procurement, storage, distribution, and dispensing of HIV/AIDS-related and other drugs, laboratory reagents/consumables, and medical commodities and equipment in developing countries. Axios works at all levels of the health system from major tertiary hospitals down to small primary clinics, and ultimately to the patient.

## The Axios Approach

Improving access to healthcare relies on effective and reliable supply chain mechanisms that deliver drugs and medical equipment to hospitals, clinics, doctors, and patients. The main thrust and focus of our activities in strengthening supply chain systems has been in health facility systems strengthening, capacity building, manpower development, and provisioning of technical assistance at all levels of the supply chain, as well as development and strengthening of laboratory infrastructure in health facilities. Axios offers extensive capabilities and in-depth understanding of logistical support and brings on the ground, firsthand experience of the geographical spread of health facilities offering HIV/AIDS services.

**Axios has successfully managed a wide range of logistics and supply chain activities** for three of Nigeria's major PEPFAR funded programs: GHAIN / SIDHAS (FHI360), ACTION (UMB / IHVN), and ProACT (MSH) since their inception. Axios' responsibilities have encompassed procurement of ARV drugs, RTKs (Rapid Test Kits), laboratory equipment, reagents and consumables, and other supplies, and management of all facets of the supply chain, such as importation, customs clearance, warehousing, distribution, inventory management in health facilities, and forecasting. Axios has helped ensure sustainable systems by focusing heavily on strengthening hospital pharmacy systems, establishing best practices, and building the capacity of pharmacy staff through regular, systematic training programs. Axios has worked with its primary partners as well as USAID, the Centers for Disease Control and Prevention (CDC), and Nigerian Federal and State governments and their agencies, to improve systems, facilities, and training in Central Medical Stores and health facilities throughout Nigeria.

For these programs, Axios has provided procurement and supply chain management services in 352 sites (comprising 232 comprehensive sites and 120 PMTCT stand-alone sites) in 36 states and the Federal Capital Territory. Axios has also established reliable and well-functioning forecasting procedures that feed data into a central procurement system by implementing computerized inventory management systems and training of personnel in health facilities in 12 states. The Axios-managed procurement and supply chain system for these programs has grown to provide uninterrupted supply of drugs to over 200,000 patients on ART since inception in 2004. Axios also ensures reliable and well functioning supply systems for laboratory equipment, reagents, and supplies, as well as OI medicines and other drugs, medical commodities, test kits, and other supplies.

### Our Supply Chain and Logistics Technical Assistance Services

- Health commodities forecasting and quantification
- Procurement planning, implementation, and execution
- Inventory planning, deployment, management, and control
- Logistics management (customs clearance, receiving and inspection, quality management, putaway and storage, fulfillment and distribution, transportation management, and reverse logistics)
- Procurement and Logistics Management Information Systems
- Related services

In addition, Axios is working with Abt Associates in the DFID (UK Department for International Development) funded PATHS2 project to improve supply chain management systems and infrastructure for essential drugs in the primary health sector in Jigawa, Kaduna, Enugu, Kano, and Lagos states. Axios supports and builds

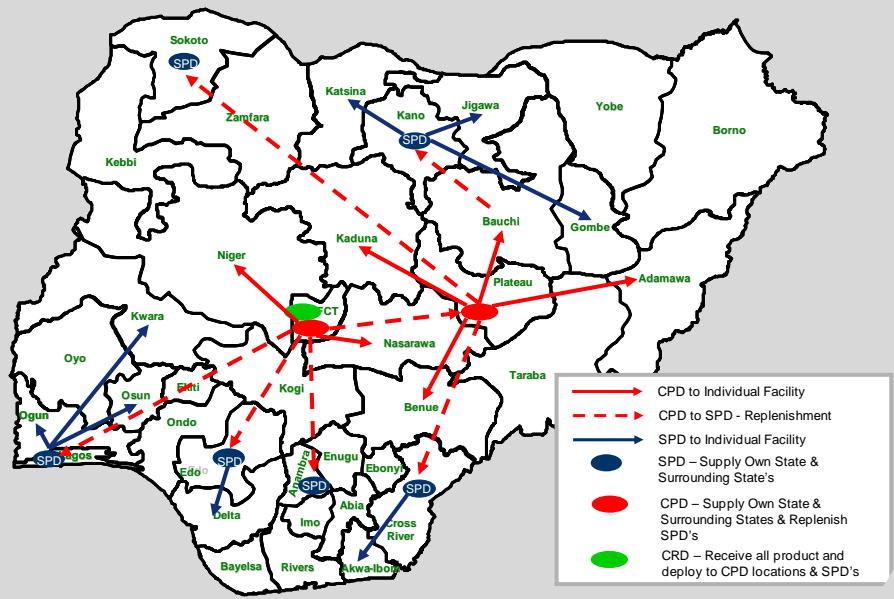
**Axios' supply chain reaches 352 sites across 36 states and the Federal Capital Territory in Nigeria**

capacity of the State Ministries of Health and Central Medical Stores in all components of supply chain management including selection, forecasting, procurement, warehousing, and distribution. Axios has taken the lead in service delivery functions that relate to health commodities and the Drug Revolving Fund (DRF), covering drug availability, accessibility, affordability, sustainability, quality, and financial management.

The Axios Foundation has been a trusted implementing partner in Nigeria since 2004. Axios has established strong, well-functioning systems and infrastructure to support efficient and effective supply chain operations in the country. We also have network of Axios technical staff throughout Nigeria to provide technical support in all aspects of supply chain management of pharmaceuticals operations including pharmaceutical care and best pharmacy practices.

**We Have 9 Warehouses with 1,300 sqm of Storage Capacity**

- 1 central receiving depot in Abuja
- 2 central program depots in Abuja and Jos
- 6 state regional warehouses in Anambra, Cross Rivers, Edo, Kano, Lagos, and Sokoto
- 22 tons of cold storage space
- Air conditioning, lighting, and backup generators
- Warehouse inventory management system
- 6 Axios operated distribution trucks
- A network of local and regional transportation vendors



**Under a United Nations Development Programme (UNDP) funded project in northern Sudan, Axios is working closely with the government and stakeholders to strengthen all aspects of the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) supported commodity supply chains.** Given Sudan's large size and challenging socio-political environment, substantial investment and support is required to improve the pharmaceutical logistics system, especially following the Government of Sudan's decision to scale up HIV, TB, and Malaria services at the national level.

Our activities encompass assessment, design, and implementation activities intended to improve the existing Government of Sudan supply chain management system. We are using our expertise in a number of focus areas including: 1) Forecasting, quantification, and procurement planning, 2) Logistics system design, implementation (including inventory control management), monitoring, and supervision, 3) Logistics Management Information System (LMIS), 4) Warehousing and in-country distribution optimization, 5) Management and coordination, and 6) Institutionalization of Rational Use of Drugs and pharmacovigilance.

Axios' technical support avoids duplication of efforts by identifying and filling in gaps, and complementing existing systems and services to guarantee consistent and uninterrupted supply of all program commodities. Axios has

designed a two-track strategy that responds to immediate logistics management and coordination support while also developing systems and building capacity to yield long-term, sustainable results. We strongly believe in utilizing existing infrastructure where ever possible and strengthening the capabilities of local stakeholders including government agencies and organizations. To accomplish this, the Axios team works side by side with staff from the Central Medical Supply, a parastatal agency with the responsibility for procurement and distribution of commodities throughout the entire north Sudanese health system. In addition, we collaborate with the Federal Ministry of Health on the HIV/AIDS, tuberculosis, and malaria vertical disease programs.

## Working With the Private Sector to Increase Access to Drugs

**Through our supporting organization (subsidiary) Axios Healthcare Development (AHD), we manage all aspects of donation programs for several pharmaceutical clients**, including identification of partner institutions or NGOs in target countries, and logistics of international shipment and distribution, to ensure that donated product reaches eligible patients or recipients reliably and cost-effectively. Effective management and implementation of drug donations ensures that patients in need are able to securely access vital treatments, reducing the financial and epidemiologic burden for local health authorities in these countries. We work in collaboration with our private sector affiliate, Axios International, which has pioneered a variety of innovative approaches to improve the availability and affordability of medicines, diagnostics, and devices through local capacity driven donation programs and shared-payment access strategies that allow private companies, local institutions, and patients to share the cost burden of medical interventions. These innovative approaches are designed to build capacity and strengthen health systems from the ground up in order to create sustainable access solutions. Such programs have been designed and/or implemented in more than 200 countries on behalf of corporate partners such as Pfizer, Merck, Novartis, Bristol-Myers Squibb, GlaxoSmithKline, Roche, Boehringer Ingelheim, Sanofi-Aventis, Eisai and AstraZeneca.

## About Axios

Axios International and The Axios Foundation were formed by a group of health experts and consultants from the public and private sectors, who shared the vision of an organization that could work effectively with clients and stakeholders from both sectors to improve access to quality healthcare for patients in developing and emerging countries. With programs in 17 countries and offices in Africa, the Middle East, Asia, and the U.S., Axios has developed extensive experience and expertise in a broad range of areas including health facility and health systems strengthening, drug logistics, health commodities procurement, laboratory strengthening, drugs access and donations, palliative care, and OVC, HCT, and PMTCT programs. Axios Foundation is a non-profit organization incorporated in the U.S. as a 501(c)(3) public charity. For more information, visit [www.axiosfoundation.org](http://www.axiosfoundation.org).