Global Policy Network

Global Medicines Policy Series 2025

The Role of Policy in Scaling Nigeria's Pharmaceutical Supply Chain: A Policy Brief

Health System: Nigeria

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The Role of Policy in Scaling Nigeria's Pharmaceutical Supply Chain

Executive Summary

This policy report summarises insights and recommendations from the Global Policy Network's Nigeria Medicines Policy Series roundtable held on August 13, 2025. The session, titled "*The Role of Policy in Scaling Nigeria's Pharmaceutical Supply Chain*," brought together senior policymakers, regulators, private sector manufacturers, and international development partners to address the critical transition from a donor-dependent system to a government-led, self-sufficient supply chain.

Nigeria stands at a precarious fiscal and operational precipice. The recent exit of multinational pharmaceutical giants has triggered price surges of up to 1,100% (Ezeagu et al., 2024). At the same time, the imminent withdrawal of donor funding for essential commodities and vaccines by 2028 demands an urgent shift toward domestic financing. Although the pharmaceutical supply chain has a strategic role in navigating these shifts, systemic, governance, and financing barriers must be overcome to realise its full potential.

Delegates collectively emphasised that the sector must no longer be seen as a peripheral or fragmented system dependent on external aid. Alternatively, it should be repositioned as a foundational pillar of national health security, capable of supporting Universal Health Coverage and reducing reliance on imports

A series of recommendations is set out in this report, directed towards the National Government, Subnational Governments (State DMAs), Development Partners, and the Private Sector. These include mandating a National Quality Assurance Policy, ring-fencing funds for health commodities, and shifting development support from parallel systems to strengthening national institutions. Achieving these goals requires bold leadership to dismantle silos and a fundamental cultural shift from dependency to ownership.

Introduction

Nigeria stands at a precarious fiscal and operational precipice. The recent exit of multinational pharmaceutical giants has triggered price surges of up to 1,100%. At the same time, the imminent withdrawal of donor funding for essential commodities and

vaccines by 2028 demands an urgent shift toward domestic financing. The "business as usual" model is ending, creating a narrow window of opportunity to build a sustainable indigenous supply chain.

Policies are at the heart of navigating this transition and building a resilient pharmaceutical system. A well-designed framework ensures that medicines are available, affordable, and safe. However, Nigeria's current system is characterized by high import dependence, with over 70% of finished medicines and active pharmaceutical ingredients (APIs) being imported (World Bank, 2023). This heavy reliance makes the national supply chain vulnerable to global disruptions and foreign exchange volatility. While regulatory bodies such as NAFDAC and the Pharmacy Council of Nigeria (PCN) have been established, enforcement capacity remains weak, and overlapping mandates often create inefficiencies that widen the gap between policy intent and practice.

Global benchmarks offer a path forward. In Ghana, new policies have prioritised integrating technology, such as drone delivery via Zipline, and establishing a Health Supply Chain Master Plan to improve public-private collaboration. India's government mandates for GS1 barcoding standards and Production Linked Incentive schemes demonstrate how policy can stimulate domestic manufacturing while ensuring traceability. Similarly, China has implemented a centralized model where the National Medical Products Administration (NMPA) utilizes a unified digital platform to provide real-time oversight and early warning mechanisms for substandard medicines.

The roundtable discussion on the role of policy was incredibly timely, convened as Nigeria faces a crisis of supply and a funding cliff. While policy intent exists in documents like the National Health Product Supply Chain Strategy, innovations in local production and governance are gaining prominence in health policy debates globally. This brief seeks to close the persistent challenge between that policy intent and practical reality, ensuring the sector is repositioned as a foundational pillar of national health security

Persistent Challenges and Strategic Priorities

While stakeholders have achieved notable milestones in policy formulation, the Nigerian pharmaceutical sector continues to face deep-seated structural pressures. Significant challenges remain, most notably regarding physical and digital infrastructure, the fragmentation of regulatory oversight, and the endemic, life-threatening issue of substandard medicines.

Infrastructure and Fragmentation

The backbone of Nigeria's pharmaceutical supply chain is currently compromised by severe infrastructure deficits. The distribution network is hampered by deteriorating road networks that delay last-mile delivery, alongside an erratic power supply that threatens the cold-chain integrity required for vaccines and insulin. Furthermore, inventory systems in many facilities remain archaic, leading to poor visibility of stock levels. These physical weaknesses result in frequent stock-outs of essential medicines in rural areas, while urban centers may experience wastage due to expiry.

Compounding these logistical hurdles is the fragmentation of authority. The regulatory landscape is crowded, with overlapping mandates between the National Agency for Food and Drug Administration and Control (NAFDAC), the Pharmacy Council of Nigeria (PCN), and various State Ministries of Health. This lack of role clarity creates inconsistent enforcement and administrative bottlenecks that undermine the efficiency of the entire system.

A pharmacist highlighted how this fragmentation is exacerbated by external actors, noting that *"every donor wants to bring in their product... parallel supply chain system?"*.

Counterfeit and Substandard Medicines

The prevalence of counterfeit and substandard medicines has escalated into a public health emergency. Estimates suggest that approximately 17% of medicines in circulation are counterfeit, with reports for specific categories indicating that up to 70% of certain drugs may be substandard or falsified. This crisis is fueled by porous borders that allow the influx of unregulated products and weak interagency collaboration that hampers effective policing. Beyond the staggering economic cost, estimated at over ₦200 billion annually, the human cost is incalculable, leading to treatment failures and preventable mortality.

Regulatory Weaknesses and Human Resource Gaps

While the Pharmacy Council of Nigeria (PCN) is the statutory body for regulating pharmacy practice, it is significantly hampered by chronic understaffing and inadequate logistical resources. These limitations restrict its ability to effectively monitor compliance across the vast, informal patent medicine sector, where a large portion of the population accesses care. Furthermore, there is a stark misalignment between academic preparation and professional reality. Current pharmacy education often prioritizes clinical theory over supply chain management.

A pharmacist serving within the Drug Management Agency (DMA) highlighted this gap, stating: *"The training need is high and it has to do with tailoring the skills to Public Policy Implementation processes. Unfortunately, this is not yet documented for educational curriculum development*.

Strategic Focus Areas for Improvement

Participants at the roundtable reached a consensus that incremental changes are no longer sufficient. The path forward requires a radical shift towards unified governance, sustainable domestic financing, and the aggressive localization of pharmaceutical production.

Governance: The Imperative for Unified Systems

A central insight from the deliberations was the critical need to transition from siloed, disjointed operations to a fully integrated national system. While the establishment of State Drug Management Agencies (DMAs) represents a positive structural reform, operations within and between states remain fragmented. Delegates emphasized the urgent need for *"more coordination"* to prevent the continuation of parallel supply chains driven by donor preferences, which often bypass state systems and create redundancy. The emerging Forum of Heads of DMAs was identified as a vital mechanism for peer review, resource pooling, and enabling states to speak with one unified voice when negotiating with federal regulators and suppliers.

Financing: Confronting the End of the Donor Era

The discussion on financing was characterized by a sobering recognition that the era of heavy reliance on external aid is ending. With the imminent withdrawal of support for vaccines and other commodities by 2028, the sector faces a *fiscal cliff*. A Participant stated this unequivocally: *"Donor funding - the party is over. We must assert ourselves"*. This sentiment was crystallized by the Chair, who asked the pressing question: *"Post USAID, where do we go to find money?"*

Participants stressed that the solution lies in domestic resource mobilization, specifically the *ring-fencing* of health funds within DMAs.

An experienced pharmacist noted, *"money is ring-fenced in DMAs. In fact, that's one big advantage of DMAs"*. Furthermore, there is a push for government commitment to finally meet the Abuja Declaration target, with delegates insisting the government must *"fund health expenditure to be greater than 15% Abuja declaration"*.

Procurement Models: Quality at Scale

To improve efficiency, the roundtable advocated for pooled procurement mechanisms. By aggregating demand across multiple states, DMAs can achieve economies of scale, drastically reducing unit costs and strengthening their negotiating power with manufacturers. However, a critical hurdle remains: standardizing quality across a decentralized system.

As noted by one delegate, *"If pooled procurement involves different DMAs, each with their own quality lab, how do you agree upon the quality requirements that must apply to the manufacturer?"*. This underscores the immediate need for a Harmonized National Quality Framework and the establishment of zonal quality assurance laboratories to verify that all procured goods meet a unified standard.

Local Production: A National Security Imperative

There was unanimous agreement that local pharmaceutical production is no longer just an economic goal, but a matter of national health security.

The consensus is that *"Until we are in the driver's seat to contribute to the production of medicines that we consume, if not, access to safe quality medicines is a mirage... Nigeria must take responsibility"*. While nearly 200 companies are currently setting up operations in Nigeria, domestic manufacturers cannot thrive without support.

The discussion on vaccines brought an acute urgency to this point. With the revelation that *"2028... Nigeria to be removed from vaccine support,"* participants questioned whether there is a *"government strategic exit plan on the ground by the government for 2028?"*. The insight was clear: a comprehensive roadmap is desperately needed to make local vaccine production a reality before the funding cliff arrives.

Strengthening the Integration of the Supply Chain

Integrated Digital Systems

To scale effectively, Nigeria must abandon fragmented, paper-based tracking methods, which are prone to error and fraud. The key takeaway from global benchmarks is the absolute requirement for interoperable systems, digital platforms that allow manufacturers, distributors, regulators, and hospitals to *talk* to each other. A Pharmacist from the NPHCDA pointedly asked, *"Is there real-time last-mile visibility of the health products?"*. The discussion implied that without reliable logistics infrastructure and visibility, equitable access is compromised. NAFDAC and state agencies should look to unified digital infrastructures to provide real-time visibility into stock movements.

Policy Changes: What Do We Stop and Start Doing?

The roundtable concluded by addressing how high-level policy must translate into immediate behavioral changes:

Stop Donor Dependency

The immediate priority for all stakeholders is to actively and systematically dismantle the ingrained mindset of reliance on parallel, donor-managed supply chains. These external systems, while often providing temporary relief, inherently undermine national sovereignty and the long-term sustainability of the health sector by creating an unnecessary dual structure that is ultimately dependent on foreign priorities and funding cycles. The focus must shift decisively and immediately to government-led models. These national models, however, are not intended to operate in isolation; they must be strategically enabled by private-sector logistics expertise. By merging sovereign government oversight with the efficiency, technical skill, and supply chain management capabilities of the private sector, the nation can build a resilient, nationally-owned, and fully accountable supply chain capable of sustaining itself long after the donor era concludes.

Start Local Sourcing

Local sourcing must be transformed from an aspiration into a mandated policy, beginning with State governments issuing clear executive directives to their Drug Management Agencies (DMAs**)** to prioritize procurement from pre-qualified local manufacturers. This policy shift is essential for multiple reasons: it directly stimulates the domestic economy by guaranteeing a secure pipeline for local businesses, and it is a crucial measure to reduce exposure to foreign exchange volatility, which often destabilizes imports and drives up medicine costs. Furthermore, prioritizing local manufacturers significantly shortens the supply chain, reducing transit times, handling, and the associated risks of quality compromise. Participants emphasized the urgency of catching up to regional peers, pointing out that countries like "*Uganda, Kenya, and S/A are already into ARV manufacturing!*", underscoring that accelerating local production and procurement is not just an economic choice, but a critical imperative for national health security and regional competitiveness.

Key Insights

The following section outlines the expanded insights, setting out the strategic implications and priority actions required across each area.

1. Strengthening Medicines Governance

Fragmentation remains the primary obstacle to efficiency, necessitating a decisive shift toward unified coordination. The current landscape is characterized by disjointed efforts where federal and state agencies often operate in silos, leading to resource wastage and regulatory gaps. Effective governance requires dismantling these silos through stronger alignment between national policy and subnational implementation. Empowered coordination bodies, particularly the Forum of Heads of Drug Management Agencies (DMAs), must be formalized and strengthened. This forum should serve not merely as a consultative group, but as an operational engine that harmonizes standards, facilitates peer review, and ensures that all states are moving in lockstep toward a cohesive national health architecture.

2. Financing Reforms for Equitable Access

The impending end of donor dependency presents both a severe fiscal crisis and a unique opportunity to build autonomy. As major international partners prepare to scale down support, the Nigerian health sector faces a "fiscal cliff" that threatens to disrupt service delivery. To weather this transition, the sector must urgently operationalize sustainable domestic financing models. This requires the strict "ring-fencing" of health funds, specifically within the Basic Healthcare Provision Fund (BHCPF) and state-level DMA drug revolving funds. By legally protecting these funds from being diverted to other government expenditures, the state can guarantee a continuous cycle of liquidity, ensuring that revenues from drug sales are immediately reinvested to procure new stock, thereby maintaining availability without reliance on external aid.

3. Aligning Procurement with Sustainability Goals

Pooled procurement and localization are the twin pillars of a sustainable supply chain, but they hinge on standardized quality. There is a clear consensus that aggregating demand across states (pooled procurement) is the only way to achieve the economies of scale necessary to drive down prices. Furthermore, directing this purchasing power toward local manufacturers is essential for economic resilience. However, this model cannot function without a "common language" of quality. A harmonized national quality framework must be established to ensure that a drug tested in Lagos meets the same rigorous standards as one in Kano. Without this uniform assurance, states will hesitate to participate in joint procurement, undermining the entire strategy.

4. Scaling Local Production Capacity

Local production is no longer just an economic preference; it is a critical national security imperative. With the 2028 deadline for the withdrawal of international vaccine support fast approaching, Nigeria faces a ticking clock. Reliance on importation for critical vaccines and medicines leaves the nation vulnerable to global supply chain

shocks and forex volatility. Consequently, the government must move beyond rhetoric and implement a credible, time-bound "exit plan" from donor dependency. This requires a concrete roadmap that incentivizes local manufacturing through guaranteed offtake agreements, tax waivers for raw materials, and infrastructure support, ensuring domestic firms can fill the gap before the donor exit creates a vacuum.

5. *Building a Resilient Workforce*

The current workforce training model is misaligned with the complexities of modern public health management. While clinical training remains robust, existing curricula do not equip pharmacists and health professionals with the requisite skills for public policy implementation, logistics, and financial governance. To build a resilient system, there must be a deliberate, sector-wide strategy to overhaul academic and professional training. Curricula must be updated to include modules on supply chain leadership, data analytics, and strategic management. This will ensure the next generation of health leaders is capable of running DMAs as efficient, data-driven enterprises rather than just clinical service points.

Recommendations

For the Federal Government

Establish and enforce a robust national framework for pooled procurement that compels all relevant agencies to consolidate their purchasing requirements. By aggregating demand across the country, the government can leverage significant economies of scale, negotiate better unit prices, and reduce administrative redundancy, ultimately driving down the cost of healthcare delivery. Develop and implement a mandatory National Quality Assurance Policy that standardizes testing protocols and regulatory standards across all Drug Management Agencies (DMAs). This policy should create a unified "gold standard" for pharmaceutical quality, ensuring that every product reaching a patient, regardless of location, has undergone rigorous, identical safety and efficacy verification to curb the circulation of substandard medicines. Legally mandate the timely release and transparent management of the Basic Healthcare Provision Fund (BHCPF) through statutory reforms. This involves creating a ring-fenced financial mechanism that ensures funds are disbursed on schedule and utilized efficiently, effectively transitioning the sector away from reliance on unpredictable donor funding toward a sustainable, domestic financing model.

For Subnational Governments (State DMAs)

Integrate the management of all health commodities, including those for vertical programs like HIV, Malaria, and TB, under a single, streamlined Drug Management

Agency (DMA). States must move to eliminate the fragmentation of supply chains by unifying warehousing, distribution, and data management systems, thereby reducing waste and ensuring a holistic view of health inventory. Adopt transparent, data-driven models for fund allocation that link financial disbursements directly to performance metrics. By implementing robust Logistics Management Information Systems (LMIS), states can enforce accountability, ensuring that funding is contingent upon accurate reporting, efficient stock management, and verified service delivery outcomes. Prioritize procurement from pre-qualified local manufacturers to enhance national health security and stimulate the local economy. By consciously directing spending toward domestic producers, state governments can shorten lead times, reduce exposure to foreign exchange volatility, and encourage the growth of a resilient local pharmaceutical industrial base.

For Development Partners

Shift support strategies from creating parallel, donor-run supply chains to technically and financially strengthening existing government structures, specifically DMAs and NAFDAC. Partners should focus on capacity building and system reinforcement within national institutions to ensure that when donor programs exit, a functional and self-sustaining system remains in place. Co-invest in critical, high-capital infrastructure that is often out of reach for annual government budgets. This includes funding the construction and equipping of zonal quality control laboratories to decentralize testing, as well as deploying advanced digital supply chain technologies (such as ERP systems and real-time tracking tools) to modernize logistics operations.

For Private Sector & Manufacturers

Invest capital and operational resources into achieving World Health Organization prequalification (WHO PQ) and other international quality standards. Meeting these rigorous benchmarks is essential not only for global competitiveness but also for meeting the increasingly stringent quality requirements for government procurement, establishing the company as a trusted partner in the national health ecosystem. Engage in long-term framework contracts with government bodies rather than relying on transactional, ad-hoc sales. By securing multi-year agreements, manufacturers can stabilize their demand forecasts, justify capital investments in production capacity expansion, and optimize their supply chains for consistent delivery.

For Academia & Workforce Institutions

Update pharmacy, public health, and medical curricula to move beyond clinical theory and include practical modules on public policy implementation, health logistics, and supply chain data analytics. Graduates must be equipped with the technical skills

required to manage complex modern supply chains and interpret the data necessary for evidence-based decision-making. Develop and offer certified executive education programs specifically designed for DMA leaders and health administrators. These programs should focus on strategic governance, public financial management, and leadership, bridging the gap between clinical expertise and the managerial acumen required to run efficient, solvent state agencies.

Attendees of Roundtable One

The insights and recommendations of this report have been informed by a roundtable event that took place on August 13, 2025. A diverse group of delegates from across government, the private sector, and international development shared their expertise to inform this policy report.

Figure 1: Sectors Represented

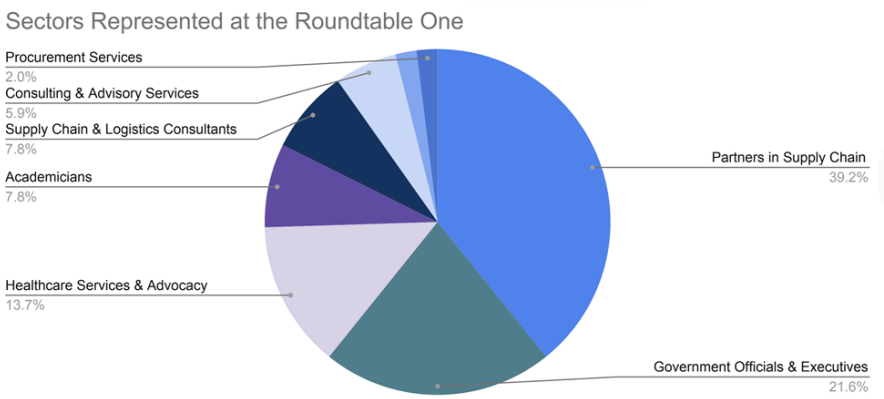
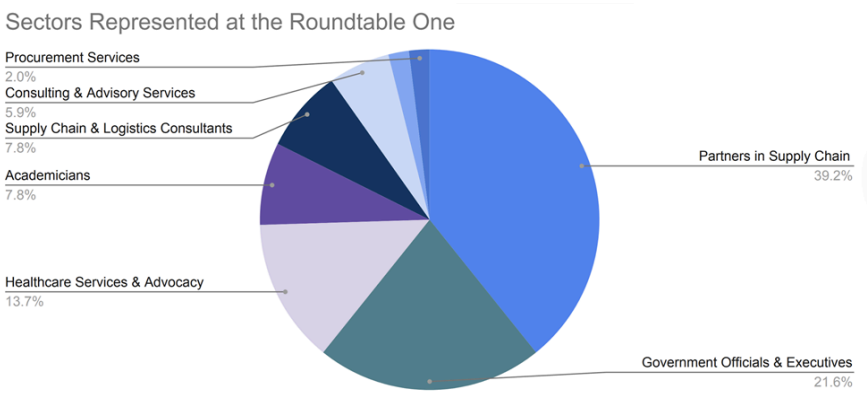


Figure 2: Roles represented in Roundtable



Acknowledgements

We extend our sincere gratitude to the Roundtable Chair, Azuka Okeke, and our distinguished speakers for their strategic leadership and valuable contributions. We also thank the representatives from the Federal Ministry of Health, NAFDAC, PCN, and the private sector, whose collective expertise was instrumental in shaping this policy report. Special appreciation goes to the GPN Nigeria Team and Fellows, including Pharm. James H. Malgwi, Pharm. Abbas Bashir Umar, Victoria Ayodele, Stephen Adeloro, Ahmad Danjuma, Usman Nasir, Chika Doris Ogugua, Mmesoma Okonkwo, Prof. Ejem A. Ejem, and Abdulrahaman Mangari for their coordination, research support, and contributions throughout the development of this roundtable and report.

Abbreviations

BHCPF – Basic Healthcare Provision Fund
DMA(s) – Drug Management Agency / Agencies
NAFDAC – National Agency for Food and Drug Administration and Control
PCN – Pharmacy Council of Nigeria

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