

Federal Republic of Nigeria

Blueprint & Operational Guide

for the implementation of the National Supply Chain Strategy [2021-2025]



Federal Ministry of Health Department of Food & Drug Services

National Product Supply Chain Management Programme

[NPSCMP]

December 2020



This document,

Blueprint & Operational Plan for the implementation of the National Supply Chain

Strategy (2021-2025);

- 1. Represents the approved technical interpretation of the provisions of the National Supply Chain Strategy 2021-2025;
- 2. It therefore shall serve as the sole guidance to the implementation of the afore-mentioned strategy document; except as may be reviewed by the Federal Ministry of Health through the Department of Food and Drug Services and the National Product Supply Chain Management Programme (NPSCMP).
- 3. However, this first edition (December 2020) covers the areas in which the national and state stakeholders have deliberated upon and made tactical decisions and choices regarding the national strategy. Therefore, all investors and implementers interested in areas that have not been covered as aforementioned, should please contact the National Coordinator of NPSCMP for guidance.
- 4. The blueprint bears the SSHHUPPP label: The change initiative embarked by the federal and state governments bears the SHHUPP label –i.e. signifying that any investments in it are reasonably secured; the change, permanent as the process and the resulting products are designed to be protected from unwanted influences. The attributes represented by SSHHUPPP (*strategic, Self-reliant, holistic, HR-elevated, universal, process-measured & controlled, protectively overseen, and public health-aligned*) add up to boost the chances of successful delivery and retention of the resulting project products.



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Foreword

In principle, the SDG 3.8 seeks to achieve universal health coverage, including financial risk protection, access to quality essential health care services, and access to safe, effective, quality, and affordable essential medicines and vaccines for all. These are the underpinning factors driving the ARC collaboration with National Products Supply Chain Management Programme (NPSCMP) to ensure the effective implementation of the National Health Supply Chain Strategic Plan 2021-2025. This strategic plan has four major pillars. They are to optimize the leadership, governance and coordination roles of NPSSCMP; to increase the state ownership of supply chain functions and their resource sustainability; to achieve integration of supply chain operations vis a vis the warehousing distribution, as well as the strategic information management at states and optimize the functions along the procurement and supply cycle value chain. While the first two pillars have direct bearing on the institutional maturity of government agencies, the last two are weighing heavily on their operational capacities to consistently deliver measurable standardised and relevant products. The enactment of these 4 pillars in reflection of the tenets of the SDG 3.8 is the basis for this blueprint and implementation plan for the operationalization of the National Health Strategic Plan 2021-2025.

The blueprint articulated the motives of the stakeholders to roll out a client-oriented supply chain with focus in achieving optimal efficiency & effectiveness in the delivery of medicines and other health products to the Nigerian people. Since 2012 the Nigeria health products supply chain system has gone through a long learning ladder of modern supply chain management, substantially reforming the landscape nationwide using bespoke health systems institutional strengthening models. Taking this further, the blueprint and operational plan documents is outlining tactics, processes, steps, timelines, milestones, responsible persons, other inputs and requirements to make the NHSCSP 2021-2025 more implementable. It articulated the value propositions underlining the multi-sectoral perspectives that drives the investments in NPSCMP, the maturity requirement for the basic institutions driving the public health systems supply chain businesses and processes at federal, states and LGA levels of care and other requisite institutional framework and management systems that precedes motives of the stakeholders. These are building up to achieving synergies amongst the

several player in using the NHSCSP to meaningfully transform the national health product supply chain landscape within the span of the current strategic plan.

List of Acronyms

- 1. **3PL**: Third Party Logistic (Service provider)
- 2. **CMS**: Central Medical Store
- 3. **CSR**: Corporate Social Responsibility
- 4. **DG**: Director General
- 5. **DMA**: Drug Management Agency
- 6. **DFDS:** Department of Food and Drug Services
- 7. **DPS**: Director Pharmaceutical Services
- 8. **DRF**: Drug Revolving Fund
- 9. **EM:** Essential Medicine
- 10. E-POD: Electronic Proof of Delivery
- 11. FCT: Federal Capital Territory
- 12. **FMoH**: Federal Ministry of Health
- 13. **GH**: General Hospital
- 14. **GON**: Government of Nigeria
- 15. **HF**: Health Facility
- 16. **HP**: Health Product
- 17. **iLMD**:- Integrated Last Mile Delivery
- 18. IRB: Internal Resource Base
- 19. **iSMSS**: Integrated and Sustainable Medicine Supply System

- 31. **PHC**: Primary Health Care
- 32. **PHC-DRF**: Public Health Care Drug Revolving Funds
- 33. **PPMVs**: Patent & Proprietary Medicines Vendor
- 34. **PPP**: Public Private Partnership
- 35. **QA**:- Quality Assurance
- 36. **QAPIT**:- Quality Assurance, Performance Tracking and Improvement
- 37. PR: Principal Recipient
- 38. SCMA: Supply Chain Management Agency
- 39. SCMS: State Central Medical Stores
- 40. SDGs: Sustainable Development Goals
- 41. SDSS: Sustainable Drug Supply System
- 42. SHF: Secondary Health Facility
- 43. **SLMCU**: State Logistics Management Coordinating Unit
- 44. SMSS: Sustainable Medicines Supply Scheme
- 45. SMoH: State Ministry of Health
- 1. **SPHCDA**: State Primary Health Care Development Agency
- 2. **SR**: Sub Recipient
- 3. THF: Tertiary Health Facility

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Acknowledgement

We wish to appreciate the enthusiastic and robust support demonstrated by the Honorable Minister of Health, Dr. Osagie E. Ehanire, to the vision of this document.

We wish to acknowledge the commitment and efforts of the Director, Food and Drugs Services, Mr. Fubara Chuku and the Executive Secretary of the Country Coordinating Mechanism of the Global Fund, Mr. Dozie Ezechukwu for providing the needed direction and traction respectively, for the development of this blueprint document.

We acknowledge the technical and unrelenting commitment and support of the National Public Health Programmes (NASCP, NTBLCP, NMEP, RH/FP, IMMUNIZATION, and NTD), FMOH- Laboratory division, MLSCN, NCDC, NACA and NAFDAC for participating in the development and ownership of this document.

Similarly, we would like to thank all our donor agencies, implementing partners, Principal Recipients, The Global Fund through the Resilient and Sustainable System for Health, Bill and Melinda Gates Foundation through the African Resource Centre (Nigeria) - for supporting all the steps we have taken in this endeavor.

We recognize the effort of the management and staff of the NPSCMP in the actualization of this task. We know it was difficult meeting up with some of the timelines but, we are grateful you made the finalization of this document top priority.

As we all take the next steps towards implementing this document across all programmes and at all levels, we are optimistic of an improved and transformed supply chain management system in the country.

Abdulaziz Mashi Abdullahi

Permanent Secretary, Federal Ministry of Health



- 1. The Department of Food and Drug Services (FDS) championing this initiative proposal on behalf of the Ministry for which the latter will be held accountable for its delivery. In this regard, the confidence of the Ministry might rest on the many times the achievements of the FDS programme, the National Product Supply Chain Management Programme (NPSCMP) have been celebrated before it. Even as a young as NPSCMP was at 3 years when she took up the project The Nigeria Supply Chain Integration Project (NSCIP), the delivery of the latter has not been matched by any of the (20) TGF-supported countries still struggling to harmonize their structures for integration. As a demonstration of excellence, TGF had, in December 2018, commissioned a case study to understand the "how" that NPSCMP did it during which the then HMH and current PSH were interviewed, amongst other gate-keepers. Earlier in mid-2017, the giant funder (TGF) pledged to the Ministry to suspend pursuing about USD\$2.4M debts on account of NPSCMP's unfolding achievements. The debt was apparently incurred by suspended FMoH Principal Recipients. Again, on her outing in the first RSSH Grant, NPSCMP met and exceeded her targets and out-performed other SRs. Another case study has been commissioned to this effect.
- 2. On whether or not NPSCMP can deliver the new initiative, the answer comes from three facts listed thus: [A] though the change proposal appears to be mind-blowing, no aspect of it is new. NPSCMP approach is simply to optimize and scale up already identified best practices within the country [B] NPSCMP has a project delivery Internal Resource Base (IRB) that constitutes

her unique strategic strength – that can be employed to deliver any project that is deemed feasible [C] NPSCMP has already employed this project delivery IRB to proactively determine the drivers of the successes or failures of past investments in the supply chain space. The success drivers and the failure mitigators are together summed up in the acronym she called the "SSHHUPPP" standard. It represents the culmination of lessons from a careful study of the investments of governments and Donors over the past fifteen (15) years.

- 3. The first "s" in SSHHUPPP stands for "strategic" meaning that the investment is in the right place if the plan is based on the strategic plan and thus will not be discarded. The study recalled, amongst others, that in the wake of COVID-19 pandemic, the supply chains that demonstrated resilience were those that were financially "Self-reliant". Using another example, government and Donor investments in national and state warehouses in the past, failed partly due to financial dependence and partly because the interventions were not "holistic". As a consequence, the gains in improved warehousing performance, for instance, was eroded by the pervading weaknesses in other aspects. Other components of the SSHHUPPP standard include "HR elevated", "Universal", "Process governed", "Protectively overseen", and "Public health-aligned".
- 4. Therefore, *SSHHUPPP* is the NPSCMP label of quality, protection, stability, growth, sustainability and resilience of government-led and managed businesses within the Nigerian context. Details of SSHHUPPP on page 30.

Section 1

General

- 1. Introduction
- 2. Background
- 3. Mandates
- 1. Federal Ministry of Health
- 2. Department of Food and Drug Services
- 3. National Product Supply Chain Management Programme
- 4. The motivation for repositioning the supply system
- 1. Demand pressure on supply chain for performance
- 2. Opportunities
- 3. Outstanding Challenges
- 4. The Journey into supply chain transformation Historical Timelines

1. Introduction

The National Health Supply Chain Strategic and Implementation Plan [NHSCSP] 2021-2025 document identified three (3) assumptions on which its recommendations were based: [a] Government Approval of Strategic Plan Priorities [b] Donor & Partner Buy-in & Investment in Supply Chain and [c] Private Sector Participation in Health Supply Chain. The Ministry endorsed the document in October 2020. Earlier on the 12th of March 2020, the national technical stakeholders (Donor representatives, other development partners and governments at the national level), reviewed the plan, made inputs and agreed with highlighted priority areas. On the 16th of March 2020, the Ministry's gate keepers led by the two (2) Ministers of Health confirmed the priority list that also had Private sector participation as a key factor in the business-like approach adopted for the transformation of the supply chain.

All set for implementation, the words of the ancient Chinese war strategist, Sun Tzu started resonating i.e. "*Strategy without Tactics is the slowest route to victory, Tactics without Strategy is the noise before defeat*". NPSCMP thus considered a coordinated approach that would deliver the desired change while maximizing value-for-money derivation from the investment of Governments, Donors and other Funders. First, the blueprint aims to provide additional clarity on the implementation roadmap in order to align all investments in the transformation to the [a] *vision* [b] *prioritization of activities* [c] identification, *optimization and scale up of best practice approach* [d] *milestones* and [f] *timelines* ,etc. set by government. Core to the implementation approach is that it is not "re-inventing the wheel"; rather to identify pockets of *accustomed best practices*, optimize and scale them across board.

The strategy document (pages 46-51) has also outlined the short, medium and long term goals of the transformation and has also identified the activities to be carried out based on four (4) pillars namely –[a] NPSCMP Optimization [b] Increased State Ownership and Capacity [c] Integration of Supply Chains [d] Optimize Supply Chain Functions. However, with keen eyes on the desired change (outcomes), NPSCMP notes with great concern that investments in supply chain transformations are heavy on *capacity-based deliverables* as opposed to *tangible products* like construction works, procurement of health products, equipment, software and devices. From experience, activities in the former category exhibit strong tendencies to end up at the *output* level without translating to commensurate *outcomes (desired change)*. In consideration of this *critical vulnerability* and other risks that negatively affect value-for-money derivation, NPSCMP, through this blueprint document, is providing an implementation *frame work* that would define "how" the activities prescribed by the strategy document will lead to the identified goals.

The implementation framework will focus on the business model being supported by the four (4) strategy pillars. The business model articulates the key functions (or roles) and how they relate with each other to unmistakably lead to the expected results. For instance, while as the first strategy pillar is focusing on "NPSCMP optimization", the frame work will identify the role of NPSCMP the optimization will strengthen and that is – effective and overarching national supply chain leadership. Next is the "Theory of change" (ToC) – the so-called "missing middle" between the "as is" and the envisaged state. The investment gap is determined by profiling the maturity of the entity (establishment) that has the mandate acting as the hub of the collaboration with partners, private sector, academia, etc. The resources needed will then be quantified by what it takes to move from one maturity stage to the next one till full maturity is attained.

2. Background

1. The approval of the document, National Supply Chain Strategy 2021-2025, by the Hon. Minister of Health in October 2020 represents a bold step by the Federal Ministry of Health to reposition the health supply chain to address Universal Health Coverage and in line with international best practices. All the while, the key components of the national health sector have operated vertically with little or no collaborative linkages between them. The scenario represented a case of huge missed opportunities for value creation in the supply chain.

- 2. In June 2019, the Project, the Nigeria Supply Chain Integration Project (NSCIP) was concluded with successes in creating enabling structures and other critical requirements (such as LMCUs) for scaling best practice models across states. One of such emerging models was the government-run, state-level DRF reforms in some states that showed promises of financial self-reliance for supply chain. Buoyed by these developments, NPSCMP with funding support of TGF convened a meeting of national stakeholders in Abuja in April 2019 where it was agreed to implement a government-run supply chain that would adopt a more business-like approach in the integrated management of the programme products and Essential medicines and in line with UHC.
- 3. The National stakeholders then directed NPSCMP to articulate the initiative into a frame work document to guide the development of the strategy. The frame work was reviewed and adopted by stakeholders in November 2019 to pave way for the drafting of the strategy document. With this process, NPSCMP ensured that all the attributes of the envisioned future state of the national supply system were preserved. In the same manner, NPSCMP has embarked on documenting the formal interpretation of the National Supply Chain Strategy 2021-2025 through the development of the blueprint and operational plan.

1. Mandate of National Product Supply Chain Management Programme (NPSCMP)

- 1. The mandate of NPSCMP is derived from that of the Department of Food and Drug Services of the Federal Ministry of Health, that is -
- 1. To <u>implement the supply chain aspects</u> of the mandate of the Department of Food and Drug Services of the Federal Ministry of Health stated hereunder -

"To promote the health of all Nigerians through the formulation of national policies, development of guidelines and strategies and initiation of legislation aimed at ensuring that **food, medicines & other health commodities, chemicals, cosmetics, medical devices and drinking water** available in Nigeria are safe and efficacious and by ensuring provision of ethical pharmaceutical services in the public and private sectors of our health care delivery system nationwide".

2. Liaison between the Federal Ministry of Health, its Agencies/Parastatals and other bodies on issues affecting *food, drugs, chemicals, cosmetics, medical devices and other health commodities*

Ref: FMoH website: https://www.health.gov.ng/

- **1.** The Journey into supply chain transformation Historical Timelines (See Annexure)
- 2. Process of Blueprint & Operational Plan Development

NPSCMP led the development of this blueprint and operational plan. The process included several engagements mainly through workshops involving partners, other national and state level stakeholders from March 2020 till December. It may be recalled that the first draft of the strategy document was released in early march 2020. The prioritized interventions were presented to the HMH for no objection on March 16th after the presentation to national technical stakeholders on the 12th of March 2020. In the meanwhile, the first draft of the strategy document was sent for what was called "global packaging" – a further improvement on the presentation and graphics which was not meant to affect the substance of the strategy document. Thus, from the 3rd week of March, engagement of stakeholder commenced to develop the blueprint for the state-level supply chain systems.

S/N	ENGAGMENTS	ACTIVITY
1	March – April 2020	LMD blueprint
	June - August	DRF Assessment nationwide
2	October 2020	Stakeholders feedback meeting on DRF assessment (DPS, Heads of DMAs/CMSs, LMCU Coordinators)
3	October 2020	LMCU Assessment nationwide
4	October 2020	Stakeholders feedback meeting on DRF assessment (national stakeholders (Heads of PSM of national programmes, etc)
5	December 2020	National and state stakeholders meeting to present issues of the strategy, blueprint, sustainability of stat LMCU
6	December 2020	Bill of quantity determination for state warehouse upgrade
7	December 2020	Workshop on development of integrated blueprint

3. Limitations

- 1. In line with the mandate of DFDS, and by extension of NPSCMP, the strategy document covered only the supply chain aspects of medicines & other health commodities. The supply chain responsibilities of the DFDS regarding **food**, **chemicals**, **cosmetics**, **medical devices** and **drinking water** have not been introduced.
- 2. The strategic plan document also reports that "the strategic planning process was limited by the absence of a detailed situational analysis of various aspects of the current status of the supply chain. This challenge still persisted in the development of the blueprint and operational plan.

- 3. The development of the blueprint document entails the process of national stakeholders (federal and state) reaching consensus on choices and decisions. Thus, additional constraints in the development process includes the fact that all 4 pillars of the strategic plan were not comprehensively covered at tactical level at the workshops and engagements, meaning that some pillars or components of some pillars were inadequately covered/discussed. The main stay of the discussions were around supply chain integration and NPSCMP.
- 4. The areas not sufficiently covered thus far will hopefully be covered in future engagements and this blueprint and operational plan updated as applicable.
- 5. In the meantime, for any urgent and/or significant action needed in the uncovered areas, the investor or implement <u>shall</u> consult the National Coordinator of NPSCMP for guidance.

Section 2

Clarifying the vision and implementation road map.



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- 1. The key points
- 2. Brief from the strategy document (Vision, Mission & Guiding principles)
- 3. The (supply chain) transformation initiative statement
- 4. High level structure of the national supply system
- 5. How the integration will manifest in individual states
- 6. The concept of one-handled, cross-level, loosely-bound, rational & coherent supply chain entity for Nigeria's public health.
- 7. Project design approach: Optimization and scale up of identified best practices.
- 8. Value propositions for different stakeholders
- 9. The Business Model
- 10. The implementation roadmap

1. Clarifying the vision and implementation road map.



& Investment

security

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The plan is based on the SSHHUPPP standard i.e. Based on the **strategic** plan; Provides for financial **self-reliance**, and transformation that is **Holistic**, the **HR** is engineered for enduring mindset and cultural change, self-driven; the transformation methodology is **Universa**I as it uses the adapted form of the global maturity model; **Processes** are standardized, measured and controlled; the businesses such as the state DMAs or DRFs are **protectively** overseen by stakeholders such as civil societies, Labor, etc. that cannot be influenced easily; Design must be **Public health** aligned



3. Brief from the strategy frame work & document

 Vision "To have a government-led sustainable system that is responsive, reliable, agile and cost-friendly to run, delivers services to the citizenry in line with universal health coverage (UHC) and in such quality standards that compete with offerings in the commercial sector in terms of cost and convenience."

2. Mission "To empower governments at the three levels to function effectively as Stewards of the supply chain in collaborating to implement a single channel of service delivery to the Nigerian Client; - using learnings from the Private sector to implement a sustainable, cost effective, UHC aligned and dynamically responsive management system".

3. Guiding Principles

- 1. "To provide stakeholders in procurement and supply chain management (PSM) of medicines and healthcare products/ laboratory commodities with a comprehensive framework for optimizing all resources for cost-effective, efficient, transparent and accountable supply chain management for health development towards the achievement of Universal Health Coverage as encapsulated in the National Health Act 2014, in tandem with the Sustainable Development Goal 3.8"
- 1. The overall guiding principle of this strategic plan is to achieve end-to-end transformation of the National Public Health Supply Chain through:
- 1. Establishing and defining a national supply chain with one service stream that brings together resources from the three tiers of government to characterize a supply chain system for the Nigerian patient in terms of cost and convenience.
- Harnessing the strengthens of State-managed DRF/SMSS and federal-managed public health programme products management through the integration of the supply chains systems (Figures 6 – 7) to increase ownership, reduce wastages, promote operational efficiency, cost sensitivity, and efficient assets management.
- 3. Reducing donor dependence, achieving financial self-sustenance and low cost of running supply chain. The cost recovery mechanism of Essential Medicines (DRF) will engender financial self-sustenance.
- 4. Leveraging or adopting supply chain best practices and learnings from the private sectors, infuse global best practices and ensure fit-for-context, purpose and value for money.
- 5. Standardizing PSM practices and streamlining roles and responsibilities of key stakeholders at all levels (upstream and downstream) with visible and effective coordination structures with unity of action and purpose.
- 6. Increasing the Federal Ministry of Health's commitment to universal health coverage (UHC) through UHC-aligned supply chain practices.
- 7. Supply chain monitoring and evaluation with one system of tools and outcomes-orientated key performance indicators (KPIs).
- 8. Instituting continuous quality improvement (CQI) initiatives through periodic data quality assessments Figure 01 acility capability audits (FAC), peer-focused performance reviews, monitoring and supportive supervision.

- 9. Instituting supply chain waste prevention and management measures across all PSM activities by promoting operational efficiency, cost sensitivity and efficient assets management.
- 10. Cross-level collaboration between key stakeholders, to harness strengths from each stakeholder for optimization; defining functions not to be shared or transferred (e.g. procurement), systems to be transferred/adopted, introduced, optimized or those requiring trade-off and opportunities not utilized.
- 11. Government ownership, leadership and supply chain innovations for the optimization and sustainability of PSM outcomes.
- 12. Instituting quality management standards in the local drug industry to improve access, affordability, availability and socio-economic benefits.
- 13. Collaboration with key stakeholders locally and international to eradicate poor quality products from entering or been used in Nigeria.

1. The (supply chain) transformation initiative statement

To reposition the national supply chain system to be integrated, sustainable, resilient and governmentled; to use the business-like and stakeholder-inclusive approach to deliver the mandate of government to save/improve lives - in an agile, reliable and responsive manner.

2. High level structure of the national supply system

- 1. [A] The federal-operated public health programmes (HIV/AIDS, TB, Malaria, FH, Vaccines, Nutrition, and MNCH2); integrates with
- [B] The state-managed Essential Medicines Management systems (in their various forms as DRF, DMA, iSMSS); the integration will be governed through a collaborative structure (Block C) that will hold each component accountable.
- 3. [C] The Harmonization & Collaborative structures that support the integration and sustained relationship between [A] and [B]. Block
- 4. [D] Represents the National iSMSS per state i.e. the integrated programme and Essential Medicines Management system.



Figure 01 . Illustrating the high level integration structure showing the four (4) components

1. How the integration will manifest in individual states

1. The integrated structure uses each state as the business & operational base. Hence, there will be 36+1 of such national iSMSS structures



Figure 02 . Illustrating how the integration will manifest in states. We will have D1, D2.... to D37 to represent State #1, #2...to state #37

1. The concept of *one-handled, cross-level, loosely-bound, rational & coherent supply chain entity* for Nigeria's public health



Figure 03 – The one supply chain concept

etructure

- 1. Having one supply network that links the FMoH with the 36 +1 SMoH, the 774 LGA supervisory units and the 34,000 health facilities provides the basis for characterizing and controlling its structure, functionality and maturity as one recognizable entity. The structure proposed in this initiative is a loosely bound supply chain that comprises the governments in each level along with supporting partners.
- 2. This is not a new creation; rather, it is an arrangement that existed in the management of public health programmes. For most of the public health programmes, Donors handled the actual procuring and delivered the products for bulk warehousing at the federal stores; the products were then sent to state stores from where they were released as needed to user facilities. For fear of the pharma compliant conditions of the state warehouses, some programmes like HIV/AIDS had refrained from using them. For this reason, this initiative plans to ally such fears by making the pharma grade condition of the state warehouse and the distribution system a prerequisite for integration.
- 3. On the other hand, states have been procuring, warehousing and distributing their essential medicines through one form of the cost recovery mechanism or the other for about two decades or more. Thus, they have the core competency as a natural role. It is hoped that, with time and excellent performance, the confidence of Donors in their capacity will be strong enough to cede the procurement of public health products to them. However, strategic planning and management has been the homestead of federal level managers. Neither the federal nor the states have the number of HR required to effectively supervise the 30,000 strong PHCs on hands-on basis. That has been the domain of the LGA supervisors or LGA LMCUs.

4. However, this rational and coherent supply chain entity is said to be loosely bound because each level is administratively independent; the chain is held together by collaborative bonding identified and ranked as follows: mutual interdependence, shared vision, federal-led initiative for supply chain, and the National Council on Health. The cross-level governing body must have to skillfully manipulate these bonding factors to maintain the link in the long term. The state has to be more closely watched as more and more assets are transferred to them.



5. From the foregoing, it becomes easy to configure one virtual, loosely-bound, rational and coherent supply collaborative network as a natural proclination with value adds in the use of specialized skills. The handle represents the role of the FMoH in providing standards of supply chain practice through guidance and policies. While as FMoH provides guidelines and policies, there is room for flexibility and innovative adoption and use of all resources. The one-size-cannot-fit-all slogan works at the tactical level. The handle diversifies at the state level to provide 36 + 1 operational outlets for delivering health products to the health facilities in each state. The broom sticks signify the 774 LGA LMCU formations that provides hands-on support to the PHCs; the logistics coordinators in the secondary and tertiary health facilities.

1. The project design approach: Optimization and Scale –up of identified best practices

1. Almost all the proposed system changes are based on the identification and use of pockets of best practices which are optimized for scale up. While as Nigeria has experienced the most verticalization of her supply chain, she has likewise generated the highest varieties of any particular process or system. From these can be selected the best and acculturated ones for scale up as listed below.

1. "Government-leadership" of supply chains

- 1. Governments at the federal and state levels in Nigeria have, in the past, demonstrated their capacity to lead and govern their supply systems effectively and efficiently in their respective areas of core competencies. This initiative is leveraging these competencies for scale up. For instances.
- 1. **The FMoH**, through NPSCMP has been leading in the development and deployment of supply chain management tools, processes, policies, guidelines, strategies, frameworks, etc. for use by the other technical stakeholders. The unique capacity is enabled by NPSCMP's model of Research & Development called Perimeter Surveillance and Strategic Response (PSSR)
- 2. **The states**, Jigawa, Kano, Kaduna, Yobe and Lagos have developed standard models of government-run, self-governed, sustainable, financially self-reliant and secured drug management systems (business and operations) based on the cost recovery scheme called DRF.
- 3. The LGA level is known for their traditional hands-on (coaching) support to PHCs

1. "Business-like" approach

- 1. The MANDATE of government to use health products to save/improve lives can be delivered more efficiently by the empowered government entity acting as the entrepreneur (Corporate Business personality), providing *commercially competitive services* to the Nigeria patients as her "customers". This approach motivates the speedy adoption of private sector business methods and operational techniques to enhance the performance of the public sector.
- The feasibility of the approach has been demonstrated in Jigawa and Yobe state supply systems: These systems and local manufacturers engaged in win-win collaboration whereby the state got products at lower-than commercial prices, also got Corporate Social

Responsibility (CSR) support to improve infrastructure and HR; the manufacturers secure volume sales, speedy and no-cost marketing - thereby saving money and time that would have been spent in months and years of vigorous marketing activities.

1. The business-like approach - entrepreneurial

- For the core business of initiating and financing commercial ventures for the purpose of making and delivering health outcomes for sustained viability and growth, almost all the states in Nigeria have been implementing the cost recovery medicine supply initiative known as DRF. The differences among state have been the organizational design, management and governance setups which in turn determined their survival, growth or otherwise decline.
- 1. **State government**-managed DMAs or DRF schemes (notably in Jigawa, Kano, Kaduna, Yobe and Lagos) have convincingly demonstrated the capacity to use the flow of products, information and finances to build and sustain huge financial capital for sustainable supply chain service delivery.
- 2. **The FMoH**, through NPSCMP has been providing the supply chain management standards (tools, processes, policies, guidelines, strategies, frameworks, etc.), in the form of Supply Chain Management Products (SCMPs) and Technical Assistance packages in the service of, or support to, Donors, governments, Implementing partners, the Private sector, Academia, and other stakeholders. Wherever it applies, these will be packaged as consultancies by NPSCMP in order to generate self-sustaining revenues in support of government efforts in funding supply chain interventions.
- 3. **LGA level**: The same applies to their coaching services.

1. "Agility" of supply chains

- 1. This emphasizes the necessity for speedy responses to changes and continuous quest for incremental improvements which is a dynamic capability. There must be a core team (HR) dedicated to strategic surveillance of the business environment for events that affect the organizations' bottom lines and by itself, propose and implement appropriate interventions that improve on existing levels of strengths, relevance, influence, growth and competitive advantages.
- 1. **FMoH** (NPSCMP) has been using her model of development research named Perimeter Surveillance and Strategic Response (PSSR) to determine new horizons of change or

improvement; also furnish the programmes, states and supply chain partners with updated policies, processes and guidelines. This practice is to be optimized and institutionalized using the new strategic initiative.

2. Sample self-spurring and self-driving practices have been studied in some states; these will be scaled up using the initiative mentioned above.

1. Value propositions for different stakeholders

1. The Patient



- 2. Other stakeholders : The Value proposition covers all key stakeholders in the business space
- 1. **Donors** Institutionalized and cost friendly avenues to channel their funds in order to deliver Grant objectives with satisfactory Value-for-money derivation.
- 2. **FMoH** Sustainable Avenue to implement health policies and achieve health outcomes in a sustainable manner.
- 3. **FMoH programmes** Opportunity to beat the "free drug mindset": Cost friendly and efficient (waste-limiting) means of delivering Public Health Programme (PHP) products to the health facilities (HFs) using contextual delivery approaches.
- 4. **Agencies of FDS** NAFDAC, NIPRID, PCN, etc. Collaborate with NPSCMP in managing roles at their interfaces with FMoH, under the leadership and guidance of NPSCMP.

- 5. **FMoH Tertiary health services**: Opportunity to partake in mega frame work contracting arrangements and achieve economies of scale.
- 6. **SMOH** Use best practice standards to deliver health outcomes in a financially sustainable while pushing for 100% health facility coverage in DRF enrolment.
- 7. **Private sector** High value, Win-win collaborations with government, NPSCMP, Programme logistics units, DMAs/DRFs, etc.
- 8. **Implementing Partners** Partake in the use of NPSCMP standards in the business of national health system development.
- 9. **Academia** Opportunity to collaborate with NPSCMP in development research and internships programmes.

1. The Business Model

1. The business model summarized

- What and what should be harmonized, strengthened and then operated to achieve the ultimate goals of supply chain management namely – [a] patient outcomes (intermediate) at personal level and [b] UHC at programme level and [c] visibility?
- 2. The combination of the under listed functions inescapably leads to the goals:
- 1. Supply Chain Leadership: This is the function that configures the most appropriate big picture view of the entire supply system based on targets or ambitions, prevailing SWOT profile (strengths, weaknesses, opportunities and threats), and lessons both within and outside its perimeter. The big picture view provides the strategic insights to develop or update all supply chain standards for adoption and use by implementers; ensures appropriate usage, manages the change process, treasures lessons and drives improvement.
- 2. *Product-focused logistics*: Ensures that health products are procured and delivered at the HF on time, in full, in good condition and with appropriate documentation.
- 3. *Health facility coverage*: This represents the drive of the leadership to ensure that all HFs in the state are linked to the DRF scheme and are fully served irrespective of the cost of service (CoS) or location (terrain).
- 4. *Health facility-based logistics and patient care*: This ensures that the delivered products are reserved for the clients only, handled appropriately, used rationally and accounted for while the patient is rightly monitored for safety and comfort while on the products. From this level (HF), primary data/information is generated for the upstream functioning of supply chain.
- 5. These will increase the chances of saving the life of the patient and/or making his/her life better (*Patient outcomes*); the latter is qualified as *"intermediate"* to signify the contribution from medicine use since other health delivery disciplines also contribute to saving or improving the life of the patient. The same overarching leadership works to reduce the financial burden on the patient through exemptions and low cost mechanisms.

1. Brief from the strategy document – the four (4) strategy pillars

- 1. This blueprint and operational plan document is based on the four (4) pillars of the National Supply chain strategy namely.
- 1. Strategies to optimize supply chain functions, along the procurement and supply cycle value chain.
- 2. Strategies to achieve integration of supply chains
- 3. Strategies that optimize the leadership, governance and coordination roles of NPSCMP.
- 4. Strategies that increase states ownership of the supply chain functions and their resource sustainability.



Figure 05 – Illustration – the four (4) strategy pillars supporting the business model

1. Role partition among the three (3) levels of government

1. Overtime, core competencies have emerged within the each level of government; fortunately, these complement the core competencies of the other levels to create natural interdependence among the levels. This has implications in sustaining inter-level collaboration in the long term. This is good for cross-level public health management since it has significantly reduced the divisive effect of health being in the concurrent list of legislation. Mutual interdependence has, in turn, induced some form of inter-level obligations, herein called "inter-level commitment" which shall be discussed briefly.

- The FMoH: (Supply chain Leadership) [the provision of standards of supply chain practice] and the determination of new horizons of improvement or transformation. FMoH through NPSCMP leads but will not be involved in core logistics implementation; shall focus on developing standards of supply chain practice and capacitating the different categories of implementers to adopt and use them – all in collaboration with all entities involved in research and development.
- 2. SMoH, FMoH's public programmes & the LGA: [Product-focused logistics and health facility coverage]: These entities, in collaboration with supporting partners and the private sector procure and deliver products to the health facilities in time, in full & in good condition; also drive coverage to the boundaries of the state.
- The LGA LMCUs and logistics coordinators in the pharmacy units of secondary & tertiary health facilities: - [Health Facility-based logistics]: Ensuring that the products are properly handled, documented, accounted for and rationally used to maximally contribute to patient outcomes.

2. Inter-level commitments

- 1. The delivery of any cross-level health project requires contribution from all three levels of government. For instance, the FMoH may provide direction but may not afford the operational base; the state can provide the operation base but lacks the number (HR) to physically cover the entire 774 LGAs and about 34,000 health facilities. Thus, the cross-level effort is usually contributory & complementary.
- 2. However, where the state is incapacitated to provide own quota of contribution to the project, the FMoH may commit to support her to fill the gap. For instance, the desire of the FMoH through NPSCMP to implement supply chain integration in the year 2014 was suspended because there was no PSM coordinating unit in any state by then. Thus, FMoH was committed to support states establish and operationalize LMCUs first. The state would, in turn, commit to support the LGA to operationalize LGA LMCUs. Therefore, the upper level of the supply system (such as the FMoH) would commit to supporting the states and LGAs to be better positioned to contribute maximally to their quota of the shared vision of delivering health-related services to the people. In return, the states and LGAs do committee to collaborate with the FMoH to deliver the service.

1. Implementation Roadmap

- 1. Expected outputs
- 1. **Output 01**: Conducive environment for takeoff at 95%

- 1. Stakeholder engagement
- 2. Resources needed
- 3. **Output 02**: NPSCMP as a matured SCMA
- 4. **Output 03**: Public Health Logistics units at "Black belt" standard in operations and oversight capability
- 5. **Output 04**: 36 +1 DRF schemes as Matured DMAs
- 6. **Output 05**: 36 +1 LMCUs at Gold standard
- 7. **Output 06**: Health Facility-based logistics and patient care at gold standard
- 8. **Output 07:** Cross level [FMoH-SMoH-LGA] governance system at "Black belt" standard
- 9. **Output 08**: SC operations at "Black belt" standard
- 10. **Output 09**: 36 +1 DRFs/DMAs and the PHP integrated as 36 +1 National iSMSS
- 11. **Output 10**: HR4SC at "Black belt" standard
- 12. **Output 11**: QAPIT (QA + PTI) at "Black belt" standard

1. Expected outcomes

[A] Exit surveys

- 1. **Outcome 01**: 99% stock availability of the priority products
- 2. **Outcome 02**: 99% HF coverage in the state iSMSS
- 3. **Outcome 03**: 100% Medicine & Health Product quality
- 4. **Outcome 04**: 15% Cost advantage to patients

[B] Overall outcomes

- 5. **Outcome 05**: 1% wastage rate of all products
- 6. **Outcome 06**: Cost of service (CoS) 50% of Mark up
- 7. **Outcome 07**: 99% of the 6 outcome KPI visibility

1. Implementation Milestones

- 1. The milestones include the following as listed below. Only some features of the state and NPSCMP maturity are shown in the figure below:
- Conducive environment: [Output #1] From January 2021, the first task would be to start creating the enabling environment for the actual implementation. There are two categories:
 [1] stakeholder engagement for their buy-in the tactical plans; they were already agreed on the strategic plans through series of workshops held between October 2019 to September

2020. [II] Assembling resources, tools and other requirements for takeoff and tracking of progress.

- 1. Figure 06 Please refer to the "key" on the maturity grading
- 2. NPSCMP is graded as level1, 2, 3 & 4; Level #3 is "Maturing". For the states, level3 is subdivided into 3A and 3B. Level 3A means – maturing but "NOT ready to integrate" with the PHP because the warehousing and Distribution components are not yet up to required standards. Level 3B is "maturing" and ready to integrate.



Figure 06 – MILESTONES

3. NPSCMP Empowered: [Output #2] The purpose is to capacitate NPSCMP to [I] deliver the transformation as designed and when done, to routinely drive the QA and Performance Tracking and improvement processes i.e. supply chain change management. In Figure 05 – the chances of success on the path to identified supply chain excellence will be assured. [II] Effectively manage the business of providing updated standards of supply chain practice for the implementing entities while capacitating them to adopt and use same appropriately. This will entail [a] developing the maturity profile (process and entitative maturity) of NPSCMP as a Supply Chain Management Agency (SCMA), using the maturity profile to estimate gaps, required interventions, resources for each maturity stage, budgets, progress in reaching goals and timelines, etc. [b] Strengthening the collaboration between NPSCMP and associated partners, FDS Agencies, Academia, etc.

- 4. Public Health Programme logistics units: [Output #3] [a] the roles of the PHP logistics units should be standardized across programmes and should highlight the roles in the integrated management of PHP and Essential medicines. [b] Use of the lessons in "harnessing the strengths of the PHP and Essential mediocres" to improve the PHP. Most striking in this regard are the aspects of lean inventory, waste reduction and cost of service (CoS).
- 5. State supply system: [Output #4 & #5, Outcome #2] Strengthen state ownership of the integrated supply chain: Optimize and scale up the identified best practices in government-led and managed medicine supply systems in some states. The definition of the *state health supply system* as the iSMSS attribute (integrated and sustainable medicine supply system) applies in this regard. Interventions will focus on the state DRF or DMA for the purpose of achieving the full iSMSS attributes and maturity; the LMCU with matured scorecard ratings, the *state technical committee* and the *state iSMSS oversight committee* having the right composition and functionality; and finally, the *state supply chain transformation* guided by the SSHHUPPP standard of the FMOH.
- 6. Health facility-based logistics and patient care: [Output #6] Strengthen health facility-focused logistics and patient care. The former aims to ensure that the HPs delivered at the HFs are properly received, handled until handed over to the patient, well documented, accounted for and reports generated as at when due and in the format and contents suitable for the upstream supply chain management. The latter focuses on rational prescribing, dispensing and effective monitoring of patients for safety and efficacy of intervention. These sum up to visibility and the maximized contribution of HPs to achieving patient outcomes. This output will be generated by strengthening the [a] state zonal hub functions [b] hands-on capability role of the LGA LMCUs if different from the state zonal hub structures [c] the logistics coordination in secondary and tertiary health facilities [d] HP management SOPs, STGs and pharmacovigilance.
- 7. Cross-level governance: [Output #7] Institute effective cross-level collaboration and governance systems in the integrated MGT of PHP and Essential medicines. This involves [a] the signing of appropriate collaborative agreements between the FMoH and Donors and other partners [b] Collaborative agreements among the levels of governments [c] cross-level TWGs and Steering committees [d] cross-level operational services such as joint distribution, supervision, KPI surveys, cost sharing, national compliance teams (the national equivalent of state teams), etc.
- 8. Key supply chain operations: [Output #8] Key logistics and supply chain operations to be standardized. Procurement, warehousing, distribution, Supply Chain Information Management System (SCIMS), Performance Management system, Financial MGT system, etc. However,

wherever these operations are involved in cross-functional integration, they must be built into the relevant *suprastructures* in order for them to maximally contribute to value creation.

- 9. Integration of PHP & EM: [Output #09] Although, this output is linked to outputs #3, #4 and #7, this activity is intended to activate the drivers of integration in other sectors and ensure that the milestone is accomplished on time and in required quality standards. It will involve the institutionalization of the *cross-level supra-structures* into which different players are expected to key in their roles, and maintain their lanes while delivering at expected quality standards. The suprastructural approach creates additional values which would not be possible if dealing with logistics functions (infrastructures) separately. For instance, the Long haul & Last mile suprastructure solves the following problems at-a-go:
- 1. Delivery of products to HFs and eliminating the incidences of proxy deliveries
- 2. The persistent problem of data haulage from the PHCs and other facilities unable to report electronically and without additional costs (a Core LMIS function)
- 3. Addresses the problem of primary data quality without additional costs by eliminating proxy data reporting (an onsite validation function)
- 4. Provides basis for all-HF periodic performance evaluation, mentoring and feedback. Enables data triangulation at primary level, thereby checks leakages and other wastes (a supervisory function)
- 5. Provides motivation for the health worker (especially the PHC worker) to own and account for job output (a governance function)
- 6. Reduces overall cost of running the supply chain.
- 1. The same applies for the following suprastructures: warehousing and inventory management, cross-level process, performance audit, etc. The institutionalization of these suprastructures must be done by those equipped with robust, broad and encompassing institutional knowledge of system only they can connect the impact of one function on the rest. Those schooled in delivering separate thematic areas of logistics systems would be most unsuitable for developing suprastructural facilities of supply chain.
- 2. Human resource for supply chain: [Output #10] HR4SC will be developed with special attention on the job requirements at all levels of service. The [a] HR4SC frame work should be developed to guide the development of the [b] HR4SC strategy. The latter should, amongst others, recognize the Nigeria public health context, segregation of learning in terms of academic, generic, cadre and place-fitness; Harmonization of foreign resources to suit country context, supply chain language and affordability – these include the pure academic resources and the myriads of performance improvement techniques. Nigerians are persuaded to invest in different brands of nearly same resources; adaptations of ASCM's SCOR-P categorization of skills, PtD HR4SC frame work; Emphasis should be on alignment to global practices through adaptation to the Nigeria public health context, noting specially that most of the "global

standards" are built for private sector supply chain. Nigeria is arguably the most resourceful in terms of public health configuration of supply chain resources.

3. Quality Assurance, Performance tracking and improvement: [Output #10] Strengthen current performance evaluation, monitoring and improvement methods; Introduce the exit survey as a routine activity and extend KPI reporting beyond stock availability to HF coverage, Cost of service, Medicine quality and wastage. Modify the LMIS concept to SCMIS (Supply Chain Management Information System) so that the name will align with the tracking of additional non-logistics indicators.

Section 3

The theory of change (ToC).

What is the "missing link" between the desired end-state and "as is"?

- 1. Security of investments in the transformation
- 2. Brief from the strategy document
- 1. Change in mind-set and organizational setup
- 2. Combining strengthens of programmes and Essential Medicines management
- 3. Levels of integration
- 4. Optimizing supply chain & Business operations
- 5. The ToC elements
- 6. How the mandate-holding entities will be optimized
- 7. Contextual Maturity profiling of government entities





What is the missing middle?

1. The theory of change

Note: Most of the contents of the last section, "clarifying the vision and implementation roadmap' also fall under this section. The reader or reviewer is encouraged to refer to them for a more complete picture of the missing links between the 'as is" and the desired end state of the national supply chain transformation.

1. The FMoH SSHHUPPP Standard

1. The lasting motivation to invest in and use this initiative to solve the supply chain challenges of the country and contribute maximally to UHC comes from its "SSHHUPPP" standard. NPSCMP, the establishment championing this cause is confident that provided the change initiative is based on the attributes of SSHHUPPP, investments and Donors and other actors are justified and will be rewarded with expected results. SSHHUPPP is the culmination of lessons from decades of investments of governments and Donors in the Nigeria supply system as to the reasons some of them (interventions) succeeded and their products endured while others failed.

- 2. Within the past 20 years, Governments and Donors have invested in many federal and staterun DRF schemes; CMS upgrades, etc. some survived others didn't. Achieving a desired change has not always been the issue; it is as much a problem as sustaining the change. Thus, the factors that contributed to the past successes and failures have been well studied and taken care of. The attributes of the change processes that enabled survival, growth, sustainability and resilience in the long term have been summed up in the "SSHHUPPP" acronym outlined below. Thus, federal and state stakeholders are convinced that the present policy thrust of government that is planned on these lessons will be achieved, protected, function even better than the private sector with sustained growth in the long term.
- 3. For practical purposes, the permanence of change and the protection of related investments are deemed secured if the initiative delivers a transformation that is deemed *strategic*, Self-reliant, *holistic*, HR-elevated, *Universal*, *Process-measured* & *controlled*, *protectively overseen*, *and public health aligned*. These are the lofty targets of this blueprint for the maturity of systems.
- 1. "Strategic" The plan is based on the national supply chain strategy 2021-2025, which is in turn drawn from the aspirations of the National Strategic Health Development Plan and the National Health Policy. Thus, the investment is on the right part and will not be discarded for want or shortfall in relevance.
- 2. **"Self-reliant**" Generates and uses own funds to respond quickly to the execution of plans. In many cases the skilled, self-motivated, technically and ethically capacitated government manager is defeated by the constraints of fund approval and release. Even with the public health programmes, the states that demonstrated resilience in the face of COVID-19 outbreak were the financially self-reliant ones as they were not inhibited by the bureaucracy of programme fund management.
- 3. **"Holistic**" Based on the "system thinking" approach. The opposite is an intervention that improves of one or more aspects (such as warehousing) and ignores others. As a consequence, the gains in improved warehousing performance can be eroded by the pervading weakness in distribution management.
- 4. **"HR- elevated**" HR is said to be elevated if these two conditions are met [a] the change is fundamental to the belief system (mind-set) of the operators and other key stakeholders and will thus, influence and sustain a change in the organizational culture. [b] The organization is supported by an *internal management team* that is self-motivated and possess the requisite dynamic capabilities to drive the organization under volatile, uncertain, complex and ambiguous market situations.
- 5. **"Universal**" the change goals can be profiled using the Global standard of supply chain maturity or an adaptation thereof. National stakeholders recognize the fact that most academic resources for global supply chain management were built for the private sector.

Therefore, it is sufficient to align with the so-called "global standards" through appropriate adaptation, not by adopting 'as is'. For instance, NPSCMP has innovatively adapted the global maturity model by blending its process-based criteria with local, context-based "entitative" criteria.

- 6. **"Process-measured & controlled**" Based on processes that are Non-personal, documented, measured and controlled.
- 7. **"Protectively overseen"** Governance oversight is provided by a multi-stakeholder committee that can hardly be disrupted by political or administrative influences; includes powerful constituencies that are outside the Ministry such as civil society organizations, Labor unions, etc. A combination of this type of oversight and appropriate legislation ensure lasting protection.
- 8. **"Public health aligned"** design –in contrast with the pure commercial methods and targets. One of the hitherto successful state DMAs has been stalled because its design was commercial-biased. To get moving again, it must adjust to the public health DMA bias. The type of bias has implications for how stakeholders are motivated in themselves and how they trust other in the short and long term; also affects the speed in which health facilities are motivated to be enrolled in the cost recovery scheme.

1. Briefs from the strategy document

- 1. "This strategy aims at achieving a supply chain which becomes a leading coordinated, innovative, stakeholder (State & LGA) owned, accessible (UHC) and sustainable supply chain service. A required foundational change is at the level of the organizational structure, in order to provide for and optimize the roles of leadership, governance and coordination". The optimization will improve the role play of NPSCMP as leader and coordinator of the health supply chain in Nigeria. The changes at this level will in turn lead and influence the rest of the health supply chain at State and LGA levels".
- 2. The mind-set and organizational setup of NPSCMP needs to change from "logistics cycle thinking" to the provider and manager of supply chain standards for the whole country.
- 3. "The need for the States to manage public health products (for HIV&AIDS, TB, malaria, family planning etc.) in parallel to essential medicines requires tremendous capacity and resources to implement".
- 4. The public health products are expected to enjoy the lean, low cost, good assets management and low wastage attributes of Essential medicines; the latter should benefit from the visibility and coverage of the former.
- 5. State supply chains must demonstrate sufficient maturity in order to instill confidence in Donors that the donated products will be managed effectively".
- 6. *"Integration into a unit supply chain will be face-changing, leading to a myriad of other changes in various PSM areas, which would all be done more efficiently to greater effectiveness for disease treatment and control.*
- 7. Intra-HF integration is needed in secondary and tertiary health facilities; Intralevel integration should be rallied around the government entity that has the mandate within the level – for instance, NPSCMP at the federal; LMCU at the state and LLMCU at the LGA. NPSCMP to collaborate with federally-controlled HFs for service data collection. Cross-level integration requires long term collaborative structures, role sharing in line with core competencies and integrated process and operational designs.
- 8. "Lastly, all policies, guidelines and strategies must affect each area of supply chain. The final pillar of the strategy will be aimed at building systems for supply chain, to have better procurement and supply management practice that delivers medicines and other health products to as close to the people as possible. The supply system must deliver quality products at prices that do not deter access by all".
- 9. Both the unit logistics and business (entrepreneurial) operations will be optimized. The target is to achieve lasting financial self-reliance for at least NPSCMP and the state supply chain units.

2. The ToC elements

- 1. Mindset
- 1. General: Transformation versus incremental improvement of systems
- 2. General: Essential medicines or programmes versus UCH scope
- 3. NPSMP: Logistics cycle view versus leadership/standards management view
- 4. NPSCMP: Implementer versus Supplier/monitor of standards
- 5. NPSCMP: MoH/Donor- dependent versus financial self-sustaining consultancy (SCMA)
- 6. SMoH: Traditional DRF scheme versus standardized DRF/DMA
- 7. SMoH: Commercial DRF/DMA versus PH-DRF/DMA
- 8. Organizational setup

- 1. Design alignment: Traditional role versus focused role based on core competency/responsibility
- 2. Entrepreneurial orientation/capability
- 1. Full-partial Donor-dependent versus complete self-reliant
- 2. Passive business entity versus dynamically-capable establishment
- 3. UCH: coverage & health financing alignment
- 1. Engage all willing HFs versus the Drive to enlist all HFs
- 2. Sell at convenient prices versus the deliberate Drive for low pricing

1. How the mandate-holding entities will be optimized

- 1. *The government entities*, NPSCMP, state-run DMAs, LMCUs and LGA LMCUs shall be transformed through defined maturity stages; the latter will provide insights into their development gaps, the level of investments required to take them to full maturity, and their capacity for generating self-sustaining revenue.
- 2. The state DMAs that are rated as "maturing" shall be categorized into two: those that have "matured" in the warehousing & distribution segments (including visibility) will be deemed ready to integrate with the public health programmes; those profiled as "matured" shall integrate without conditions.
- 3. The Programme logistics processes must be "lean" enough to fit into the level of prudency with which the Essential medicines are managed.
- 4. At personnel level, all job roles including the low and medium cadres shall be accredited.
- 5. Development Partners directly supporting governments shall be capacitated to fit into their roles without necessarily going through the maturity stages.

1. Contextual Maturity profiling of government entities

- 1. **The global maturity model profiling:** The global maturity model is focused on the performance of processes which is recognized herein as "process maturity". While considering the risks associated with establishments in the public sector space, the maturity of the establishment is considered as if separate from its performance capacity. This is referred to herein as the "entitative" maturity. Therefore, the definition of the maturity stages of the government entities shall be made of these two aspects.
 - 1. Process Maturity

 The extent to which processes are explicitly defined, managed, measured, controlled and effective. Process maturation implies that process capability is improved over time, (BPMM, 2007). It is an indication of how close a developing process is to being complete and capable of continual improvement through qualitative measures and feedback. https://www.isixsigma



Figure 07 - The global maturity model - Gartner

1. Entitative maturity

1. The extent to which the establishment, as a corporate personality, can survive, function with minimal interruptions from administrative and political influences, remain viable through managing own competitive strategies in the long term.

1. Gap filling significance of maturity stages

- 1. The maturity level is an indication of the level of investment to advance the entity to full maturity; for instance, a rudimentary DMA will need 100% investment for advancement to full maturity.
- 2. A maturing DMA has started generating revenue, part of which can be channeled into development; it can also benefit from the CRS support of the private sector with which it collaborates.

3. Maturity grades are arranged in such a way that budgets for interventions can be estimated together. For instance, if one emerging DMA needs USD\$250,000 for advancement to maturity, it can be used to estimate the needs of 10 other emerging DMAs as USD\$2,5M

1. The transformation Objectives

1. Actualizing the vision

- 1. This subsection will describe what needs to done between Jan 2021 and December 2025 to move the national supply system from "as is' the envisioned state in line with the vision and mission of the strategy document.
- 2. It will provide insights into the transformation of the verticalized, inefficient, nonprofessionalized and unsustainable supply chains into a coherent, efficient and sustainable national system.

1. Notes on Scope of objectives

- 1. The list of objectives presented hereunder are limited to the extent that the national stakeholders have reached consensus on tactical decisions and choices on the strategy 20221-2025 document. It is hoped that the current scope will be expanded as NPSCMP organizes more stakeholder meetings on other areas. The scope is also in line with the prioritization of the strategic plan elements agreed with national stakeholders on the 12th of March 2020 and given "no objection" approval by FMoH gatekeepers under the leadership of the HMH on the 16th of March 2020.
- 2. The strategy document has also noted limitations in its coverage. These will be addressed as time goes on or as urgent needs arise.
- 3. In the meantime, any investor or implementer interested in any area not yet covered by either the blueprint or strategy document should contact the National Coordinator of NPSCMP for guidance. Any action that fails to follow this procedure shall be deemed an illegitimate investment or incursion into government business.

1. List of broad Objectives

1. To create conducive environment for the takeoff of the implementation of transformation activities by December 2021

- 2. To Upgrade NPSCMP to a matured SCMA (Supply Chain Management Agency) by December 2024
- 3. To upgrade the operational and oversight capabilities of public Health Logistics units to NPSCMP standards by December 31st 2024.
- 4. To Upgrade all 36 +1 DRF schemes to Matured DMAs by December 2025
- 5. To upgrade all 36 +1 LMCUs to the Gold standard by December 2023
- 6. To strengthen the HF-based logistics and patient care delivery system by December 2024.
- 7. To strengthen cross level [FMoH-SMoH-LGA] governance by December 2023
- 8. To develop and/or upgrade Supply Chain operations and suprastructures to national "Black belt" standards by December 2023
- 9. To integrate the PHP with 36 +1 state Supply chains by December 2025
- 10. To develop, standardize and upgrade HR4SC to national "Black belt" standards by 2023
- 11. To reform and upgrade the Quality assurance management and performance monitoring and improvement system to the national "Black belt" standards by December 2024

OUTCOME OBJECTIVES – Multidisciplinary objectives

- 12. To achieve 99% stock availability of the priority products by December 2023
- 13. To achieve 1% wastage rate of all products by December 2023
- 14. To achieve 99% HF coverage in the state iSMSS supply chain services by December 2023
- 15. To achieve 100% quality of the priority products by December 2023
- 16. To lower the cost of medicines at the HF level to 15% of average commercial value by December 2025.
- 17. To achieve a reduction of cost of supply chain service to 50% of the DRF markup value by December 2025.
- 18. To achieve 99% Stock & service level visibility by December 2023

Section 4

National Supply Chain Pillar strategy leadership optimization



The system will perform optimally if supply chain standards that reflect current and contextual needs are developed, adopted and used appropriately. The organizational design and mindset of NPSCMP need to be re-aligned with the demands of the new policy thrust i.e. strategic leadership and the provision of the standards mentioned above. This is the exclusive role of NPSCMP and her associated partners notably the Academia, other R&D institutions

1. Introduction

#1

- 2. Exclusivities of NPSCMP
- NPSCMP Theory of change (ToC) 3.
- 4. The missing middle elements
- 5. Operating philosophy
- 6. Organogram guiding principles
- 7. NPSCMP Maturity profile
- 8. The Maturity grading





1. Supply Chain leadership Optimization.

2. Introducing NPSCMP

1. Who is NPSCMP?

- 1. The institution of the government of Nigeria with MANDATE to enhance the country capacity to build resilient, effective and efficient health supply chain systems in a sustainable and resilient manner.
- 1. Accomplishes this role by striving to bridge the gap between system requirements for the contribution of supply chain to specific TARGETS and the actual implementation on the ground. Therefore, NPSCMP serves as the in-country resource for filling strategic gaps for the health supply system.
- 2. Implements all the supply chain-related mandates of the Department of Food and Drug Services of the Federal Ministry of Health, Nigeria – covering *food, medicines & other health commodities, chemicals, cosmetics, medical devices and drinking water*.

Notes

- 1. The targets include UHC for medicines and other health products, medical devices; FMoH policies regarding food, chemicals, cosmetics and drinking water.
- 2. For the sake of clarity, NPSCMP does NOT implement the supply chain roles, rather, she provides the responsible programmes, divisions of the FDS, government entities, Agencies and parastatals with the required standards of supply chain practice they need to function optimally; capacitates them to adopt and use them appropriately.

1. What NPSCMP does?

1. NPSCMP manages the vision of Nigeria's health supply chain system, provides it with a functional high-level structure, operating suprastructures, and continuously advances their maturity.

- 2. Provides standards of supply chain best practices and capacitates states and other government entities, and other implementers to adopt and use them appropriately.
- 1. Ensures that processes in use meet the standards; that the services they support reach acceptable levels of quality expectations; and that they align with the following health strategic objectives and priorities of government, the Nigerian context, public health system norms, and culture and core values of the Ministry .
- 2. Ensures that the processes are pro-actively and continuously studied with the intent to enhance performance, prevent or decrease the chances of problems.(PTI)
- 3. Ensures that partnership and collaborative structures meet the standards and that they support the coordination of stakeholders to ensure unity of action and purpose in the supply chain.
- 1. By ensuring free flow of information, that stakeholders deliver their roles and from within their respective lanes, that their roles are connected and contributing directly to the health strategic objectives of the government they serve; and that undesirable trends are detected and corrected as appropriate.

1. NPSCMP and the change plan

- 1. NPSCMP will be central to driving supply chain integration efforts. A careful review of NPSCMP reveals a need to reposition for the deliverables of the integration mandate. Areas where change is required include but not limited to:
- 1. NPSCMP needs to evolve into a Health Supply Chain Agency with applicable legal backing.
- 2. The programme is to focus on managing the "big picture view" of the country's supply chain system and provide standards of supply chain practice; cede implementation to other technical stakeholders
- 3. NPSCMP mandate needs to be reviewed to reflect her role as the exclusive supply chain arm of the DFDS and thus cover all relevant aspects in future. Current coverage is at below 30% of mandate area.
- 4. The organogram needs an overhaul to be better aligned with her new role.
- NPSCMP products and services are mostly intangible and easy to connect to the whole world. Thus it should connect more with the outside world through a robust web-based office and warehouse system for her type of products and services.

1. Purpose

1. To advance NPSCMP to a matured SCMA with the requisite internal resource base (IRB) to sustain superior competitive advantages in the effective management of the "big picture" view of the national health supply system in the long term; strengthen her collaboration with other technical partners, Agencies and academia in the development of supply chain standards, and how best to use them to fulfill her commitments in the national health system by capacitating programmes and states to adopt and use them appropriately.

1. Exclusivities of NPSCMP

- 1. NPSCMP is the holder of the FMoH mandate for the supply chains of food, medicines & other health commodities, chemicals, cosmetics, medical devices and drinking water.
- 2. NPSCMP is the only establishment that is strategically positioned to observe, manage and drive the "big picture view" of the entire national supply system.
- 3. Other stakeholders deal with normal logistics i.e. the flow of data/information, finance and products (Tablets, injection, liquid preparations, equipment and devices). NPSCMP deals with the logistics of supply chain management products (SCMPs)
- 4. Firms have dedicated leadership units that drive their competitive capabilities in the business environment usually by developing and implementing winning strategies. For the necessity of uniform distribution of technical resources, monitoring and evaluation of performance, these roles are ceded to NPSCMP.
- 5. For the purpose of this initiative, NPSCMP will not be involved in core implementation of activities; rather will provide standards for implementers; create businesses for partners and other stakeholders.

1. NPSCMP Theory of change (ToC)

- 1. NPSCMP is the project champion for the initiative for which prospective sponsors will be investing millions of USD. She is technically responsible for delivering the change and accountable for the investments and outcomes to the Ministry, funders and other stakeholders.
- 2. At a tender age of three (3) NPSCMP took up and eventually delivered NSCIP #1 successfully with an established project delivery Internal Resource Base (IRB) that included a coordinationbiased mindset and organizational design that served the public health logistics systems. The new initiative which can be described as NSCIP #2 has been clarified in terms of the vision and roadmap. Now, the missing link is the corresponding project delivery IRB (mind-set & Org design) that matches the new role – i.e. configuration of a countrywide, all-encompassing national supply chain big picture view, standards that correspond to this big picture view and

the supply chain <u>change</u> management capability. NPSCMP would not be setup for success if she carries along the NSCIP #1 IRB to face NSCIP #2.



1. The missing middle elements

- 3. Mindset
- 4. incremental improvement of systems versus Transformation
- 5. Essential medicines or programmes versus UCH scope
- 6. Logistics cycle view versus leadership/standards management view
- 7. Implementer of supply chain activities <u>versus</u> Supplier of standards; QA & PTI
- 8. Full FMoH/Donor- dependent versus financial self-sustaining consultancy (SCMA)
- 9. Organizational setup
- 10. Traditional role (NSCIP 1 IRB) <u>versus</u> focused role based on core competency/responsibility (NSCIP 2 IRB)
- 11. Entrepreneurial orientation/capability
- 12. Completely free service versus free and chargeable services

- 13. Passive business entity versus dynamically-capable establishment
- 14. UCH: coverage & health financing alignment
- 15. HPs marketed at convenient prices <u>versus</u> the deliberate Drive for low pricing

1. Operating principles

1. NPSCMP functions to determine the most appropriate big picture view of the country's supply chain system (*Big picture configuration*); Based on continous risk evaluation, determines new horizons of change or improvement on established "big picture"(*Visionary drive*); the established big picture guides the development and updating of whatever systems and tools that would be needed by implementers to meet target KPIs (*Supply Chain standards*); measures are taken to increase the chances of success in transiting from subsisting practices to the new standards (*Supply chain change management*); the implementers are capacitated to adopt and use the standards appropriately for sustainable business and health outcomes (*Quality assurance*).

1. The Organogram of NPSCMP



Figure 09 – organogram of NPSCMP

2. NPSCMP Maturity profile

- 1. How does NPSCMP transit from current role and organizational set up (January 2021) to the envisage positions?
- 2. This will be managed and tracked through a maturity process. The latter has two inbuilt components – [a] the process aspect which is aligned with the global supply chain process and the [b] the "entitative" aspect which has to do with the extent to which the establishment can survive, function, grow and sustain in the long term.
- 3. The maturity monitoring tool will be developed to enable periodic (3-6 months) reassessment of developments in order to determine whether or not the entity has advanced to higher levels or retrogressed as applicable.





1. The Maturity grading

- 1. **NPSCMP Maturity**: The *extent* to which, as an establishment, NPSCMP is autonomous, backed by appropriate legislation, financially self-reliant, agile, innovative, resilient, sustainable in providing leadership and governance in the operations of public health services; while implementing *processes that are explicitly defined (standardized), measured, controlled and efficient*.
- 2. **Grading**: NPSCMP is graded as a supply chain management Agency (SCMA) under the Department of Food and Drug Services of the Federal Ministry of

Health. The maturity development is graded from 1-4. The zero level was excluded: It was assumed that all government-owned establishments are run on documented processes, whether followed or not. It also excluded level 5 because that level was not considered as attainable within the strategic planning period (2021-2025). However, any opportunity for attainment within the period will not be ignored.

- 3. Grades:
 - 1. Level 1: Rudimentary SCMA NPSCMP at the stage where she has the mandate of the Ministry, financially dependent, tied to the apron strings of the FMoH; implementing processes that are largely reactive.
 - 2. Level 2: Emerging SCMA NPSCMP at the stage where she has the mandate of the Ministry, the capacity to generate preferred SCMPs for programmes and supply chain systems (followership) at the national and state levels; recognition of Funders as the national strategic leader, has demonstrated commitment to transit to a health supply Chain management Agency (SCMA) through, leveraging strong political will, developed clear strategic direction with a dedicated management team; but still financially dependent, tied to the apron strings of the FMoH; implementing processes that are standardized but largely reactive.
 - 3. Level 3: Maturing SCMA NPSCMP that is agile, innovative, autonomous, financially self-reliant, backed by appropriate legislation; partially meeting the needs of health supply chain systems in the country in effectively managing the "big picture view" of the national system and in the provision of Supply chain standards; has recognition as the strategic leader of the national supply chain: *implements processes that are efficient, standardized, but not necessarily measured and controlled to generate outputs of consistent and acceptable quality standards*.
 - 4. Level 4: Matured SCMA NPSCMP that is agile, innovative, autonomous, financially self-reliant, backed by appropriate legislation; meeting the needs of health supply chain systems in Nigeria and the African region in the supply of SCMPs; implementing processes that are efficient, standardized, measured and controlled to generate outputs of consistent and acceptable quality standards for most segments

2. NPSCMP Web office and warehouse

1. NPSCMP should have a global outreach. Thus it should relate with the outside world through a robust web-based office and warehousing system for her products and services. Virtual visitors should be able to log in and book appointment with the National Coordinator and other key functionaries; view products and services; procure as needed based on approved transactions.



Figure 11. The proposed design of the web-based office and

Section 5



State health supply system = DRF/DMA + State LMCU + State Committee + iSMSS Committee + SSHHUPPP Attributes

The system will deliver health products sustainably at low costs and push for 100% coverage of HFs if the SMoH is empowered to manage the supply system in line with the NPSCMP's SSHHUPPP approach.

- Defining the state health supply system as iSMSS -1. Integrated and sustainable medicine supply system
- 2. Examples of ministerial obligations of the state health supply system.
- 3. The concept of iSMSS – compliant Drug Management Agency (DMA) in Nigeria's Public Health
- Brief from the Supply Chain Strategy 4





- 2. Pillar #2: Intervention to increase states ownership of the supply chain functions and their resource sustainability.
 - 1. Defining the state health supply system as iSMSS Integrated and sustainable medicine supply system
 - 1. Neither the DRF/DMA nor LMCU is the state supply system; they are the two main operational arms of it. The former is focused on the logistics of procuring health products and delivering same to the health facilities using the frame work of a sustainable business model. The latter is technically coordinated internal and externally on behalf of the SMOH by the LMCU. It is important to note the following:

- 1. That the DMA/DRF is one of the supply chain partners in the state; and thus cannot coordinate itself.
- 2. The DMA/DRF is operated within a frame work of SMoH obligations that affect all other stakeholders in the state, the FMoH, the LGA and Health facilities. The DMA/DRF is occupied by the day-to-day running of her business and logistics operations to represent the Ministry in fulfilling these obligations.
- 3. The obligations cover a wide range of stakeholders that include the Nigeria health seeker, all channel partners and other stakeholders including the DMA/DRF, FMoH, all LGAs, development partners, etc.

Figure 12- showing the basic composition and attributes of the state health supply system as iSMSS

- 1. LMCUs
- 2. DRF/DMA
- 3. State committee
- 4. iSMSS Committee



4. Foremost in the delivery of all cross-level health services is the "commitment" of the higher level of government (such as the FMoH) to the lower levels (the states) to support the latter in fulfilling their quota of contributory roles. It was from this stand point that the FMoH got committed to support states set up and operationalize LMCUs in order for states to be able to coordinate their supply chains as an indispensable contribution towards achieving national health outcomes. The states are likewise committed to supporting the LGAs. The beneficiary levels are, in this regard, obliged to play some roles in order to balance the scale of interdependence among the tiers of government. For these and more, the role of LMCU is

critical in the technical coordination of the ministerial obligations to all stakeholders within and outside the state, promoting objectivity in the discharge of that role, and above all, ensuring unity of action and purpose for the supply chain activities of the DMA/DRF and all other health projects in the states even as these are connected to health strategic objectives of the state.

- 5. In addition, with the role of LMCU in data/information management, she is most strategically positioned to provide the DMA/DRF with data analysis that relate to performance and improvement. The DRF/DMA is saddled with the day-to-day operations of the business of procuring and delivering HPs and should not be seen as coordinating a family of supply chain operators that includes itself.
- Therefore, under no circumstance should LMCU or DRF/DMA be subsumed into the other.
 Besides, the NCH approval of October 2014 that established LMCU had placed it in the office of the DPS, not necessarily in terms of physical location but in supervision.

Definition of the state health supply system

1. The definition of the state supply system goes beyond the combination of the roles of the DMA/DRF and the LMCU. It is imperative that the DMA/DRF enjoys operational autonomy for agility and speed in her day-to-day activities and business engagements; yet it must be subject to the political oversight of the body of relevant SMoH directors under the technical direction of the DPS and political oversight of the PSH or HCH. The state committee provides the platform for this body of relevant SMoH Directors to review the activities of the DMA/DRF and LMCU periodically.

Sustainability and resilience of the state supply system

- 2. The three components mentioned above, namely the DMA/DRF, LMCU and the state committee are still not sufficient to guarantee sustainability and resilience of the supply system in terms of organizational design: the other two critical requirements include [I] The fourth factor is that the state supply chain is operated under the principles of the SSHHUPPP attributes. [II] The fifth factor is an emphasis on one of the SSHHUPPP attributes i.e. the "protectively governed" the wide stakeholder oversight committee must be properly constituted to include powerful groups outside of the SMOH that cannot be easily influenced by any personal, administrative or political authority. The committee must be active as long as the supply system exists.
- 3. In conclusion, the *definition* of the state health supply system as **iSMSS** incorporates the role of the LMCU, the DRF/DMA, the state committee, the

wide stakeholder oversight committee active and properly constituted and operating under the principles of the SSHHUPPP standard. The *organization* of the state supply system can be said to be strengthened if the LMCU is active and independent (not subsumed in DMA/DRF), the DMA/DRF enjoys operational and financial autonomy (and not subsumed in the LMCU), the state committee and the wide stakeholder oversight committee are properly composed and active, and all the attributes of SSHHUPPP are complied with. The *performance* of the state supply system is reflected in the maturity of the DMA/DRF and of the LMCU.

2. Examples of ministerial obligations of the state health supply system.

- 1. Ministerial obligations include but not limited to the following:
- 1. Coordinate all the key supply chain stakeholders in the state including the DMA/DRF in ensuring unity of action and purpose, connecting all their activities to ultimately promoting patient outcomes (intermediate for supply chain) and returning quality service data for the upstream running of the supply chain.
- 2. Deliver health products to 100% of the HFs irrespective of location and cost of service (CoS).
- 3. Ensure that the state supply system is responsive to all other changing health priorities of government.
- 4. Ensure that HF facilities are capacitated to use recommended supply chain standards appropriately to handle HPs, prescribe and dispense them correctly, monitor patients for safety and return quality data in the form and substance acceptable for the upstream management of supply chain.
- 5. Ensure that health facilities are empowered to manage their DRF systems using stateprescribed guidelines and are monitored for compliance
- 6. Maintain all collaborative agreements with, and commitments to, other levels in the long term. In particular, access technical resources from the FMoH and capacitate the lower level to adopt and use same appropriately. This is an essential aspect of inter-level commitment to deliver cross-level service to Nigerians.
- 7. Support the system-based sustainable and resilience approach to quality health service, safety and coverage; preserve and protect the legacies, culture and core values of the state public service.

1. The concept of iSMSS – compliant Drug Management Agency (DMA) in Nigeria's Public Health

 The DMA is a DRF scheme that has been granted autonomy to function as an AGENCY. However, being a DMA does not automatically earn the establishment such qualities as secured for survival and functioning in the long term, growth, competitive capabilities, etc.



A transformed DMA is also not the same as an improved DMA – even if the improvement be wholesome, sectorial or

incremental. This is so because such improvement in one sector may be eroded by pervading weaknesses in another; also performance may be due to the personal initiative and drive of dedicated individuals. A transformed DMA has the features represented by the attributes of SSHHUPPP – strategic, self-reliant, holistic, HR-elevated, universal, process-governed, protectively overseen, and public health -aligned. These attributes define the NPSCMP standard of a DMA that is iSMSS compliant.

- 1. The term "Integrated and Sustainable Medicines Supply System" was coined to highlight the attributes of the business model of the government-led and managed state supply system as a whole and of its key component parts such as the Drug Management Agency (DMA) or DRF as the case may be. The attributes, in contemporary view, encapsulate the NPSCMP notion of a home-grown and transformed supply system. The term was adapted by National Supply chain stakeholders meeting in Abuja in October 2020 from lessons in the past investments of governments and Donors to transform supply chain systems.
- 2. Striking examples include the multi-million world bank funded DRF scheme of the FMoH (1993 -1998); USAID funded renovation of the Federal CMS (2012-2013), USAID and TGF-funded renovation of state CMS, DFiD-funded strengthening of DRF schemes in some states (Benue, Enugu, Kano, Jigawa, Kaduna, etc.). As a way of developing a documented definition of Public health supply chain transformation, NPSCMP hosted a wide range of national stakeholders' consultations (March to October 2020) for the purpose of establishing the root causes of successes and failures of past investments in order to guide future investments in the new policy thrust of the government. Therefore, iSMSS represents the basic framework for ensuring the success and sustaining the gains of public health supply chain transformations.

1. Purpose of the new policy thrust on DMAs/DRFs

3. To advance each of the 36+1 state supply systems to matured DMAs/LMCUs with the requisite internal resource base (IRB) and infrastructural development needed to collaborate with all technical stakeholders especially the public health programmes in the business of procuring

and delivering HPs to the last mile in defined quality standards; fulfilling her commitments to the LGAs and secondary health facilities by strengthening their capacity in the use of NPSCMP standards to promote patient outcomes and return quality primary data for the upstream.

1. Brief from the Supply Chain Strategy

- 1. The National Health Supply Chain Strategic and Implementation Plan [NHSCSP 2021-2025] identified the optimization of the increase of states ownership of the supply chain functions and their resources sustainability as a key pillar. Under this pillar, it identified 3 areas for action in improving the Nigeria supply chain system, namely:
- 1. Financing & resource mobilization [DRF/DMA identified as key here]
- 2. Private sector engagement and public private partnership
- 3. Supply chain assets management
- 1. NPSCMP has already commenced advancements in these areas prior to the blueprint workshops. The blueprint workshop sessions supplemented and added value.

1. Purpose of state-level iSMSS model

The purpose is to develop and document a national standard of "transformed" state supply chain in line with the new policy direction of national stakeholders in supply chain regarding the planned integration of the Public programmes and Essential Medicine Management. While as the public health supply chain management has been structured and standardized for many years before now, the management of Essential Medicines has witnessed a wide variety of practices across states and this has huge implications for quality of management, supply chain outcomes, coverage in line with UHC, resilience and sustainability. More importantly, FMoH recalled that governments and Donors had invested in supply chains in the past some of which succeeded while others failed. Therefore, the government, having considered the factors responsible for successes and failures, has come up with new standards of transformation i.e. SSHHUPPP which reasonably guarantees the security of future investments.

2. "Supply Chain Transformation (SCT)" as distinct from traditional incremental improvement

- 1. SCT as a paradigm shift from the traditional incremental improvement culture; is critical for instilling confidence in the capacity of supply chains to contribute meaningfully to the realization of UHC; generating huge revenue for the government; and supporting the state Health Insurance.
- 2. Thus, Supply chain transformation can be differentiated from the usual efforts we make every now and then to cause improvements in one or more segments of the supply system. It rather signifies a holistic and more permanent change in beliefs (mind-set), behavior (leadership and governance) and practices (infrastructure, processes, technologies and systems) that

ultimately lead to and sustain a corresponding permanent change in performance culture (quality service, access coverage, profit, growth, productivity, institutional capacity development). In the words of Pamela Steele Associates, "This is achieved through the modification of beliefs; targeted re-engineering of the core supply chain components and their linkages; aligning the people, processes and technology initiatives of the supply chain to the strategic objective of the Ministry to achieve UHC. Since the change is internal, fundamental, of elevated profile and interlinked with external entities, it is more likely to be permanent".

1. Overview of state-level iSMSS

1. What is iSMSS DMA

- 1. State government-led, operated and governed supply chain that has the attributes of the SSHHUPPP standard.
- The state iSMSS is the business and operational base: <u>Operated</u> under the mechanism, tenets
 & principles of a public health-aligned Drug Management Agency (DMA).
- 3. The state supply system is an ecosystem i.e. a localized group of interdependent healthrelated entities together with the operating environment that they depend on; it is managed with the system-view approach: It is c<u>oordinated</u> by the LMCU that relates with all the entities in the ecosystem: the coordination components include [a] internally with the ministry's changing health priorities and other situations, all health providers in the state with significant dealing in health products, public health programmes, etc. [b] the upper level i.e. NPSCMP and other national stakeholders and [c] lower level - LGA LMCU and other logistics coordinators in secondary and tertiary HFs. LMCU communicates updates to the system through the state management committee.
- 4. Integrates all public health supply chain functions of the state
- 5. Encourages private sector participation through outsourcing and other PPP arrangements
- 6. Governs with technical partners through the TWG; and with external stakeholders through the iSMSS committee
- 7. Functions as the *operational base* component of the national shared role structure for crosslevel services.
- 8. Committed to sustaining the collaborative structure that binds the three levels of government together for the integrated management of programme products and Essential medicines, other cross level functions.
- 9. Aligns with national and global trends through technical collaboration with NPSCMP

10. Quality target & performance of iSMSS:

- 1. Standardized and highly performing supply system; comparable to **Level 4** of the Maturity Model (i.e. Supply chain that is "Quantitatively managed" i.e. processes are measured and controlled).
- 2. Data-driven performance with progress towards 100% DRF coverage of health facilities conducive to Universal Health Coverage.
- 3. Financially self-reliant to take care of own supply chain costs including last mile deliveries, supervision, data/information management, human resource development, etc.
- 4. Each health facility enjoys autonomy in the management of their cost recovery systems but are closely supervised and monitored using agreed guidelines and structures.
- 5. Fit to accommodate the management of public health programme products in its fold in line with the new national supply chain strategy

6. Enhancements

- 1. The iSMSS **DMA** is a transformed (not improved) form of Drug Revolving Fund (DRF) scheme in almost every state; it is, in this case, enhanced by the following:-
- 1. Appropriate legislation (for long-term preservation, compliance and change to an AGENCY)
- 2. Baseline assessment and benchmarking
- 3. Standard Upgrade of the Central Medical Stores (CMS) and participating Health Facilities
- 4. Standard Last Mile delivery system
- 5. Quality, data-driven management systems
- 6. Strong governance systems
- 7. Health facility financial management autonomy
- 8. Wide stakeholder (beyond health sector) involvement
- 9. Information & data visibility regarding performance and coverage
- 10. Manpower development including Mindset change

11. Business principles & Values

1. Coverage in line with UHC (100% HF covered); reaching the unreached (hard-to-reach and indigent populations); Quality (Products & systems); Affordability; Transparency;

Accountability; Sustainability; Accessibility; Availability; Equity; Partnership & Community Participation; Efficiency; 100% Cost recovery

2. Supply chain attributes of iSMSS DMA:

State supply system that -

- 1. Offers commercially competitive services to the clients in terms of costs and convenience
- 2. Effective delivers at minimal wastages
- 3. Cost effective to run
- 4. Enjoys significant autonomy and protected from all manners of decapitalization risks.



5. Integrates all public health supply chains in the state; Integrates programme products and Essential medicines

1. National Context

1. Guiding principles

- 1. The state government health supply chain is the *operational base* of a loosely bound, rational, coherent, dynamic, globally and UHC-aligned supply chain entity that cuts across the three levels of government. It is therefore expected to harmonize and collaborate *in perpetuity* with the federal and state levels for the other critical components of public sector supply chain management. The guiding principles include but not limited to the following:
- 1. Inter-level commitment and mutual interdependence on service delivery
- 2. Harnessing core competencies at each level of government
- 3. Home grown Supply chain transformation
- 4. Securing government supply chains
- 5. Last mile logistics (or Health Facility-based logistics) services
- 6. Sustaining Partner support through Service level visibility
- 7. The "System View" & technical leadership of LMCU
- 8. One supply chain view

1. Inter-level commitment and mutual interdependence on service delivery:

1. To ensure health for all Nigerians requires a significant measure of interdependence among the levels of government. Where one level lacks the complement of capacity needed, the other levels would commit to support the filling of gaps. It was based on this principle that FMoH supported states to institute and operationalize LMCUs. As the federal needs all states to institute standards DMAs, NPSCMP has been gathering resources to support states meet up their own side of the bargain.

1. Harnessing core competencies at each level of government:

1. Incidentally, each of the tiers of government has over time focused on building specialized skills that complement the core competencies of others. For instance, as the state serves as the operational base, the FMoH provides the component of policies and guidance while the LGA level (LLMCUs) focuses on hands-support to HFs (especially the PHCs). The significance of this and (I) above is to highlight the continuous role of LMCU in sustaining the collaboration with the upper room (FMoH and partners) and lower room (LGA level).

1. Home grown Supply chain transformation:

1. The design and development of the state-level iSMSS is based on demonstrated systems that have worked in some states. The key enablers and impediments in the states have been identified; the knowledge so gained will help to configure approaches in other geo-political zones that show differing cultural values.

1. Securing government supply chains:

1. Experience with failed attempts to institutionalize effective government owned and managed supply chains have revealed some patent vulnerabilities. Toddling DMAs must be backed with legislations that guided by past experiences. Legislations will not be enough, there should be a governance committee with wide reach enough that it stretches beyond health to include civil society organizations, council of women society, labor, etc. Where necessary, it may consider to partner with the private sector in equity holding.

1. Last mile logistics (or Health Facility-based logistics) services

1. The public sector supply chain services go beyond moving products from point [A] to point [B]. Its culmination is in maximizing the contribution of product use towards patient outcomes. It also relies on the last mile to generate data in form and substance suitable for the functioning of supply chain upstream. In addition to this, the PH-DRF/DMA invests in instituting and improving the quality of last mile logistics services and patient care. This is done by strengthening the capacity of LGA LMCUs to provide hand-on support to HFs i.e. in quantifying, ordering, receiving, arranging, recording, managing and monitoring products in storage, dispensing, monitoring adverse drug events and reporting. The logistics coordinators of secondary health facilities will be used to accomplish the task of hands-on capacity building.

1. Business growth versus health coverage:

1. NPSCMP distinguishes a commercial DRF/DMA from a public sector DRF/DMA: Typically, the former serves those that come to it and may pride in amassed huge capital base; On the contrary, a PH-DRF/DMA should take the services to those that would not come to it but need

the services; PH-DRF/DMA strikes a healthy balance between coverage and financial capital building.

1. Sustaining Partner support through Service level visibility:

1. The risk of transformed state supply chains tending to shut the doors behind partners should be highlighted. It is misleading to assume 100% self-sufficiency even after transformation milestones have been reached. PH-DMAs should maintain adequate service level visibility at all times to make it easy to determine where and when to enlist the support of partners in fulfilling the mandate of supply in line with UHC. This will add to the resilience of the business since the DRF markups will not be sufficient to carter for all needed interventions including exemptions, and other projects. It should be cautioned that whenever any system stagnates by failing to move with global trends, it begins to retrograde and decay.

1. LMCU technical supply chain leadership

1. Overview of LMCU

1. LMCU is the body established by the approval of the 58th meeting of the National Council on Health (2014) to coordinate all supply chain functions of the state Ministry of Health, and to be domiciled in the office of the Director of Pharmaceutical services.



- 2. In view of the above, and the circumstances that gave rise to its formation, LMCU fits into the "regular" supply chain function of integration described by UNICEF (2016) as "the transfer of the responsibility and accountability for all elements of the supply chain to the regular supply chain". The mandate of LMCU translates to being the official representative of government and the supply chain leader; reports to the gate-keepers of the Ministry through the Director of Pharmaceutical services. However, the technical advisory to the Ministry will be through the Logistics Technical Working Group (L-TWG) a multi-stakeholder forum of all involved partners in the state that meet every quarter under the Chairmanship of the Director of Pharmaceutical Services while LMCU serves as the secretariat.
- 3. *LMCU, the Nucleus* the heart, the centre point, the nub, the core, the driving force, the core programme management Office. The nucleus maintains the integrity of the

system such that each component survives, stays within its "lane" and delivers its role in a synchronized manner; the internal functioning, survival in the external environment; then its operations as a living whole – i.e. positioning, sourcing, packaging, delivering in specified quality standards and reporting in fulfilment of the mandate for which it exists – these are all critical roles handled by LMCU. She plays the pivotal role in balancing the forces within the system, growing the system and aligning its functions



towards achieving the health objectives of the state. Typically, a business unit wants to make profit and remain viable; the "health system" strives to strike a balance between profit and social benefits, how to reach the unreached while also remaining viable.

- 4. LMCU is the hub of data communication and analysis at two levels:
- 5. For the entire system: The six (6) KPIs Stock availability, Medicine quality, cost of medicines to the patient, cost of service (CoS), wastage rate and HF coverage
- 6. For the state supply system, LMCU reports on coordination template i.e. the governance system of policies, procedures, structures and systems by which the different key players are meant to structure their work plans and synchronize their operations to align with and connect to the strategic health objectives of the SMoH. The coordination reporting monitors progress in stakeholder alignment, the regulation of their behavior to ensure they deliver quality outputs that connect to outcomes (outcome accountability) and that they work within their allocated lanes. The contribution of supply chain towards the realization of the health strategic objectives of the SMoH is the responsibility of the LMCU.

1. Organizational principles of the state supply system

1. The business of the state-level iSMSS must be Protected from undue influences that could jeopardize its corporate existence, functional integrity, capital build up or compliance with

legislative provisions, core value system, etc.: - the **iSMSS committee** should be the supreme, non-technical, governance committee and should include powerful constituencies outside the Ministry such as the Civil society, Labor, etc. in addition to other RACI stakeholders.

- 2. The state-level iSMSS is part of the national and global supply chain eco-system, should align operations with the health strategic objectives, collaborate with other health supply chains in the state (private sector, Donors and Partners), FMoH upstream and LGA downstream: Accountability for system performance should be rendered at the TWG meeting. DPS is accountable for medicines management in the state and thus heads the state Logistics TWG while LMCU (the clearing house) acts as the secretariat.
- 3. Technically, directing and guiding the business and operations of iSMSS means contributions from all the technical stakeholders such as the CMS Manager, LMCU Coordinator, heads of operational committees, zonal Managers, relevant Directors in the Ministry, ES SPHCDA, etc. The **state MGT Committee** is the apex business and operations policy decision makers headed by the DPS.
- 4. In line with "system view" thinking, there must be a dedicated body to lead and govern, <u>at</u> <u>system level</u>, all the state health supply functions i.e. [a] Providing and improving the systems used by the operators for supply chain processes; receiving and analyzing service data for the purpose of monitoring the performance of the system, monitoring the SWOT profile and driving system maturity; [b] coordinating the diversity of supply chains to ensure unity of action and purpose [c] regulating the behavior of stakeholders to ensure they deliver quality and within their allotted lanes [d] relating with all internal and external collaborators, ensuring that external obligations are met. The LMCU should be overseeing system leadership and governance of all processes.

1. The system strengthening approach for DMAs and LMCUs

1. Definition of DMA Maturity

1. The *extent* to which the corporate entity is disposed to survive, function and grow in business aligned to public health service; in a state of significant autonomy and promising perpetuity; while *implementing processes that are explicitly defined (standardized), managed, measured, controlled and efficient*.

1. Key considerations in DMA maturity

1. **Process maturity –** The maturity of its processes as described in section three (3).

- 2. **Entitative maturity** Maturity of the entity as a corporate being as distinct from the processes it employs. The former addresses its performance while the latter focuses on its being, survival and functionality with minimal disruptions.
- 3. **Status of warehousing, distribution and inventory visibility:** This aspect determines the readiness of the state DMA to integrate with PHP. The level of integration envisaged at the initial stage is within warehousing and distribution. Thus, these two aspects must be of the quality standards acceptable to the Donor.

1. DMA maturity grading

- 1. The DRF/DMA is central to states demonstrating ownership of the supply chain functions. It has also been identified as a foundation for the much-desired integration of Public Health Products [PHP] and Essential Medicines [EM] supply chain systems. A DMA/DRF must attain a certain minimum level of performance as a prerequisite for PHP-EM commodities integration at state level.
- 2. Interestingly governments in Nigeria have demonstrated the capacity to lead and govern their supply chain systems effectively and efficiently based on core competencies. Examples include Jigawa, Kano, Kaduna and Lagos states who have developed standard models of government-run, self-governed, sustainable, financially self-reliant and secured drug management systems (business and operations) in the form of DMAs for the first three states and DRF scheme for Lagos.
- 3. Four DMA maturity levels have been identified. Kindly note the following:
- 1. As government institutions, no state supply system is expected to be at Global Level [0] Maturity - where process guidelines do not exist at all and operations are person-dependent (like personal businesses).
- 1. [1] Rudimentary, [2] Emerging, [3A] Maturing but not ready to integrate, [3B] Maturing and ready to integrate, [4] Matured
- Global Level [5] Maturity is essentially the process automation of our national DMA maturity (Level 4). This level is not considered to be within the scope of our national strategy 2021-2025. Notwithstanding, its attainment will be encouraged.
- 1. In making an objective decision on the integration of PHP and EM commodities per state, the state's DRF/DMA will be assessed periodically [every 3-6 months] to determine their placement within the maturity ladder. The assessment tools and qualification yardsticks will be developed by NPSCMP and updated as applicable. Only state DMA's that meet the pre-set minimum standards [maturing DMA Ready to Integrate] will be classified as ready for integration. Only when DMA's that meet such criteria will integration actually happen. The same assessment indices also provide explicit details of gaps to be addressed per maturity

level and thus function as a systems improvement tool too. Also refer to the Operational Plan for interventions applicable at every level of maturity.

- 1. Defining the stages
- 1. Level 1: -Rudimentary DMA: Establishment is significantly influenced by ministerial bureaucracies; operations are based on traditional logistics methods while business is structured for cost recovery (DRF) not DMA; *processes are largely unpredictable and reactive*.

Guidelines may be documented but not followed and measured.

- 2. Level 2: Emerging DMA: A state that has demonstrated commitment to transform her health supply system to a DMA through, at least, indicating strong political will, funding investment and a management team but *still implementing processes that are largely unpredictable and reactive*.
- 3. Level 3A: Maturing NRTI (NOT ready to integrate): DMA that is agile, innovative, autonomous, financially self-reliant, backed by appropriate legislation, *implements processes* that are efficient, standardized but NOT yet measured and controlled enough to generate outputs of consistent and acceptable quality standards for at least the warehousing and distribution segments.
- 4. **Level 3B: Maturing RTI (Ready-to-integrate):** DMA that **is a**gile, innovative, autonomous, financially self-reliant, backed by appropriate legislation; *implements processes that are efficient, standardized, measured and controlled to generate outputs of consistent and acceptable quality standards for at least the warehousing and distribution segments.*
- 5. **Level 4: Matured DMA:** DMA that **is** agile, innovative, autonomous, financially self-reliant, backed by appropriate legislation, implementing processes that are efficient, standardized, measured and controlled to generate outputs of consistent and acceptable quality standards for most segments.

1. Applying the maturity criteria

- 1. A state that meets most of the elements in a particular stage should be considered for the next one provided the missing element is not critical for that next stage.
- 1. For instance, the element of DMA protection from undue influences: Protection is conferred by a combination of legislation as DMA and the oversight of a wide stakeholder committee. Of these two, the oversight is deemed superior provided there is at least a written document or

an edict that backs it. On the other way round, protection is deemed insufficient with a comprehensive DMA legislation that lacks the oversight enabler. A strong oversight coverage without any written and properly endorsed document or edict should not be considered as enough cover.





1. Evaluating Resource Needs & Resource Generation by GAP Width

1. Three main players have been identified as major sources of funding within the supply chain integration context. They are government, private sector and government. The level of support by each of these stakeholders is expected to be different at different stages of a state's DMA maturity. Support will prioritize three main areas of strategies [strategic framework], human resources [HR] and operations. Fig 18 provides a quick overview of the support levels per DMA Maturity level while Figures 19 -21 provide more information on the support required to transition from one level to another.



1. Transformation milestones



2. [Emerging] to [Maturing NTRI]

Figure 17 – . Required support: [Emerging] to [Maturing Not Ready-to-Integrate]



3. [Maturing NRTI] to [Maturing RTI]

Donor **Private Sector** Government Operational Strategy Development - Strategy Development - HR Development/ Training - Access to Medicines - HR Recruitment - PPP for Warehouse Mat Operational - Dev Standards - Visibility - Perf Monitoring - LMD - Research and Devt - Tech Asst for Finance Donor 50% Government 20% **Private Sector 30%**

Figure 18 - Required support: [Maturing Not Ready-to-Integrate] to [Maturing Ready-To-Integrate]

4. [Maturing RTI] to [Matured]

Figure 21. Required support: [Maturing Ready-To-Integrate] to [Matured]

Figure 19 –



2. LMCU (Maturity) SCORE CARD – guidance to review and optimization

- 2. LMCU Scorecard to be reviewed to reflect LMCU's maturity (entitative and process)
- 3. Data management role to be reviewed in line with the expanded SCIMS (supply chain management information system) role
- 4. Coordination reporting template to be reviewed as well to reflect the new policy thrust.

5. Section 6

Pillar strategy#3

Cross-level integration of supply chains

The most feasible way to make supply chain support UHC is - to institute a single stream of service per state that can be characterized in terms of standard supply chain attributes; and on which harnessed efficiencies from all entities can be consolidated, while pushing for 100% HF coverage.

- 1. What to be achieved
- 2. Brief from the supply chain strategy
- 3. The goal and benefits of Integration
- 4. Current systems for PHP and EM
- 5. Strengths and weaknesses of the current PHP and EM





1. Achieving the integration of supply chains across the three levels of government

1. What to be achieved

1. One-handled, cross-level, loosely bound, rational and coherent supply chain entity that uses each state as the operational outlet to deliver one stream of service to the Nigerian Client. The services so rendered should compete with offerings in the commercial sector in terms of quality, cost and convenience.

1. Brief from the Supply Chain Strategy

- Pillar 3 of the National Health Supply Chain Strategic and Implementation Plan [NHSCSP 2021-2025] identified the need to integrate current parallel supply chain systems in Nigeria as a major deliverable. It noted as a major gap /weakness, the existence of parallel supply chain structures for the federal-managed Public Health Program [PHP] medicines and the state managed Essential Medicines [EM]; resulting in preventable wastage of resources with parallel structures. Pillar 3 of the strategy which focuses on Supply Chain Integration highlights the need to leverage on best practices and lessons learnt from both parallel structures in designing a customized and contextual integration solution.
- 2. The key areas identified by the strategy for integration are warehousing, Last Mile Distribution [LMD] and LMIS. These are addressed by this blueprint. Understandably, the desired state of the national supply chain system at full maturity will include an integrated supply chain system for PHP and EM commodities.

1. Targeted goals and benefits of the Integration agenda

- 1. The goal of Supply Chain Integration is to improve efficiency and value for money in the management of Healthcare Products in Nigeria through the integration of warehousing, distribution and logistics management information systems for Public Health Products and Essential Medicine
- 2. Supply Chain Integration seeks to use a single coordinated Government -led supply chain system to deliver quality healthcare products for universal health coverage; while growing country ownership, reducing waste and minimizing supply chain costs. Overall, the benefits of integration include but not limited to:
 - 1. Improved government ownership at all levels
 - 2. Advancement on the sustainability journey
 - 3. Improved quality of service
 - 4. Decreased wastage leveraging on the strengths of the current EM supply chain system
 - 5. Decreased out of stock
 - 6. Elimination of proxy delivery
 - 7. Demand driven LMD
 - 8. Improved visibility, Improved data availability and quality
 - 9. Improved decision making
 - 10. Improved Stakeholders' engagement & involvement
 - 11. Improved accountability.
 - **1.** Harnessing the Strengths of current PHP and EM practices for optimization in the integrated structure

Fig 20 is a summary highlight of the strengths and weaknesses of the current parallel systems. The integrated system is expected to maximize these strengths while minimizing the weaknesses.



2. Operational process of reporting and (physical) product delivery

1. The entities

- 1. *FMoH*: NPSCMP provides the standards in form of intangible products and services. Hence, at the federal level, the logistics units of the public programmes handle the <u>logistics operations</u>. The federal-controlled <u>CMS</u> are made up of two federal-owned warehouses (strategically located in the south (Lagos) and north (Abuja). There are four zonal hubs which are being used as cross-docking hubs. The federal controls the federal tertiary Health Facilities (THFs) i.e. the Teaching Hospitals (THs) and the Federal Medical Centers (FMCs); however, these are autonomous in operation and therefore not represented as well in the figure below like NPSCMP.
- 2. SMoH: At the state level, the DMA or DRF is the management unit that leads business and logistics operations; the unit operates the <u>state CMS</u>, plans and executes distribution to health facilities either to the secondary health facilities (SHFs) i.e. the General hospitals (GHs) or to both the GHs and the Primary health care centers (PHCs) in line with what obtains in the state. The other entity at the state level is the <u>LMCU</u> that handles coordination of partners, system level resources and linkages (FMOH, SMOH & LGA).
- 3. *State zonal hubs*: A new concept is the establishment of <u>state-controlled zonal hubs</u> in each senatorial district in the state; they share the logistics and business transactions which were originally confined to the state CMS.
- 4. *LGA*: AT the LGA level are PHCs and community resources such as Pharmacies, Dispensaries, PPMVs, Community Development organizations, etc.



Figure 21 – The four (4) key storage points

1. Logistics Information management systems: targeted changes or scale up.

- 1. The targets of information management scale up include
- 1. The concept of LMIS should now change to SCIMS (Supply chain Information Management system) to reflect the expanded reporting of the other KPIs namely quality of medicines, health facility coverage, wastage rate and cost of medicines at last mile posts.
- 2. All programme data at the federal level, secondary and tertiary institutions be linked to the NHLMIS including all the federal warehouses.
- 3. That all reports in hard copy emanating from the PHC level should be computerized at the LGA LMCU or the state zonal hub office. The mega PHCs as exist in some parts of Lagos, FCT, Rivers and other states will either log into the NHLMIS platform or send their reports electronically to the LGA LMCUs and copy their State zonal hubs and state LMCUs.
- 4. That the recording and reporting tools of the high and low burden facilities be segmented to reflect the resources they require.
- 5. That user-requirements for SCIMS of NPSCMP be implemented across board as appropriate. Most importantly, that data analytics be expanded beyond resupply purposes.

- 6. NPSCMP to develop specialized dashboards to reflect the peculiarity of programmes.
- 7. NPSCMP should find or negotiate cost friendly alternatives to the Donor supported transactional software solutions used by states.
- 8. NHLMIS should be interoperated with the transactional tools used by state DMAs/DRFs. NPSCMP should develop a priority list of Essential medicines that should be reported on the NHLMIS monthly – it is critical for the purpose of enabling frame work contracts to capture the consumption of Essential Medicines nationally. NPSCMP to collaborate with the Hospital services Department of the FMoH for the purpose capturing consumption data from federal health institutions.





1. Flow of logistics information

- 1. Two categories of reports emanate from the HF [a] periodic LMIS report and [b] PoD reports.
- 2. All low volume facilities still reporting with hard copy tools submit their reports at the LGA LMCU office or their state zonal hub where the data would be computerized i.e. the EM into the DRF/DMA transactional tool and the PHP into the NHLMIS.

- 3. The EM components are processed immediately at the state zonal hubs for ordering and payment while the PHP component is accessed by, LMCU or sent to, LMCU for approval. Where the LMCU members have been assigned to the state zonal hubs, both are processed together. Where the state zonal hub is not yet operational, the low volume HF or PHC will be linked to a secondary or tertiary HF that will act as the hub.
- 4. The high volume HFs, the SHF and THFs report electronically to LMCU through the NHLMIS or other platform and approval secured to collect from the nearest state zonal hub for both EM and PHP. Where the state zonal hub is not yet operational, the DRF/DMA management will arrange for a 3pl carrier to deliver for the facility. LMCU reports to the national level.
- 5. All HFs should be able to scan delivery notes and send to the LMCU as e-PoD. This applies to all 3pl transactions. For all 1pl transactions, the state zonal hub or the SHF/THF hub secures the documents and accounts to the ambient state zonal hub or SCMS.

1. The flow of products

Introduction: As highlighted earlier, the goal of Supply Chain Integration is to improve efficiency and value for money in the management of Healthcare Products in Nigeria through the integration of warehousing, distribution and logistics management information systems for Public Health Products and Essential Medicine [including any other commodities distributed to the health facilities].

2. Modes of delivery: Lessons from years of experience indicate that low volume facilities are best supplied through 1pl arrangements. Two reasons – [a] 3pl is not suited because of the cost of product versus delivery costs [b] motivation of staff through participation is key to success [c] By using 1pl, it is possible to get the service provider at the point of collection for validation of records/reports, mentoring before release of fresh supplies [c] automatic recording of receiver's identity and endorsement. [d] A large proportion of the low volume HFs are also hard-to-reach [e] the risk to loss is lower. For other levels of delivery, 3pl is preferred: the staff in the locations are more motivated to account for stewardship and the risk of loss whenever it happens is higher on account of high volume.





- 3. *Pre-deposition:* In operationalizing this model, the deliverable in the short to medium term [2021-2025] is that the PHP commodities will be *pre-deposited* at the state warehouses separately [as is about the case currently]. HPs should be seated at the point of issue to the HFs before the issuing period. This means that the PHP from the federal stores will be delivered to the state CMS ahead of the CMS distribution, preferably 1-2 months ahead using the previous quarter report. Likewise, the state zonal hubs will be replenished ahead of the issuing period using previous quarter reports.
- 4. Bulk issuing alternative to physical cross docking: As an alternative to physical crossdocking of the delivered PHPs, the quantities of the PHP required in the state for the planned distribution period will be calculated in bulk, together with some overage (about 10%) will be delivered to the SCMS. Then the requested quantities by HFs will be drawn from the bulk supply and combined with the essential medicines component. In moving further down the pipeline, all the commodities [including the PHP and the EM commodities] will then together be distributed to supported health facilities in an integrated way.
- 5. *Cost allocation:* For ease of sharing costs of delivery, the proportion of the consignment to any HF by Donor or PR and government will be allocated either by weight or cost percentage as will be agreed upon by stakeholders. Aggregated costs will be send to the respective funders. Integration will be much easier and complete if all fund management systems of the various Donors and government are integrated at the state level.
- 6. *Tertiary Health Facilities Primary Health Facilities –* Secondary Health Facilities: In the long term, post 2025, the possibility of integrating the movement of various PHP commodities from the national warehouses to the

state warehouses is on the cards. Currently, these are independently handled by the national programs and their respective funding streams. Meaning, currently TB and HIV PHP commodities move from national to the state warehouses separately. Integrating this could be a possibility for the long term.

2. What will happen at the different levels of the integrated pipeline

1. The table below provides a quick summary of what is expected to happen at each stage of the integrated PHP-EM commodities pipeline.

Expectation at Various Levels of the Integrated Pipeline

S/N	Where		Expectation
1	National/Zonal	1.	3PL will move commodities down to the next level
2	Warehouses	2.	E-documentation of transactions [receipt and issue]
		3.	Data collection and validation
		4.	Product issuing
		5.	Mentoring
		6.	Commodity storing
		7.	Contract management
		8.	Cost sharing amongst applicable disease programs
2	SCMS / LMCU	1.	Receive stock of both PHP and EM
		2.	Product issuing
		3.	E-documentation of transactions [receipt and issue]
		4.	Data collection and validation
		5.	Product issuing
		6.	Mentoring
		7.	Commodity storing
		8.	Contract management
		9.	Cost sharing amongst applicable PHP and EM lines
		10.	Data use for decision making
		11.	Oversight and hands-on support SAC
		12.	LMCU roles will cover both PHP & EM

- 3 LGA / LLMCU 13. Oversight and hands-on support FAC
 - 14. Data collection and validation
 - 15. Data use
 - 16. Mentoring of facility personnel
 - 17. E-documentation of transactions [receipt and issue]
 - 18. LLMCU roles will cover both PHP & EM
- 4 THF / SHF 1. Service delivery
 - 2. Data collection and validation
 - 3. Data use
 - 4. Mentoring of facility and community level personnel
 - 5. E-documentation of transactions [receipt and issue]
 - 6. Receive PHP & EM via either 3PL or 1PL
- 5 PHC/HP/HC 7. Service delivery
 - 8. Data collection and validation
 - 9. Data use
 - 10. Mentoring & community level oversight
 - 11. Hard copy documentation of transactions [receipt and issue]
 - 12. Receive PHP & EM via either 3PL or 1PL

1. Key Stakeholders in Supply Chain Integration

 A broad range of stakeholders will be involved in the Supply Chain Integration journey. Starting with the donors and the federal level actors to the health facilities and community entities.

Fig 24 below provides a schematic listing of the key stakeholders and the level at which they will be prominent within the stakeholder engagement pipeline.



1. HR types

1. NPSCMP

	Level	Thematic	Activity	Min SKILL		
SL	JPPLY CHAIN LEADERSHIP @ SYSTEM-LEVEL (Logistics of non-tangible SC products)					
lm dii	plements n mensions	ew horizons of impr	rovement or advancement; governs existing			
1	NPSCMP	SC leadership	Critical thinking, "Big picture view" MGT	Expert		
SC Governance		SC Governance	Multi-level Coordination (SC)	Expert		
			System audit trailing (SCAC & FAC)			
		SC Standards	Innovation, R&D, scientific story writing	Proficient		
		Quality Assurance	Quality control	Competent		
		Performance	Monitoring and improvement, etc.	Competent		

2. Programme Logistics units

	Level	Thematic	Activity	Min Skills			
SU pro	JPPLY CHAIN LEADERSHIP @ OPERATIONAL LEVEL (Logistics of Physical SC roducts)						
Fu	lfills the HP nee	eds of host programm	es				
2	Programme	Programme Process leadership logistics units	Process measurement and Control	Proficient			
	logistics units		Oversight of lower levels on stock status	Competent			
		Stakeholder	Multi-level Coordination (SC)	Proficient			
		management	System audit trailing (SCAC & FAC)				

3. State DMA/DRF

Level	Thematic	Activity	Min Skills	
SUPPLY CHAII outcome (Phy	N LEADERSHIP @ O /sical SC products)	PERATIONAL & BUSINESS L	EVEL & Public health	
Fulfills the HF	needs of host prog	grammes		

2	DMA or DRF	Process leadership	Process measurement and Control	Proficient
			Oversight of lower levels on stock status	Competent
		Strategic leadership		Proficient
		Stakeholder	Multi-level Coordination (SC)	Proficient
		management	System audit trailing (SCAC & FAC)	

4. LMCU

	Level	Thematic	Activity	Min Skills					
SU	SUPPLY CHAIN LEADERSHIP @ OPERATIONAL LEVEL (Non Physical SC products)								
Fu	Fulfills the HP needs of host programmes								
2	LMCU	System leadership	System performance	Proficient					

Oversight of lower levels on stock status Competent

Supply Chain leadership Big picture view management Proficient

Stakeholder management Multi-level Coordination (SC) Proficient

System audit trailing (SCAC & FAC)

7.11.5 – LGA LMCU

	Level	Thematic	Activity	Min Skills					
LC	OGISTICS SUPERVISION (Physical & Non Physical SC products) Competent								
M	onitors compliance with SO	Ps, STG, etc.							
2	LGA LMCU &	Hands-on support	Monitoring with Authority to						
	HF Logistics Coordinators (2 nd /3 rd)								

2. Advocacy, communication and Consensus building

- 1. A key finding of the national strategic plan development process was that there is inadequate ownership of supply chain at various levels of government. This results in low investment by government in supply chain operations, including allocation of staff and support for operational activities for sustainability.
- 2. Considering the rather broad range of stakeholders impacted by the Supply Chain Integration, advocacy, communication and consensus building will be central to success. This will in this circumstance involve top levels of government. Four levels of consensus building is anticipated:
- 1. Between the Government of Nigeria and the donors.
 - 1. Government of Nigeria represented by FMoH and the donors.
- 2. Between FMoH and other national level players
 - 1. These includes FMoH, NPSCMP, National Programmes, PRs & IPs.
- 3. Between stakeholders at state level including community representatives
 - 1. These include SMoH, SPHCDA, DRF, DMA, LGAs, Community Representatives
- 4. Between national and state level stakeholders.

1. The government through NPSCMP will take the lead in socializing the idea and building consensus at all applicable levels. Applicable legal instruments will be used to consummate and document the consensus position.



Section 7 - Supply Chain Function Optimization

"The desire of the government of Nigeria is to establish a supply chain that operates according to international best practices. Characteristic of best practice supply chain organizations is their ability to achieve cost and service targets routinely".

- 1. Introduction
- 2. RSSH Context
- 3. Key issues in performance management
- 4. Performance evaluation Performance evaluation review and optimization



3. Supply chain function optimization

1. Introduction:

- 1. "Characteristic of best practice supply chain organizations is their ability to achieve cost and service targets routinely. The desire of the government of Nigeria is to establish a supply chain that operates according to international best practice. In this regard, the government considers the *most important elements of supply chain best practice* to be overriding commitment to patients supply chain organization". This section describes the context of supply chain functions in the Nigeria public Health supply chain space; and the approaches to optimizing them. The national supply system is system-based and thus consists of a dynamic blend of standards and visionary drives. The systems were designed to presumably deliver 100% results but these are based on assumptions that were unrealistic or unrealized. Thus, system optimization will have to rely heavily on the combination of quality assurance (QA) and performance tracking and improvement (PTI) to guide improvement drives.
- 2. Any adjustments in the system design will be informed by risks (opportunities and threats), strengths and weaknesses observed in the course of the evaluation of previous performance; also includes the proactive study of processes. In the case of the new policy thrust of government, it shall include the demands of new roles. Threats to successful delivery will be managed as known "vulnerabilities" while looking out for new ones and modification of old ones. In conclusion, supply chain function optimization shall be focused on quality assurance, performance tracking and improvement modelling.



2. New approaches

- 1. The new approaches are presented hereunder: It -
- 1. Upholds the current governance practices that uses the TWGs as the latter provides the government with an effective platform for accountability. However, it has been criticized for relying only on the "policy approach" which has been adjudged ineffective in driving performance improvement. The TWG model has been criticized for prescribing solutions without empowering the implementer to deliver change. The amendment will be to incorporate the "guidance" aspect.
- 2. Next is to incorporate KPI surveys into the routine performance system. The reason is that value gains along the supply chain path should consolidate to improve services at the last mile and should thus be measured at that level. In this manner, a KPI like stock availability survey should be conducted routinely.



Figure 25 – The two evaluation methods

- 3. The KPIs should be expanded to include Medicine quality, health facility coverage, cost of medicines and wastage rate
- 4. Performance drive will focus on system design optimization, value linkage and process governance.

1. RSSH Context

1. Nigeria's public health supply chain is system-driven; has two distinct roles: [a] System development that in turn, guides the [b] implementation aspects of procurement, distribution and usage. The former role (system development) lies within the core competency of the FMoH through NPSCMP as a supply chain management programme; the latter aspect is handled by the FMoH's logistics units of PHPs, Medical Centers (FMCs) and the tertiary Health institutions along with the states and LGAs.

2. The system development aspect is aligned with TGF concept of Resilient and Sustainable System for Health (RSSH). According to TGF, it "includes: improving procurement and supply chains; strengthening data systems and data use; building an adequate health workforce; strengthening community responses and systems; and promoting more integrated service delivery so people can receive comprehensive care throughout their lives"

- 3. Central to RSSH is "managing supply chain change" i.e. how to increase the chances of success on the path to supply chain excellence. Supply chain projects are known to be very risky on account of its cross-functional and multi-stakeholder nature. The public sector supply chain is made even more risky by its significant funding through Donors and the associated reliance on stakeholder consensus. Unfortunately, these stakeholders also harbor self-interests that influence their behavior regarding what they expect to gain or fear to lose in every grain of decision in the supply chain. Another main source of risks is the participation of implementers of varying levels of motivation and skill.
- 4. "RSSH relies on data. Quality health data is what allows countries to design and deliver the right health services to the right people at the right time. Data allows resources to be spent in the most efficient and effective way".
- 5. Therefore, supply chain function optimization consists in the action of leadership to use data guidance to optimize design and govern implementation based on lessons. The latter includes the governance of activities to ensure they achieve outcomes and the linkage of values from different functional areas that contribute to values consolidating at the last mile



6. In RSSH, the target is not necessarily outputs, rather outcomes even as Donors & funders pay for outcomes (change), not outputs.

Figu	ire 26 –				

7. In a multi-level, complex and significantly verticalized system, localized improvements may not link up with the other components. Besides, capacities that are transmitted across boundaries may get attenuated before they reach the last mile. Therefore, linking of values should be seen from one entity to another and how it consolidates ultimately at the last mile.

2. Key issues in performance management

Note: Tactical plans do not work without taking the under-listed issues on board

 The categories of risks identified by the USA military as VUCA (volatile, uncertain, complex and ambiguous) are all features of change management in the public health especially in a developing economy. They manifest through different means that include but not limited to the under listed.

1. **Design optimization**

- 1. One of the potent means of supporting performance optimization is through supply chain design. NPSCMP should pursue the modification of design of the supply system by focusing on the following:
- 1. Harmonization of roles among the logistics units of PHPs, state LMCUs and DMA logistics operators;
- 2. Supply Chain segmentation
- 3. Coordination of logistics activities in secondary and tertiary health facilities,
- 4. Harmonization of roles among state LMCU, LGA LMCU and state zonal hubs

5. Review of the hierarchy of TWG reporting. In subsisting systems, reporting follows the programme line. Thematic TWGs should be abolished. All TWGs should report to NPSCMP at the National level, LMCU and LGA LMCUs at the state and LGA levels respectively. Then all three should report to a supra cross-level TWG to be introduced.

1. Private sector - Performance enhancing techniques -

- 1. The Private sector is the custodian of performance enhancing techniques because of the relentless drive of the sector for maximizing profit and business viability. The public sector can tap from the rich resources of the private sector. Thus the following areas shall be exploited with lessons from the public sector context:
- Measures to achieve lean inventory, comply with max-min settings and nearly eliminate wastages especially in last mile distribution operations - [a] Max-min Inventory control tower management systems which include (I) the Maximum Inventory validation tool, [II) Total inventory control tower & (III) Months of Shelf life protection (MoSP) stock distribution policy (IV) Other performance enhancing techniques should be explored, if found valuable, should be properly adapted.
- 2. Structured Supply chain performance diagnosis: This entails the adaptation of the "SCOR model" for the diagnosis of the operational aspects of the supply chain system that it is suited for i.e. HP delivery to the last mile; then innovatively extend this function to the other three (3) areas namely (I) leadership as defined for NPSCMP and the state health supply system (II) Development and management of standards (for NPSCMP); entrepreneurship and health facility standards (for the state health supply system) (III) Health facility-based logistics and patient care as it contributes to intermediate patient outcomes & quality primary data returns including accountability.
- 3. *Early warning systems (EWS) appropriate to each level:* (I) Should be simplified for PHCs and linked to appropriate decisions; (II) stock levels should be descriptive as well as numerically presented; (III) Pipeline at national level should be visible over a 12-month range; (IV) alerts on expected shipments must include the right quantities and arrival dates calculated to prevent stock outs; (V) systems for triangulation of logistics data and HMIS data must be built into the LMIS reported progressively upstream from the HF level to the state or national as the case may be. (VI) Near Expiry management system with alerts and action decisions must also be built into the operating system.
 - 1. Conflicts:

- 1. To implement change in the public health system, government managers face challenges associated with stakeholders and their interests. The latter could easily be classified as perceived gainers, perceived losers and opportunists in relation to their dispositions towards actions and decisions in the system. Of the three categories, the commonest and most difficult to pre-empt is the opportunistic group. The project, NSCIP was shut down on the day of its kick –off by the same stakeholders that had, for 10 months deliberated and willingly agreed on its implementation. Incidentally, stakeholders are specially empowered when making decisions in projects funded by the International Development Projects (IDPs) for obvious reasons, the wider the composition of the stakeholder team, the more reliable will the decision be. Unfortunately, the stakeholders have both voice and interest.
- 2. Hence, for years, Technical stakeholders in the national supply system had learnt that it required about 70% level of effort to effectively coordinate stakeholders in order to manage change in the system compared to about 20% needed to coordinate at technical level; and that success depended in the use of institutional memory of system dynamics to pre-empt and manage these risks which are often classified as "unusual risks".

1. The paradox of increased investments:

1. The biggest challenge to technical delivery is the common observation that successfully implemented activities do end up at the output level without translating to desired outcomes (change). It is a paradox because while as activities and spending kept increasing, little or nothing changed. NPSCMP had once labelled this phenomenon as "motion without displacement" signifying that as much as things seemed to change, they actually remained the same. Unfortunately, Donors and funders pay for outcomes (change) not outputs. The areas most affected by this phenomenon are those project products that are capacity-based as opposed to definitely shaped project products like building construction, equipment, software and devices. There are other varied causes that can hardly be put together under categories. NPSCMP had devised many techniques for combating this paradox in order to achieve the "velocity of escape" needed to propel activities beyond the output trap.

1. The theory of Vulnerabilities:

1. Another observation aligned with the above (paradox) is the fact that many types of activities exhibit strong tendencies to miss their targeted ends unless conscious and matching efforts are made to bind them to succeed. For instance, Donors have practically "outlawed" trainings because of wasted investments even though trainings were perfectly organized as planned and approved. Another obvious example is "Supervisory visits" – they more often fail to achieve any change despite being perfectly implemented. Effective vulnerability listing and management are key to implementing change in RSSH. NPSCMP has maintained and reviewed list of vulnerabilities since July 2016 from experience implementing NSCIP.

1. Motivation:

- 1. Another source of complexity in delivering change is the fact that the public health is implemented by HR from differing levels of skills and motivation. According to PICKnPACK NTBLCP, "the <u>will</u> to implement the health system makes the difference between using very little to achieve so much and using so much to achieve very little". The more peripheral the supply level is, the lower motivated the HR to implement the system as designed. Additionally, the lower the motivation level, the less predictable is the HR. In consequence, plans and actions implemented without due consideration for "notional errors and assumptions" miss targets.
- 1. The private sector has been acclaimed to be efficient especially in operational areas. However, it must be noted that the private sector is motivated solely by the prospect of profit, continued patronage, business viability and the necessity to avoid litigations. They are essentially output driven essentially aimed at fulfilling terms of contracts and getting paid. Unfortunately, when implemented as written, most contract terms do fail in delivering the goods unless open to adjustments. One of the effective means of combating the challenge is the version of contract management model developed by NPSCMP and named the "superUser capability". Developed in November 2015, it manages the gap between contract terms and tactical requirements for product delivery.

1. System complexity:

1. The national supply chain system is made of up of several sub systems that report to their respective governing structures. There are two categories of risks: [a] Often, the value adds by these subsystems are not linked serially to consolidate gains at the last mile and may thus be lost in being self-serving. [b] The value may be progressively attenuated as the capacity is transmitted from one point to the other. For instance, a ToT resource that started at the national level may be losing value as it is handed downwards such that before it reaches the HF level, only a small fraction of the original stuff will be retained. This is called "value attenuation" in NPSCMP. Supply chain audit capability (SCAC) was designed to combat it.

1. System biases:

 Some of the things to be corrected in the new strategic thrust of government are processes biased by interest. For instance, Traditional feedback was the chief performance enhancing technique before the heavy influx of foreign donations. Gradually, it was weakened through neglect as attention was shifted to developing "success stories" ostensibly to impress Funders. This bedrock of service delivery was unwittingly weakened when HF reports were analyzed for the sake of resupplies rather than to assess performance and provide feedback. NPSCMP had developed the facility Audit Capability (FAC) mechanism to refocus attention on feedback that strengthen the last mile but poor funding motivation had not given it the attention it deserves. Other biases should be reviewed and corrected.



Annexure #1

The Journey into supply chain transformation – Historical Timelines

1. Early Ministerial interventions

- Despite the efforts of development partners to support the logistics aspects of the programmatic management of public health diseases and other health conditions, weaknesses in the supply system peaked in 2010-2011 with increased investments.
- Most of the support was centered on processes with little or no trace of central coordination. However, the Ministry held programme-wide TWG meetings between 2008 and 2012. Logistics was featured as component reports by National Coordinators of the Health programmes
- 3. There were heavy losses due to expiries coupled with alarming reports of stock outs and leakages. In June 2011, the Ministry's TMC (Technical Management Committee) raised issues of critical concerns on the supply system and mandated the Department of Food and Drugs to find what they called "remedial steps" i.e. alluding to a belief that things went wrong somewhere and at some point in the support structure.
- 4. In the meantime, most of the logistics activities of the Ministry were operated from the Federal Central Medical stores (FCMS). The latter managed all the programmatic functions of HF reporting, distribution planning, distribution and feedback of HIV/AIDS products from 2001 to about 2009 when those roles were collected from the FCMS by the NASCP logistics unit and handed over to the USAID project JSI/SCMS. The latter had, before then, restricted most of her support to capacity development i.e. - system design, SOPs and trainings from 2004. The take over from the FCMS occurred when TGF funding was extended to the JSI/SCMS to also support the FDS with reporting and distribution management. With the incident, FCMS fell back to supporting TB and Malaria programmes in order to retain ownership and mitigate threats to the annexation of the FCMS itself.
- 5. By July 2011, issues of inefficiencies escalated further, the held the 9-9 meeting (FDS TMC emergency meeting of the 9th of September 2011) and made resolutions to confront the system challenges; but not much could be done due to lack of development support.
- 6. However, in July 2012, for reasons that have more to do with resolving succession conflicts in one of the programmes than resolving the burning supply chain issues, a unit (Product supply chain management unit) was created in the FDS by the Ministry and charged with coordinating

the logistics activities of the FMoH. In March, 2015, it got approval to upgrade to national programme in order to be positioned to implement NSCIP that had already been commissioned in Geneva 9-13th December 2014 by HSMH and TGF headship and other partner representatives.

1. Moves to sensitive states to own and coordinate their supply chains

- The Axios Foundation was the first to be confronted with the necessity of setting up an integrated supply chain unit in the states but could not garner the support it needed to establish a foothold. Her SIDHAS project (Strengthening Integrated Delivery of HIV/AIDS Services - 2011-2014) was launched in the South South states of Akwa Ibom, Cross River, Rivers and Edo.
- 2. By 2013, TGF and stakeholders had started brainstorming on the next Grant (2015-2017); planned to spent about USD\$1B and feared that about half of that fund would go into procurement and supply management while the system was too weak to implement and account for it. Other Donors also planned huge investments.
- 3. The first workshop/meeting to discuss the coordination and ownership of supply chain at the state level was organized by NPSCMP through NACA as PR to TGF in Lagos at Destiny Hotels (9-12th April 2014) for the six (6) South West states. Other regional meetings took place afterwards with communiques seeking for the establishment of LMCUs. By October 2014, the NCH meeting in Calabar approved LMCU for all states.
- 4. However, between the period of regional sensitization workshops (April 2014) and the inception of NSCIP operation for states (November 2015), some development partners went ahead of NPSCMP to setup some structures that bore the resemblances of the LMCU concept. Though they deviated significantly from the NPSCMP model, these mutant LMCU concepts, helped to socialize the idea of supply chain in the states and provided some office equipment; but they failed to communicate and implement the core issues of ownership and coordination by state-owned staff. Nonetheless, the first model of LMCU developed with NPSCMP was the CHAI-supported version and was piloted in Nasarawa state about June 2015 before NSCIP takeoff.
- 5. NSCIP corrected all the deviant modes in affected states on inception of state operations from November 2015 and went further to inaugurate LMCUs in all 774 LGAs.

1. NSCIP, the projectized multi-stakeholder coalition and intervention

1. At the first national stakeholders' workshop to discuss NSCIP held in Abuja on the 7th of May 2014, it was agreed that the project would be implemented in two phases: The first was supposed to be a learning intervention that had limited the scope to the federal level and 14 states and for three years (January 2015-December 2017) aligned with TGF Grant period. The second phase was to cover the remaining 23 states, the 774 LGAs and handle the remaining

aspects. The first year, September 2015 to September 2016) was technically led by TGF consultants.

- 2. However, NPSCMP speedily took over ownership of the technical drive just at the inception of the 2nd year of the project; used the opportunity to scale up to the remaining 23 states and launched LMCUs in all 774 LGAs using same budget and within same timelines. It wasn't without a few sacrifices because funding for vehicles promised the 14 pilot states was used for the benefit of the other states.
- 3. In any case, the project successfully institutionalized foundational structures and other prerequisites that would be needed for the phase 2 assumed to be NSCIP #2. The next phase would focus on the cross-level integration of programme products with Essential Medicines in line with UHC. Operationally NSCIP 1 ended on the 31st of December 2017.
- 4. Success, they say, breeds troubles. Controversies regarding its achievements and spurious claims to its legacies by some parties; some other clandestine but powerful movement to suppress an emerging evidence of the ability of a government entity to deliver a supply chain project; all culminated in the decision of TGF to engage Delloite consulting firm to conduct a review of its achievements for the purpose of securing a globally creditable evaluation. The USD\$500,000-valued review report by Delloite was adopted at the all-Donors' workshop in Sheraton Hotel on the 5th of December 2018 and unanimously acclaimed to be a significant success worth the investment, after Delloite presentation of the report and review by foreign-based Donor participants.
- 5. Anticipating the next phase of NSCIP, NPSCMP proposed the structure below to further the cross-level integration.

1. Planning the second tranche of transformations (April 2019 – December 2020)

1. Initiation of NSCIP phase 2 discussions

1. The national Stakeholders brainstorming workshop on the next tranche of reform of the national supply system commenced at the Operational Review Workshop @ Stone Henge Hotel Abuja 4-5th April 2019. The participants included all the DPSs and LMCU coordinators from the 36 +1 states of the federation at TGF-supported event. The discussion was centre on what the future "big picture view" would be and what would be its functional basis. NPSCMP had proposed the structure already. Stakeholders agreed (with only one decent) to use the cost-recovery mechanism of the DRF as basis to build financially self-sustaining supply chain systems that would align with UHC. The stakeholders thereupon mandated NPSCMP to articulate a frame work document that shows how the new positioning of the supply chain system that would address all the present and future concerns of management stakeholders without introducing new problems.

2. The Frame work for the development of the 2021-2025 national strategy

1. The 147 –slide document in PowerPoint format was developed solely by NPSCMP and presented for stakeholders' review and adoption in October 2019. It articulated the vision, mission, principles and other essentials that would guide the development of the strategy proper.



2. The strategy document

1. The development was started in November 2019 to elaborate on the key features of the change drive such the models for warehousing networks, Last mile delivery system, etc. The completed document was approved in October 2020. Before that and while the review process was ongoing, the provisions were being used for investments. To ensure that those investments would receive the approval of the Ministry, the key features for investments were prioritized and presented for no objection by the Ministry.

2. Prioritization of interventions

1. *The Prioritization* workshop took place in Nairobi Kenya in late February 2020 sponsored by TGF. NPSCMP sent her presentation. The key features were presented to technical stakeholders on the 12th of March 2020 at Jade Hotel Abuja; and to the HMH, HSMH, PSH & other Ministry Gate-keepers on the 16th of March 2020 on the 6th floor, Secretariat complex Abuja. No objection was raised on the eight (8) chosen priority areas.



2. Interpreting the National supply chain strategy 20221-2025

- 1. Having secured the endorsement of the strategy document in October 2020, it became necessary to articulate and document the blueprint and operational plan for its implementation. The aim is to consolidate and document the principles and choices of national stakeholders on its implementation from discussions in dozens of workshops that took place from October 2019 to November 2020.
- 2. The output of the exercise will be reviewed by stakeholders before presenting to the HMH for endorsement. It is hoped that any investment in the national supply chain will be based on the blueprint and operational guidance.