GHANA HEALTH SUPPLY CHAIN MASTER PLAN (2025-2029)

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THE GLOBAL FUND

USAID GLOBAL HEALTH SUPPLY CHAIN PROGRAM
Procurement and Supply Management

CONTENTS

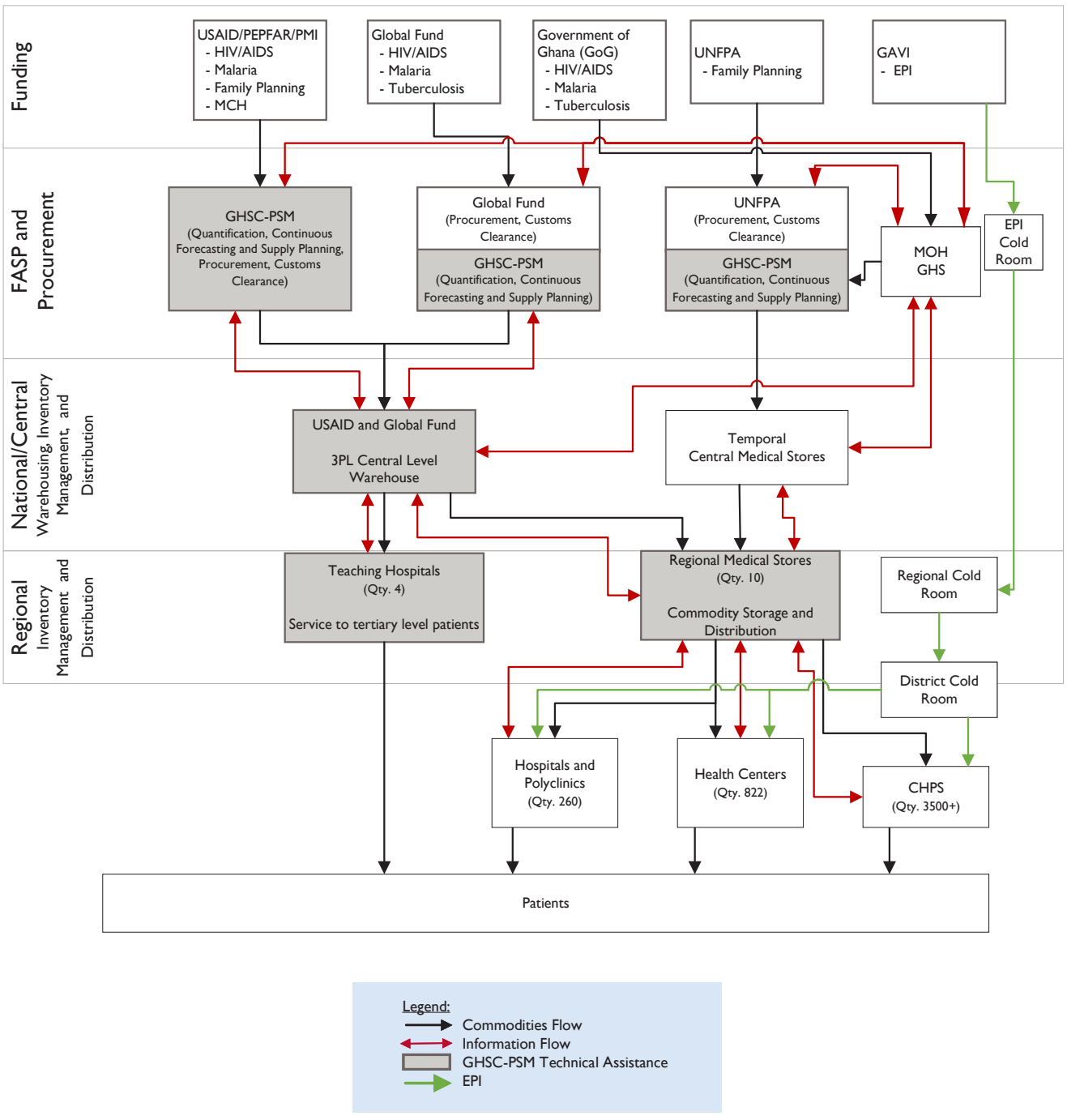
ACRONYMS

ABC	-	Activity-Based Costing
CARISCA	-	Centre for Applied Research and Innovation in Supply Chain-Africa
CHAG	-	Christian Health Association of Ghana
CHPS	-	Community-Based Health Planning and Services
CMS	-	Central Medical Stores
CPD	-	Continuing Professional Development
DRF	-	Drug Revolving Fund
EPA	-	Environmental Protection Agency
E-LMIS	-	Electronic Logistics Management Information System
FASP	-	Forecasting and Supply Planning
FDA	-	Food and Drugs Authority
GHANEPS	-	Ghana Electronic Procurement System
GhiLMIS	-	Ghana Integrated Logistics Management Information System
GHS	-	Ghana Health Service
GHSC-PSM	-	USAID Global Health Supply Chain Program – Procurement and Supply Management
GOG	-	Government of Ghana
GWP	-	Good Warehousing Practices
GSDP	-	Good Storage and Distribution Practices
IHS	-	Imperial Health Sciences
KNUST	-	Kwame Nkrumah University of Science and Technology
KPI	-	Key Performance Indicator
LMIS	-	Logistics Management Information System
LMU	-	Logistics Management Unit

MOH	-	Ministry of Health
NEML	-	National Essential Medicines List
NGO	-	Non-Governmental Organisation
NHIA	-	National Health Insurance Authority
NHIS	-	National Health Insurance Scheme
NSCA	-	National Supply Chain Assessment
PPP	-	Public-Private Partnership
P&SC	-	Procurement & Supply Chain
PV	-	Pharmacovigilance
RHD	-	Regional Health Directorate
RMS	-	Regional Medical Stores
SC	-	Supply Chain
SCM	-	Supply Chain Management
SCMA	-	Supply Chain Management Agency
SCMP	-	Supply Chain Master Plan
SDP	-	Service Delivery Point
SOP	-	Standard Operating Procedures
STG	-	Standard Treatment Guidelines
TCMS	-	Temporary Central Medical Stores
TH	-	Teaching Hospital
TWG	-	Technical Working Group
UAV	-	Unmanned Aerial Vehicle
UHC	-	Universal Health Coverage
UNFPA	-	United Nations Population Fund
USAID	-	United States Agency for International Development
WHO	-	World Health Organisation

Ghana Supply Chain System

Commodities and Information Flow



FOREWORD

Access to quality medicines and medical supplies is critical to achieving Universal Health Coverage (UHC) and improving health outcomes for all Ghanaians. The Ministry of Health (MOH) recognises that a resilient and responsive health supply chain is fundamental to any efficient healthcare system. The revised Supply Chain Master Plan (SCMP) 2025-2029 represents our renewed commitment to ensuring the uninterrupted availability of essential health commodities at the last mile while also addressing unforeseen health emergencies and disruptions.

The 2015-2020 SCMP, developed in 2015, systematically addressed challenges in Ghana's public health SC, outlined objectives for the future, and proposed critical interventions. Over its implementation period, notable achievements were realized, including progress in developing national policies, guidelines, and standard operating procedures (SOPs); scheduled last mile deliveries (LMD) to service delivery points (SDPs); and the design and rollout of the Ghana Integrated Logistics Management Information System (GhiLMIS).

Following the expiration of the SCMP 2015-2020, the Ministry of Health (MOH), with support from its agencies and partners, developed the SCMP 2021-2025. This plan was intended to build on the successes of its predecessor. However, the timeline for its development was delayed by the COVID-19 pandemic, resulting in its finalization in 2022. Implementation of key activities began in 2023, but many strategic interventions and activities are still pending.

As a result, the SCMP 2021-2025 has been revised, and its implementation timeline extended to 2029. The revised plan, SCMP 2025-2029, aims to ensure the successful completion of critical tasks while enhancing the supply chain's adaptability and responsiveness to emerging challenges.

With the commitment and support from the Government of Ghana (GOG), its SC partners, and other stakeholders, we can significantly improve access to essential medicines and other healthcare services for all Ghanaians. I, therefore, urge all involved in implementing this plan to fully dedicate themselves to this effort over the next five years.

The MOH will remain committed to ensuring the successful implementation of this plan to achieve our goals of ensuring equitable access to quality health services for all our citizens.

DR. BERNARD OKOE-BOYE
MINISTER OF HEALTH, REPUBLIC OF GHANA

ACKNOWLEDGMENT

The MOH sincerely thanks all those who participated in the planning, execution, and revision of the Supply Chain Master Plan (SCMP).

Special thanks to the Minister of Health, Dr. Bernard Okoe-Boye and the Director General, Ghana Health Service, Dr. Patrick Kuma-Aboagye for their leadership role and support during the development of the SCMP.

We would also like to thank USAID for funding and providing technical oversight for the review of the SCMP.

Finally, we acknowledge the Technical Working Group (TWG) for providing vital leadership and guidance for a successful exercise and the GHSC-PSM staff who provided insights, data, and overall technical assistance that were critical to the revision of the plan.

TECHNICAL WORKING GROUP

No.	Name	Organisation	Designation
1.	Edward Bright Agyekum	Procurement and Supply Chain Directorate, MOH	Chairman
2.	Evans Ofori Twum	Procurement and Supply Chain Directorate, MOH	Member
3.	Araba Kudiabor	Supplies, Stores and Drug Management, GHS	Member
4.	Bernard Asamany	Supplies, Stores and Drug Management, GHS	Member
5.	Catherine Armah	Supplies, Stores and Drug Management, GHS	Member
6.	Felicity A. Commey	Korle-Bu Teaching Hospital/Procurement Unit	Member
7.	Claudette Diogo	Family Health Division, GHS	Member
8.	Rita Owusu-Donkor	Ashanti Regional Health Directorate, GHS	Member
9.	Micah Asare-Bediako	Ashanti Regional Health Directorate, GHS	Member
10.	Solomon Obiri	Eastern Regional Health Directorate, GHS	Member
11.	Daniel Kwaku Apawu	Northern Regional Health Directorate, GHS	Member
12.	Edna Acheampong Nai	Office of the Director General, GHS	Member
13.	Philip Aboyinga	Expanded Programme on Immunization, GHS	Member

No.	Name	Organisation	Designation
14.	Kwadwo Koduah Owusu	National AIDS and STI Control Programme, GHS	Member
15.	Joel Jeffrey Idun-Acquah	National Malaria Elimination Programme, GHS	Member
16.	Susuana Bruce	National Tuberculosis Programme, GHS	Member
17.	Adah Allotey-Pappoe	Food and Drugs Authority	Member
18.	Vigil Edward Prah-Ashun	Food and Drugs Authority	Member
19.	Alex Kpakpo Moffatt	Policy Planning Monitoring and Evaluation Directorate, MOH	Member
20..	John Manso Frimpong	KNUST	Member
21	Abdul Samed Muntaka	KNUST	Member
22.	Angela Ackon	WHO	Member
23.	Damaris Forson	USAID	Member
24.	Olivia Amoo-Lamptey	USAID	Member
25.	Dela Gle	UNFPA	Member
26.	Kwasi Addai-Donkor	Systems for Development	Member
27.	Adolf Antwi	Systems for Development	Member
28.	Innocent Ibegbunam	GHSC-PSM	Member
29.	Daniel Oswald Owusu-Afranie	GHSC-PSM	Member
30.	Emmanuel Sefah Boakye-Yiadom	GHSC-PSM	Member
31	Emmanuel Menyah	GHSC-PSM	Member
32	Millicent Appiah	GHSC-PSM	Member
33	Tony Patrick Takyi	GHSC-PSM	Member
34	Irene Andoh	GHSC-PSM	Member
35	Viktor Kwesi Playe	GHSC-PSM	Member
36	Angela Odoi	GHSC-PSM	Member
37	Patience Ama Owusu	GHSC-PSM	Member
38	Emmanuel Niboi Okantey	GHSC-PSM	Member
39	Andrews Ebo Mensah	GHSC-PSM	Member

EXECUTIVE SUMMARY

The SCMP 2025-2029 retains the essence and structure of the SCMP 2021-2025 which was developed to build on the successes of the SCMP 2015-2020, address ongoing issues, and tackle new and emerging challenges. It continues to align with the Ghana Universal Health Coverage (UHC) vision, focusing on functional areas organized by the 11 technical areas of the National Supply Chain Assessment and guided by four transformational pillars: coordination and collaboration, innovation, transparency, and sustainability.

Each "focus functional area" section presents a summary overview that recaps the key findings of the NSCA maturity assessment, describes progress to date and highlights ongoing challenges. Priorities for each functional area are then aligned with the SCMP's transformational pillars to ensure that these key themes are infused throughout all strategies and interventions. The most critical component of each section is the competency-based improvement pathway. These "pathways" are competency-based as they were built in direct response to the competency assessment of the NSCA. They detail the current state, the envisioned future state for 2029, and the strategic pathway to achieve this future state. This pathway is then presented in detail through strategic interventions paired with annual performance targets. The Supply Chain Master Plan encompasses a total of forty-seven (47) strategic interventions, each linked to annual performance targets across the 11 technical areas and a dedicated section on private sector engagement.

The following provides a quick overview of the strategy for each technical area.

STRATEGIC PLANNING AND MANAGEMENT

This SCMP is an opportunity to re-examine all levels of the SC system and to build political leadership that supports reform. Moving forward, in the absence of a Supply Chain Management Agency, it will be necessary to harmonise SC responsibilities and to create complementarity in roles and responsibilities among the MOH and agencies. The goal is a well-coordinated ecosystem of SC actors, including a robust market of private sector entities that is stewarded by the GOG. An overarching priority remains to ensure that all necessary SC functions are fully covered; those existing entities are sufficiently empowered; and that the respective roles, responsibilities, and relationships among actors are clearly and universally understood. The SCMP will promote coordinated leadership and governance across MOH and its agencies; reflected in clear guidance regarding functional roles and responsibilities, disseminated to all regions.

POLICY AND GOVERNANCE

The SCMP will lay the framework to implement strong accountability and governance structures to hold agencies and the private sector accountable for performance. More inclusive policies and stronger governance structures will promote sustainability by bringing in more local actors (private sector, civil society) and inform proper resource allocation. Enhanced coordination according to clear policy and governance structures will strengthen existing linkages. The SCMP strategy will focus on decentralising governance of vertical SCs to the regions whilst transitioning the central level to conduct intensive supportive supervision in which regions are held accountable based on performance scorecards. It will enhance the supportive supervision role of the central level over the regions through the implementation of a performance management framework.

HUMAN RESOURCES

Opportunities for SC-specific capacity building exist, as the presence of dedicated and professionally trained SC personnel is most significant at the highest levels of the public health system and lacking at lower levels. Capacity development must occur at multiple levels (e.g., individual, organisational, societal) and across sectors (public, commercial, civil society) to be successful. The SCMP will aim to standardise SC capacity development at all levels and introduce a Continuing Professional Development program for SC personnel. Implementation of the SCMP will focus on professionalisation and more innovative and sustainable methods of workforce development.

FINANCIAL SUSTAINABILITY

To develop a well-coordinated financial system that supports the public health system, implementation of the SCMP will include a mapping exercise to understand the flow of money and tracking of expenditures at each level. To attain financial sustainability of SC at all levels, the MOH must focus on framework contracting, PPPs, NHIA reform, and the respective linkages with SC. Drug Revolving Fund (DRF) operated in the regions should be replicated at the district, SDP, and sub-district levels. The MOH must support the development of a dedicated/standalone DRF Guidelines to promote efficiency and accountability in the management of DRF at all levels of the supply chain. The SCMP will focus on interventions to settle outstanding debts and establish and enforce future payment deadlines and support the design of a dedicated Financial Sustainability Plan to guide this critical area.

FORECASTING AND SUPPLY PLANNING

Sustained, high-performing FASP is dependent on the tools and staff capacity. The SCMP proposes a gradual shift to using common FASP software and data inputs on GhiLMIS consumption across all disease areas, including essential medicines, to attain a coordinated FASP program. This will include standardisation of SOPs across programmatic areas and facility levels, and provision of capacity building to enable government-led quantification at central and regional levels.

PROCUREMENT AND CUSTOMS CLEARANCE

To achieve the desired future procurement state, the SCMP will promote e-procurement at all levels to enhance transparency; enhance the capacity of procurement entities (staff at all levels) in procurement best practices, develop mechanisms that promote regular procurement monitoring at all levels, including vendor performance; enforce strict adherence to prevailing procurement laws and guidelines to improve transparency; and improve customs processes to reduce clearance time.

WAREHOUSING AND STORAGE

To improve adherence to GWP, the MOH will invest in physical and human capacity to bring all warehouses at central, regional, and SDP levels to Ghana FDA standards and ensure SOPs and other tools are prepared to international practice levels and implemented by well-trained commodity managers. The plan will implement strategies that enhance labour efficiency and improve the management capacity of all warehouses. In addition, it will create an enabling environment for a standardised, modern warehousing infrastructure that promotes good warehousing practices.

DISTRIBUTION

Improvements in distribution will be driven by an optimised distribution strategy paired with a detailed sustainability plan to reach a state in which commodity distribution plans are structured, implemented, and monitored to achieve regular on-time distribution to SDPs. The MOH will leverage on existing experiences in-country and coordinate the development of a broad-based strategy -- through comprehensive consultative processes -- to provide clear regulatory guidance and operational procedures for the use of unmanned aerial vehicles (UAVs) for transportation of medical suppliers.

LOGISTICS MANAGEMENT INFORMATION SYSTEM

Significant progress has been made to date on the rollout of the GhiLMIS which will be built on to create an active culture of data quality and use. To realise a fully mature, secure eLMIS that facilitates end-to-end SC visibility through interoperability with other systems, interventions of the SCMP will establish a supply chain data governance structure and design and implement a sustainable performance-based incentive mechanism for SC data generation and use, among other efforts.

QUALITY AND PHARMACOVIGILANCE

Through the implementation of the SCMP, the MOH will improve patient care and safety through the implementation of the pharmaceutical traceability strategy leveraging GS1 standards. In addition, the MOH collaborating with the FDA and its agencies will ensure the CMS, RMSs and teaching hospital warehouses obtain and maintain FDA accreditation for good storage and distribution practices.

HEALTHCARE WASTE MANAGEMENT

Through the SCMP, we will review and disseminate policies and SOPs on healthcare waste management to enhance implementation at all levels. Additionally, the MOH will advance knowledge on healthcare waste management through research, using findings to inform policy revisions and ensure the efficient use of waste disposal mechanisms.

PARTNERING WITH THE PRIVATE SECTOR

To promote greater private sector participation, the MOH — through SCMP implementation — will involve the private sector in strategic planning and develop a national private sector engagement strategy to guide the implementation of cost-effective SC initiatives. Engagements will focus on mobilizing additional capital and introducing alternative management and implementation skills.

The estimated cost of implementing the 2025-2029 SCMP is GHS759,053,461.84 or US$47,440,841.37, at a prevailing rate of GHS16 per US$. For details kindly refer to Appendix 5.3

Summary Cost of Implementation for the 2025-2029 SCMP

Focus Functional Area	Total (GHS)	Total (US$) @ GHS16 per US$
Strategic Planning and Management	45,422,600.00	2,838,912.50
Policy and Governance	9,700,400.00	606,275.00
Human Resources	27,376,000.00	1,711,000.00
Financial Sustainability	229,035,000.00	14,314,687.50
Forecasting and Supply Planning	24,251,000.00	1,515,687.50
Procurement & Customs Clearance	18,457,650.00	1,153,603.13
Warehousing and Storage	127,113,820.00	7,944,613.75
Distribution	16,748,500.00	1,046,781.25
Logistics Management Information System (LMIS)	26,132,500.00	1,633,281.25
Quality and Pharmacovigilance (PV)	79,200,291.84	4,950,018.24
Healthcare Waste Management	154,130,700.00	9,633,168.75
Partnering with the Private Sector	1,485,000.00	92,812.50
Total	**GHS 759,053,461.84**	**US$ 47,440,841.37**

1.0 BACKGROUND

The Ministry of Health (MOH) is committed to enhancing the overall health status of the population through effective and efficient policy formulation, resource mobilization, monitoring and regulation of health care delivery by different health agencies. In 2011, the Ministry of Health and its agencies decided to transform the public health supply chain through the development of a Supply Chain Master Plan (SCMP 2012).

This was revised to become the SCMP 2015-2020 which systematically identified challenges in Ghana's public health supply chain, outlined objectives for the future, and proposed numerous interventions. Since then, there has been considerable progress in the development of national policies, guidelines, and SOPs, as well as in the design and rollout of the Ghana Integrated Logistics Management Information System (GhiLMIS). Today, several original recommendations from the SCMP 2015-2020 remain pertinent, underscored by updated data on the current situation of Ghana's public health SC system.

A review of the interventions (February 2020) revealed significant progress in SC performance objectives in the health sector, specifically:

- The scheduled delivery of commodities from the RMSs to 100% of SDPs (regional hospitals, district hospitals, polyclinics, and health centres) was attained.
- A warehousing strategy to optimize commodity management and distribution was developed but could not be fully implemented.
- A framework contracting mechanism was developed for high-value, high-volume, and critical lifesaving commodities to benefit from economies of scale and assured quality.
- An integrated logistics management information system (LMIS) that captures, analyses, and reports on SC data for decision making was developed and rolled out.
- Mechanisms have been put in place to ensure SC coordination at the regional level by operationalizing SC coordinating committees.

These achievements notwithstanding, implementation of the SCMP 2015-2020 faced numerous challenges, from the inability of the MOH to establish an autonomous agency for SC oversight to limited funding for SC activities across all levels. Following its expiration the MOH, supported by its agencies and partners, developed the SCMP 2021-2025. A key task of the new strategy was to reconsider the priorities outlined in the SCMP 2015-2020 according to the current SC capabilities and performance and, crucially, in the context of management, leadership, priorities, economic, and political realities.

The timeline for completing the SCMP 2021-2025 was affected by the COVID-19 pandemic, leading to its finalization in 2022. Implementation of key activities commenced in 2023 with the Monitoring and Evaluation (M&E) and Risk Mitigation plans for the SCMP developed in 2023. The table below shows the progress of implementation of key activities from eleven (11) functional areas in the SCMP 2021–2025 as of April 2024.

Functional Area	Progress of Implementation
Strategic Planning and Management	28%
Policy and Governance	31%
Human Resources	25%
Financial Sustainability	39%
Forecasting and Supply Planning	36%
Procurement and Customs Clearance	52%
Warehousing and Storage	19%
Distribution	20%
Logistics Management and Information System	42%
Quality and Pharmacovigilance	56%
Healthcare Waste Management	8%
Overall	**35%**

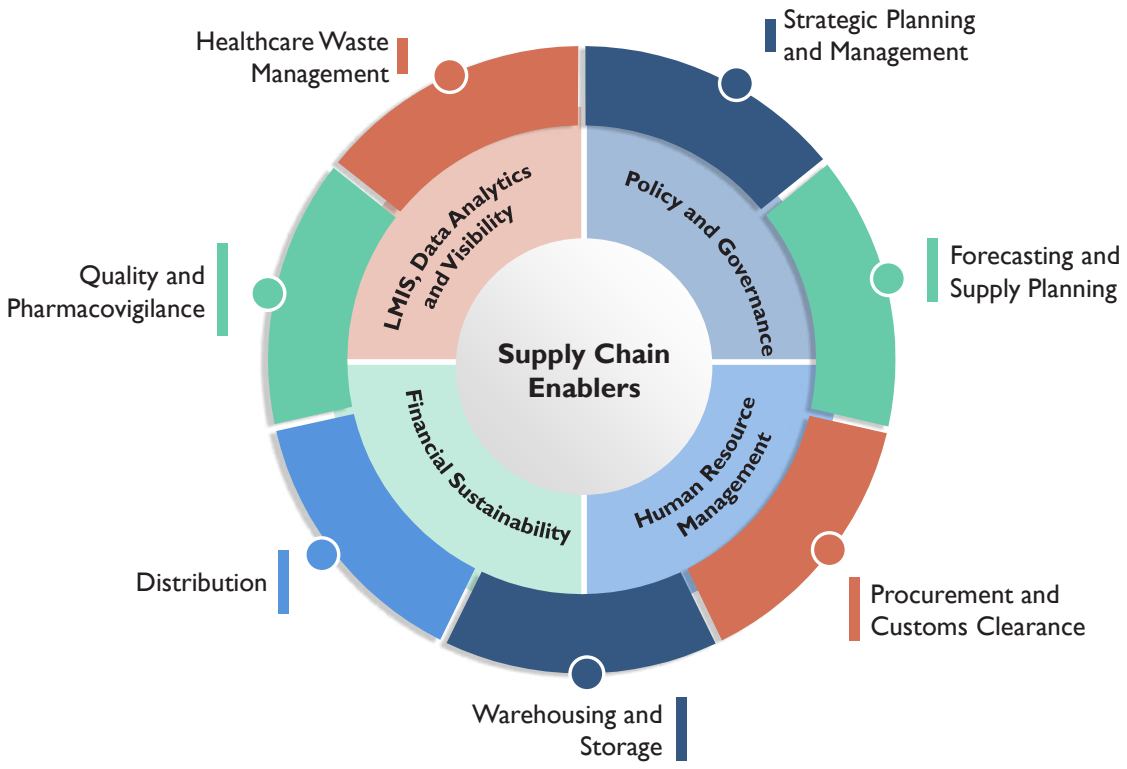
Given these circumstances, it is essential to consider revising and extending the implementation period for the SCMP 2021-2025 to 2029. This extension aims to ensure the successful execution of key tasks, while also optimizing resource allocation and effort, which would otherwise be expended in developing an entirely new SCMP.

Additionally, the revision will provide an opportunity to incorporate interventions that enhance the adaptability and responsiveness of the SCMP to emerging public health threats, such as COVID-19, MPOX, and other potential diseases to ensure the supply chain is better equipped to respond swiftly and effectively to future health emergencies.

NATIONAL SUPPLY CHAIN ASSESSMENT

The National Supply Chain Assessment (NSCA) established the presence or absence of key capabilities across eleven (11) functional areas at all facility levels and assessed key performance indicators (KPIs). The NSCA 2019, in assessing the progress of specific activities under the SCMP 2015-2020, demonstrated some progress on specific activities but noted the lack of implementation for others. Most notable of these is the decision not to create a centralised agency or authority to manage the SC. The balance of capabilities and performance suggested opportunities for investment, reform, and intervention; it also serves as a basis for the recommendations that follow.

Health Supply Chain Intervention Areas



2.0 VISION, MISSION, AND TRANSFORMATION PILLARS

VISION

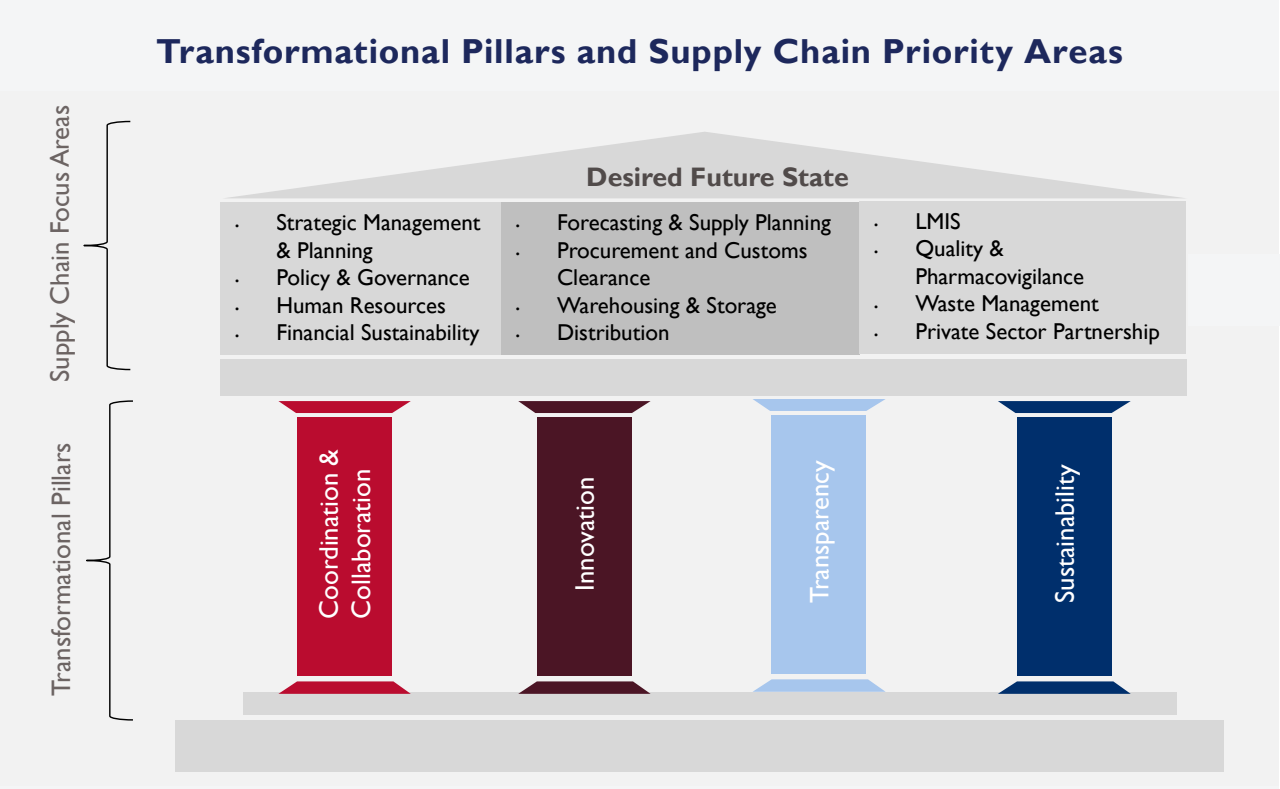
Ensure the availability, timely access, and affordability of high-quality health commodities across public and private sectors to successfully deliver UHC that will ensure all people in Ghana have timely access to high-quality health services irrespective of ability to pay at the point of use (Ghana UHC Vision).

MISSION

Identify and implement key strategic interventions and priority activities for a country-led robust and sustainable supply chain.

LINKAGES TO TRANSFORMATIONAL PILLARS

The transformational pillars applied in this section are premised on the notion of the GOG operating in a transparent, well-coordinated SC system that infuses innovation with a commitment to reaching self-reliance. To this end, all interventions in this SCMP will be anchored, amongst others, on the following critical transformational pillars:



Coordination and Collaboration

The SCMP is intended to inspire a spirit of strengthened coordination, collaboration, and cooperation amongst all actors. A well-coordinated SC will ensure that quality essential health commodities are available, accessible, and affordable, furthering the achievement of UHC. Similarly, sustained collaboration and cooperation amongst all stakeholders, including the private sector, are desirable to attain the vision of this SCMP.

Innovation

The SCMP will deploy innovative SC strategies and interventions that support Ghana's objectives for UHC and result in an efficient, lean, agile, and sustainable SC from the central level to SDPs.

Transparency

The SCMP will focus on clearly defined roles and responsibilities and transparent procedures in dealing with finances and data across all levels.

Sustainability

The SCMP will infuse sustainability into each intervention to ensure a government-owned and financed SC that provides available, accessible and affordable health commodities using dedicated staff, coordinated systems, and innovative technology.

3.0 FOCUS FUNCTIONAL AREAS, STRATEGY AND IMPROVEMENT PATHWAY

The following sections are organised according to the NSCA focus functional areas to build upon the assessment and offer aligned strategies. An additional functional area focusing on private sector partnership has been included to leverage private sector resources and expertise. These areas are interconnected and will require coordinated interventions to enhance SC performance. Each focus functional area includes a current status overview referencing the NSCA 2019 and a 2024 review of the implementation status of the SCMP 2021-2025 to establish consensus on the present state and to enable stakeholders to be forward-looking in subsequent sections. Strategies that align with each transformational pillar are defined to emphasise the importance of focusing on coordination, collaboration, innovation, transparency, and sustainability.

A competency-based improvement pathway is outlined, summarizing the current state and envisioning a 2029 future. It outlines a high-level strategy, detailed strategic interventions, and annual performance targets to achieve the transformative change in line with the NSCA recommendations, findings of other assessments and lessons learnt during the implementation of the current SCMP 2021-2025. The interventions are tailored responses to the current level and desired future state of competencies across the twelve (12) functional areas. These interventions are not intended to be exhaustive but to communicate key activities to be undertaken for Ghana's health SC to transform from the defined current state to the envisioned future state.

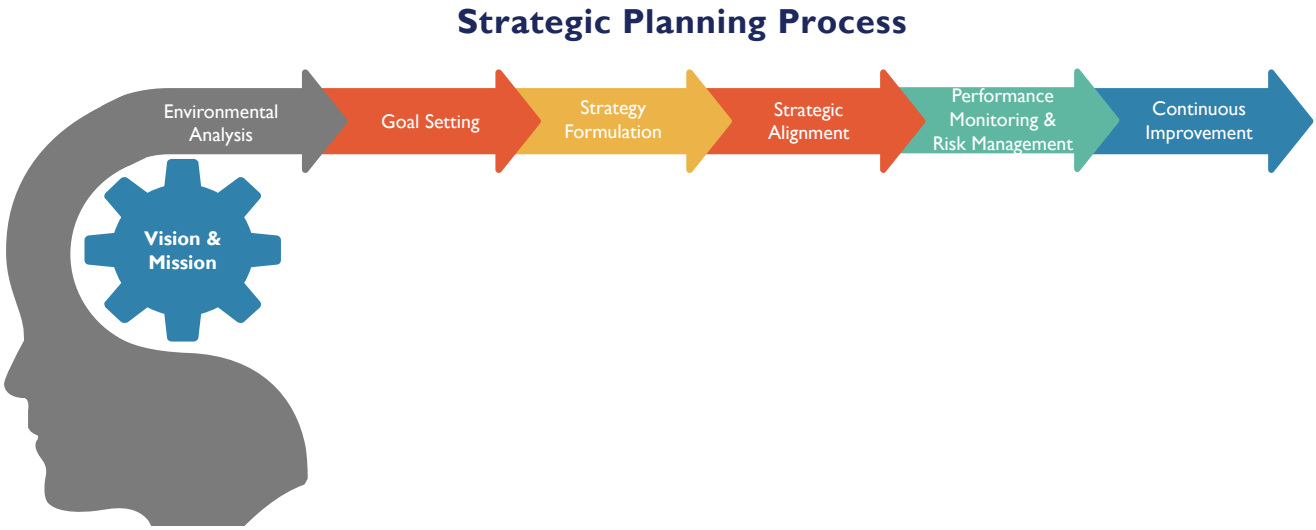
3.1 STRATEGIC PLANNING AND MANAGEMENT

MATURITY ASSESSMENT, PROGRESS TO DATE, ONGOING CHALLENGES

The MOH and its agencies share strategic planning and management responsibilities in the Ghanaian SC system. The NSCA assessed strategic planning and management capabilities at the national level. MOH, GHS, the Temporary Central Medical Stores (TCMS), and DP World previously called the Imperial Health Sciences (IHS)-managed warehouse. It also assessed selected regional-level sites: regional hospitals, teaching hospitals, and the RMSs. Central entities had reasonable strategic management and planning capabilities. The MOH and GHS had intact SC strategic and implementation plans, and they engaged with the private sector. The MOH and GHS fell short of the recommended 80% capability maturity score, at 67% and 51% respectively. Whilst strategic plans are in place, the use of performance monitoring plans or frameworks to track SC performance is limited. There is room for growth in private sector engagement and coordination; existing engagements, such as the IHS warehouse, are not fully reflective of a private-public partnership.

The challenge in strategic planning and management stems, in large part, from cross-agency issues: duplication of effort, lack of clarity of roles and responsibilities, limited formal coordination, and an apparent lack of trust. Moving forward, in the absence of a Supply Chain Management Agency (SCMA), it will be necessary to harmonise SC responsibilities and to create complementarity in roles and responsibilities among the MOH and its agencies.

Central-level entities were reported to have greater strategic planning and management capabilities than regional facilities. Three (3) out of the 10 traditional RMSs had SC strategic plans and less than 50% of facilities monitored SC performance. Formal SC risk management plans were rare amongst assessed facilities; most reported risks were financial, human resources, and operational.



LINKAGE TO TRANSFORMATIONAL PILLARS

Coordination and Collaboration

Given that the creation of an overarching body (SCMA) was deprioritised, the development of harmonised SC responsibilities across agencies is critical to realise coordinated SC leadership and management. To ensure complementarity of the MOH and its agencies' roles, as well as for well-coordinated strategic planning and management, the MOH will collaborate with its agencies and partners to lead the review and documentation of roles and responsibilities for each SC agency, including the private sector and other government agencies. An overarching priority remains to ensure that; all necessary SC functions are fully covered; existing entities are sufficiently empowered; and that the respective roles, responsibilities and relationships amongst actors are clearly and universally understood.

Innovation

Building on the enhanced data accessibility and visibility, planning and management approaches that are driven by metrics and causation relationships will be deployed. Government stakeholders will maximise the use of accurate data and apply lessons learned to improve decision-making and deliver innovative solutions.

Transparency

To improve the transparency of goals and strategic objectives, the SCMP will be aligned with the activities of all MOH agencies, the private sector, and other related government agencies and disseminated to all. The transparency and visibility of SC performance aided by technological advances or innovations in the performance of SC functions by different actors, including the private sector, will sustain the network of relationships between the MOH, its agencies, development partners, and the private sector. Transparency and visibility will build an effective SC relationship and achieve positive SC strategic planning, performance and data-driven decision-making at all levels.

Sustainability

Proper and well-coordinated strategic planning and management will promote a strong and sustainable SC. To date, participation of the private sector has been minimal. To promote greater private sector engagement, the MOH through the SCMP implementation will involve the private sector in strategic planning and develop a national private sector engagement strategy to guide implementation of cost-effective SC initiatives. Where feasible, the MOH will continue to "outsource to" or "contract with" the private sector. A focus on contract management will equip the MOH to effectively acquire and manage services. To ensure the financial sustainability of the SC at all levels, the SCMP will promote framework contracting, public-private partnership (PPP) and support the National Health Insurance Authority's (NHIA) SC-related reforms.

COMPETENCY-BASED IMPROVEMENT PATHWAY

Current State

Inefficiencies are rooted in the fragmented management of the SC. This is resulting from an existent overarching strategy of non-complementary roles and responsibilities across key agencies, as well as insufficient risk management protocol, and engagement of the private sector.

Future State

The goal is a well-coordinated ecosystem of SC actors, including a robust market of private sector entities that is stewarded by the GOG. The government itself operates under clear mandates and collaborates through defined mechanisms and communication channels. There is alignment across all MOH agencies and at all levels of the SC around a shared strategic plan that is updated regularly. SC operations are characterised by strong risk management processes and clear performance management structures.

Strategy

This SCMP is an opportunity to re-examine all levels of the SC system and to build political leadership that supports reforms and innovations. Coordination at a strategic planning and management level is critical for an efficient SC in Ghana. Rather than create an SCMA, which was deprioritised by stakeholders, the SCMP will provide coordinated leadership and governance across MOH and its agencies. The coordination will be reflected in clear guidance regarding functional roles and responsibilities. Although the SCMP primarily targets public sector entities, there is a need to consider other stakeholders in the private sector, in the SC leadership and governance shift at all levels.

Strategic intervention 1.1

Clarify the inter and intra-agency SC functional and strategic roles and responsibilities.

A key initial task of the SCMP will be to clarify the division of roles and responsibilities as they relate to SC functionality amongst the MOH and its agencies, the private sector, and other entities.

Activities will include

- Conduct a mapping exercise of the respective roles and responsibilities, of each central-level SC entity.
- Designate an authorities' matrix to provide coordinated leadership across the MOH and its agencies.
- Conduct interviews with key stakeholders of each entity, strategic forums for discussion, and finalization of clear roles.
- Design and monitor KPIs for SC actors based on the agreed roles and responsibilities from stakeholder consultations and engagements.
- Disseminate findings for implementation across relevant levels.

Strategic intervention 1.2

Institutionalise strategic planning practices at all levels

Activities will include

- Design region-specific SC strategic plans within the SCMP context.
- Conduct regular reviews of the region-specific plan.
- Disseminate the SCMP to all stakeholders at all levels.
- Review the implementation progress of the SCMP annually against performance targets.

Strategic intervention 1.3

Formalise the practice of assessing SC risks at all levels.

Activities will include

- Conduct regular (annual) SC risk assessments at all levels.
- Design relevant mechanisms to address SC risks emanating from the risk assessment.

Strategic intervention 1.4

Transform the RMSs and Teaching Hospital (TH) Medical Stores into business units.

Activities will include

- Assess the viability of transforming the RMSs and Teaching Hospital Medical Stores into business units.
- Hold consultative engagements with the management of Regional Health Directorates (RHD) and THs on RMSs and Teaching Hospital Medical Stores transition into business entities.
- Conduct activity-based costing (ABC) in all regions and THs to identify true operations costs; use findings to guide transitions into business units.
- Prepare business plans for each RMS and TH.

Strategic intervention 1.5

Introduce a focus on financial sustainability, including sustained engagement for increased financial resources for SC interventions.

Activities will include

- Develop strategies to align framework contracting with the NHIA price review process.
- Review the private sector engagement strategy to include PPPs in supply chain.
- Develop engagement mechanisms for improved funding for SC interventions.
- Increase resource mobilisation efforts at least annually for SC performance, including procurement of programme commodities.

Strategic intervention 1.6

Institutionalise monitoring of SC strategic interventions.

Activities will include

- Update and consolidate the monitoring tools for interventions in all functional supply chain areas.

Performance Targets

2025: Develop region-specific supply chain strategic plans

2025: Consolidate supply chain monitoring tools

2025 -2026: Validate and implement supply chain roles and responsibilities matrix at all levels

2026: Develop business plans for RMSs and THMSs

2025-2027: Develop strategies on financial sustainability for supply chain interventions

2025-2029: Identify SC risks; develop and implement mitigation plan

2025-2029: Review SCMP implementation annually

3.2 POLICY AND GOVERNANCE

MATURITY ASSESSMENT, PROGRESS TO DATE, ONGOING CHALLENGES

Whilst NSCA 2019 assessed the existence of policy and governance capabilities, the level of implementation and the policies' effectiveness were not explored, though they have implications across other functional areas. At the central level, nearly all assessed "basic" capabilities are in place (100% at MOH, 84% at GHS). Overall, a broad range of formal policies (e.g., National Essential Medicines List [NEML], standard treatment guidelines [STG]), as well as guidelines and SOPs for key SC functions, are in place and updated regularly. There were challenges with disseminating these policies to the lower levels of the public health system. Only 53% of facilities made copies of key national policies accessible. Annual policy reviews, as recommended by the SCMP 2015-2020, were not conducted.

To improve regulatory and governance implementation, it will be necessary to enforce robust supervisory structures and increase clarity into agencies', departments', and units' respective, authority, roles and responsibilities to create and implement SC policies. These would require MOH's sustained prioritisation and leadership. Stakeholders of MOH are pushing for stronger policy and governance, more transparency and accountability of the SC system.

LINKAGE TO TRANSFORMATIONAL PILLARS

Coordination and Collaboration

To improve governance structures and operations according to policy, it will be critical to decentralise interventions and disseminate policies to all levels. Stakeholders of the MOH must be involved in providing feedback.

Innovation

The innovative path to improving public health in Ghana includes revising policies to reflect changing best practices and onboarding new technologies and solutions. Elevated data use to monitor SC performance should be explored. Innovative areas for governance solutions should be introduced in updated policies for regional- and facility-level drug revolving funds (DRFs) and in processes to monitor policy implementation, including NEML, STGs, and SOPs. Implementation of monitoring by stakeholders of MOH should be structured with clear policies, guidelines and oversight.

Transparency

The SCMP will lay the framework to implement strong accountability and governance structures to hold agencies (GHS, teaching hospitals, etc.) and the private sector accountable for performance. The MOH will develop and disseminate standard scorecards for use by all SC stakeholders. In addition, appropriate forums will be created at all levels to share experiences and best practices.

Sustainability

More inclusive policies and stronger governance structures will promote sustainability by bringing in more local actors (private sector, civil society, etc.). They also will inform proper resource allocation. Enhanced coordination according to clear policy and governance structures will strengthen existing linkages. For example, to promote sustainability, the SCMP will create the enabling environment to deepen the coordination between the NHIA and the National Medicines Pricing Committee for all pharmaceuticals to ensure 1) no price divergence and 2) timely insurance reimbursements to service providers.

COMPETENCY-BASED IMPROVEMENT PATHWAY

Current State

A broad range of policies, guidelines, and SOPs are in place and regularly updated. However, there are challenges with their dissemination and effective implementation at all levels. For instance, central levels govern the implementation of the vertical SCs for programme medicines, whilst regions focus on managing the supply of essential medicines and other pharmaceuticals. The involvement of relevant private sector actors and civil society is ad hoc.

Future State

Clear monitoring structures are in place to enable the central level to monitor regional governance performance through coordinated leadership at MOH and its agencies. Similarly, the regions coordinate SC performance at the district and SDPs.

Policies, guidelines, and SOPs are well-understood and drive improved performance of public and private sector actors at each SC level. Other stakeholders' voice is heard and may inform policy.

Strategy

The SCMP strategy will focus on decentralising the governance of SCs to the regions and THs. The central level will transition to conduct periodic supportive supervision in which regions and THs are held accountable based on performance scorecards. It will enhance the supportive supervision role of the central level over the regions through the implementation of a performance management framework. The MOH will provide copies (physical and/or electronic) of policies, guidelines and SOPs to all SC functional levels and introduce a scorecard approach with performance-based incentives where feasible.

The SCMP will also expand the framework contracting process to include vendor management and will strengthen the application of revised NEML and STGs in procurement and prescribing practices. The procurement entities (MOH and agencies) will actively manage vendor performance, publish results, and apply performance results to future contract awards. The MOH will collaborate with its agencies to develop and implement guidelines for sanctioning those who are non-compliant with procurement processes, as well as for non-compliant vendors. The MOH will ensure that all procurement entities monitor vendor performance as part of their contract management. The vendor performance will be transparent, published and used in subsequent contract awards.

The MOH will create an enabling environment that enhances the Food and Drugs Authority's (FDA) technical and financial capacities to perform its regulatory functions. This will assure access to quality health technologies, including testing and post-marketing surveillance.

Strategic intervention 2.1

Update NEML and STGs bi-annually and develop a Non-Medicines Tracer List to align with the national medicines policy and other relevant guidelines.

Activities will include

- Develop SOPs and scorecards for bi-annual reviews.
- Revise NEML and STGs accordingly.
- Develop national health commodity non-medicines tracer list.

Strategic intervention 2.2

Ensure awareness and availability of existing national policies at all levels.

Activities will include

- Checks for physical or electronic copies of policies, guidelines, and SOPs in supportive supervision visits.
- Introduce regular reviews of price regulatory mechanisms.
- Disseminate key policies through national and regional public meetings, newspapers, websites, other media platforms, etc.

Strategic intervention 2.3

Streamline management of programme commodities at all levels.

Activities will include

- Increase regional involvement in managing programme commodities for the following SC activities: quantification, storage, distribution to the last mile, inventory management and disposal of expired programme commodities.

Strategic intervention 2.4

Improve performance management and accountability at all levels.

Activities will include

- Develop scorecards for performance management.
- Initiate supply chain performance management including monitoring the implementation of policies and governance processes to ensure commodity availability at all levels.

Performance Targets

2025: Start performance target scorecard monitoring

2026: 90% availability of supply chain policies at all levels

2026: Defined roles and responsibilities for regions on management of programme commodities

2025 - 2029: Set annual performance targets at all levels

3.3 HUMAN RESOURCES

MATURITY ASSESSMENT, PROGRESS TO DATE, ONGOING CHALLENGES

The NSCA 2019 revealed that the SC workforce includes a variety of individuals at national, regional, district, and health facility levels. These include logisticians, pharmacists, warehouse personnel, and SC managers. Within the broader context of insufficient and unequal human resources in Ghana's public health system, SC functions are specifically inadequately and, often, inappropriately staffed. Vacancies exist in SC positions throughout the system (e.g. an average of 24% of SC positions at district hospitals and 44% of SC positions at GHS headquarters are vacant). The presence of dedicated and professionally trained SC personnel is most significant at the highest levels of the public health system and lacking at lower levels.

Opportunities for SC-specific capacity building exist, including mentorship, certificate programmes, bachelor's degrees, and master's programmes. SC topics are not fully integrated into the traditional public health curriculum. SC-specific capacity-building efforts are concentrated mostly at regional levels. The NSCA also revealed that about a quarter of Community-Based Health Planning and Services (CHPS) and clinics (23%), and Health Centres and polyclinics (26%) received no SC capacity-building support. Mechanisms such as supportive supervision are in place, with 80% of facilities providing regular reports of supportive supervision throughout the system.

LINKAGE TO TRANSFORMATIONAL PILLARS

Coordination and Collaboration

Capacity development must occur at multiple levels (e.g., individual, organisational, societal) and across sectors (public, commercial, civil society, etc.) to be successful. The SCMP will aim to standardise SC capacity development at all levels and introduce a Continuing Professional Development (CPD) programme for SC personnel. For this to be accomplished, adequate funding and effective coordination must be in place, and these should be aligned with the job functions of SC positions. In addition, the MOH and its agencies will liaise with accredited academic and professional institutions and associations to explore opportunities for sustained, cutting-edge SC capacity building and professionalization support for SC functions.

Innovation

Implementation of the SCMP will exert an increased focus on professionalisation and more innovative and sustainable methods of workforce development. Development of innovative training platforms, including e-learning and an in-service curriculum for staff, will strengthen SC skills. Innovative partnerships with private sector entities through internship or mentorship programmes will be explored. The GOG will seek to leverage and apply operational research in labour markets to inform approaches for sustained human resource capacity.

Transparency

Transparency fuels accountability. The MOH will strive through SCMP implementation to increase the transparency of 1) performance management processes for SC staff and 2) job selection criteria, remuneration policies, and practices. Efforts will also be made to establish a clear career trajectory in SC function to increase the motivation of the SC workforce. Regular CPD training programmes will be necessary to enhance performance and promote transparency.

Sustainability

In tandem with building knowledge and skills, sustainable human resource development will require improving systems, processes, and performance, with a focus on professionalisation, and addressing motivation because motivation is a key component of a sustained workforce. To become increasingly self-reliant, Ghana's public health SC must be able to identify, attract, support, and retain adequately skilled and qualified SC staff — or contract services from a private sector organisation with the capability to perform the SC function. Meeting the future needs of Ghana's SC workforce entails understanding and harnessing the Ghanaian SC labour market; the educational and training institutions that produce qualified workers, the policies and regulations that determine SC personnel requirements and influence career paths; and the dynamics that influence SC workers' movement between organisations and sectors.

COMPETENCY-BASED IMPROVEMENT PATHWAY

Current State

A fragmented approach to professional SC competencies and workforce structure results in insufficient workforce capacity to manage the public health SC.

Future State

A well-performing, motivated, and professionalised health SC workforce is officially recognised within the public and civil service and adequately staffed to meet health system needs. Effective policies, structures, and training (pre-service and in-service) are intact to attract qualified staff and to equip professionals with modern approaches and tools for improved health results. Compensation and remuneration for SC professionals are equitable and commensurate with functions performed, improving workforce retention and motivation.

Strategy

Systematic improvements to human resources systems require detailed interventions in staffing, skills, motivation, and the work environment. A continuous professional development programme will enable continued capacity building and introduce a continuous improvement mechanism to increase SC efficiency and level of service. The capacity of SC staff will be built according to the task-shifting policy of MOH. The MOH and its agencies will strengthen linkages with accredited institutions (universities, professional bodies, etc.) as a sustainable source of cutting-edge SC capacity building. The MOH will collaborate with the Public Service Commission, Fair Wages Commission and other relevant bodies and the private sector to create a Supply Chain Management (SCM) professionalisation framework for the country.

Strategic intervention 3.1

Ensure the infusion of critical inputs to improve SC workforce.

Activities will Include

- Ensure more visibility of Supply Chain Management practitioners in the Human Resources for Health Strategy Document.
- Strengthen demand for increased resource allocation for SC functions in public health.
- Establish performance-based motivation for SC professionals and institutions.

Strategic intervention 3.2

Accelerate professionalisation of the SC workforce.

Activities will include

- Define qualifications and required skills set for key supply chain managerial roles at all levels.
- Develop or identify CPDs accreditation opportunities for SC professionals.

Strategic intervention 3.3

Enhance supportive supervision practices.

Activities will include:

- Harmonise supportive supervision exercises with SC SOPs.
- Conduct on-the-job training to reinforce knowledge and skills for SC practitioners.

Strategic intervention 3.4

Improve recruitment and retention of SC personnel.

Activities will include:

- Conduct SC labour market assessment for the health sector.
- Adapt the World Health Organisation Workload Indicators of Staffing Need (WISN tool) human resource management tool for supply chain workforce planning.
- Improve recruitment processes for SC professionals in the public health sector.
- Explore strategies to address geographic disparities in the recruitment and retention of SC professionals into the public health sector.

Strategic intervention 3.5

Engagement with relevant accredited academic institutions and professional bodies on provision of institutionalised capacity for SC staff at all levels.

Activities will include:

- Develop memoranda of understanding with relevant accredited academic institutions and professional bodies.
- Monitor performance of SC professionals.
- Explore opportunities to develop open-source e-learning modules for SC functions.

Strategic intervention 3.6

Strengthen collaboration between professional networks of health SC professionals.

Activities will include

- Advocate for strengthened collaboration between public and private sector health SC practitioners.
- Organise and participate in annual conference of SC professionals.
- Support SC practitioners to become members of SC professional bodies (e.g. International Association of Public Health Logisticians).

Performance Targets

2025: Develop qualification criteria for SC managerial roles.

2026: Adapt WHO workload indicator for SC human resource planning

2025-2029: Each SDP (health centres, polyclinics and hospitals) has at least one SC professional who will perform SC activities.

2025-2029: Each district and Network of Practice (NOP) hub have at least one SC professional who will provide supply chain oversight on supply chain activities.

2025-2029: Identify and engage accredited academic institutions and professional bodies to provide regular SC capacity to relevant staff; monitor and measure performance of SC trainees.

3.4 FINANCIAL SUSTAINABILITY

MATURITY ASSESSMENT, PROGRESS TO DATE, ONGOING CHALLENGES

Generally, financial management best practices are present. At the MOH level, budgets are prepared annually and updated quarterly. SC costs are explicitly recorded, and the government contributes to SC and health commodity costs. At RMSs, the presence of key financial capabilities including annual budgets, miscellaneous budget lines and explicit recording of SC costs are available. At lower levels of the health system, some fiscal best practices are followed, but there is greater variation in capabilities across sites.

Government and/or facility revenue have been reported to cover the majority of SC costs. However, substantial numbers of facilities reported budget shortfalls for health commodities. Health insurance is accepted at nearly all SDPs, but SDPs frequently report that insurance reimbursements inadequately cover costs for health commodities and are rarely on time. Some facilities use internally generated funds intended for DRFs to finance activities, such as wages and staff incentives impacting negatively on funds availability for medicines procurement.

LINKAGE TO TRANSFORMATIONAL PILLARS

Coordination and Collaboration

There is a need for better coordination at the central, regional, and district levels. To develop a well-coordinated financial system that supports the public health system, the SCMP must conduct a mapping exercise to understand the flow of money and tracking of expenditures at each level. The existing pricing policy developed by the MOH will be implemented. The MOH must ensure that the National Medicine's Pricing Committee meets regularly (at least twice a year) to review pricing, aligning the purchase price and the service cost with the reimbursement rate of the National Health Insurance Scheme (NHIS).

Innovation

To attain financial sustainability of SC at all levels, the MOH must focus on framework contracting, PPPs, improving NHIA's reimbursement regime, and the respective linkages with SC. To promote efficiency through innovation, technical assistance targets can be tied to funding levels. A road map regarding a financial incentive mechanism would be adopted for SCMP.

Transparency

Clear-cut policies regarding the needs and use of the DRF need to be disseminated across all levels of the health system and implemented and monitored regularly. Guidelines for reporting on financial expenditures at all levels must be rigorously enforced.

Sustainability

All levels of the health system operate a DRF, however, it is not highly functional and/or sustainable. To sustain the critical role of DRFs, there is a need for 1) timely reimbursement by NHIA; 2) recapitalisation of ailing RMSs; 3) strengthening of governance and accountability mechanisms for the drug revolving fund at all levels through the development of a dedicated/standalone DRF Guidelines; 4) transition to self-reliant financing for regional DRFs and co-financing of vertical donor-supported commodities; and 5) coordination with the Ministry of Finance during annual and midterm budgeting for a smooth transition from development-partner financing toward self-reliance.

COMPETENCY-BASED IMPROVEMENT PATHWAY

Current State

Unpredictable fund releases and insufficient reimbursements by NHIS continue to undermine the financial solvency of Ghana's public health SC system. Baseline costs and expenditures for commodities vary greatly across the various levels. Delays in reimbursement to facilities by the NHIS continue to be a challenge, although some improvements are observed. A variety of SC interventions are underfunded.

Future State

All levels of the public health system operate a DRF to support the costs of commodity procurement and SC service costs. This should be emphasized at the district and sub-district levels. Additionally, there should be a dedicated fund for psychiatric facilities. NHIS implements a responsive rate adjustment policy, allowing for periodic revisions in response to various factors including economic dynamics. Vetted claims are paid fully on time. Central and regional levels set commitment cost levels to share for the vertical commodities funded by development partners; they also dedicate funding to sustain SC initiatives/reforms financed by development partners.

Strategy

Achieving financial sustainability across all levels of the supply chain requires strengthening financial management practices, improving visibility into facility indebtedness, and advocating for measures to reduce high debt levels. Additionally, optimizing drug revolving fund management and governance is crucial. The strategy will also advocate for responsive NHIS tariff adjustments and timely claims payments. Furthermore, a dedicated/standalone drug revolving fund guidelines would be developed to improve management of the fund and ultimately financial sustainability for improved supply chain performance at all levels.

Strategic intervention 4.1

Prioritise a national effort to settle outstanding debts and establish and enforce future payment deadlines.

Activities will include

- Determine the magnitude of outstanding debts.
- Develop mechanisms for outstanding debt clearance.
- Prepare a five-year costed financial implementation plan for all levels.
- Design appropriate mechanisms to ensure prompt SDP payment to RMSs.

Strategic Intervention 4.2

Ensure the financial sustainability of the SC system.

Activities will Include:

- Leverage the findings from the MOH's financial sustainability assessment to guide the development and implementation of a five-year (2025-2029) SC financial sustainability plan.
- Develop and implement a resource mobilization strategy for incremental financing of SC interventions (including procurement of programme commodities).
- Strengthen continuous coordination between MOH and its agencies and partners.
- Advocate for enhancement of NHIA's reimbursement mechanisms.
- Make all financial management guidelines available to all stakeholders; operationalize their implementation.
- Prepare SC annual budgets at all levels (national, regional, district and sub-district) and review quarterly.
- Develop a dedicated/standalone DRF Guidelines.
- Develop a tracking tool to monitor the implementation of the DRF at all levels.

Performance Targets

2025: Establish debt levels for health facilities and RMSs in the public health sector.

2026: Develop five-year financial sustainability plan (2026-2030) to assure sufficient funding for SC interventions

2027: Develop a resource mobilization strategy for SC interventions.

2029: 100% of BMCs develop SC annual budget

3.5 FORECASTING AND SUPPLY PLANNING

MATURITY ASSESSMENT, PROGRESS TO DATE, ONGOING CHALLENGES

The NSCA 2019 found that national disease programmes perform the strongest in forecasting and supply planning (FASP) but still display wide variability between them, indicating a lack of standardisation. This wide variability translates into a wide range of the quality of forecasting performance, as well. National quantification guidelines are not employed in entities that conduct forecasting. The calculation of forecasting metrics at the product level is not standardised in the health system. Each national disease programme conducts its own quantification without a common tool or coordinated data input. FASP for essential medicines is not well-coordinated at central and regional levels.

LINKAGE TO TRANSFORMATIONAL PILLARS

Coordination and Collaboration

Stakeholders will work together to define the most appropriate national-level FASP coordination mechanism. Each of the programmes conducts its own quantification. There are differing opinions on continuing this practice or conducting joint FASP because of the unique demands of each programme (i.e., Global Fund for Malaria grant negotiations, the United States Presidential Malaria Initiative wants quantification to be revised to inform the Malaria Operational Plan). Aligning the timing across commodities may be the most effective way forward. The SCMP will explore implementing one coordinated quantification cycle and one medium to disseminate FASP for all commodities. Central-level stakeholders will be represented across all programmes. Forecasting for essential medicines at the regional level should be coordinated across the regions so they use similar parameters and historical data consistently.

Innovation

The SCMP will aim for all programmes to use modern, innovative tools to forecast their consumption needs, improving the forecast accuracy and efficiency of supply planning (i.e. transition from Microsoft Excel and other outdated tools and adopt new forecasting and supply planning tools and software for programmes and essential medicines). The SCMP will also explore the use of a common forecasting tool across all programmes and the viability of harnessing consumption data through GhiLMIS.

Transparency

The SCMP recommends assigning a coordinator at the central level to provide leadership on FASP practices and to coordinate health commodity quantification, as well as to share final output with all stakeholders.

Sustainability

Sustained, high-performing FASP is dependent on the tools and staff capacity. The use of GhiLMIS (for consumption data) and forecasting tools is critical for improved data and sustainability. Capacity of staff at central and regional levels will be built and training rolled out to other SC levels so that FASP tools may be used accurately.

COMPETENCY-BASED IMPROVEMENT PATHWAY

Current State

The FASP process is siloed by programme area and for essential medicines. For most programmes, quantification is conducted with a minimal level of technical assistance. Most programs use issuance and service data for quantification.

Future State

Consumption data is the basis of forecasting, improving accuracy. The timing of the quantification process is aligned. The regional level follows guidelines for national disease programs and essential medicines. Data and lessons learned are shared across disease areas.

Strategy

There should be a gradual shift to using common FASP software and data inputs on GhiLMIS consumption across all disease areas, including essential medicines, to attain a coordinated FASP programme.

Strategic intervention 5.1

Standardise the use of modern FASP methods across programmes and essential health commodities

Activities will include

- Update the national quantification guidelines.
- Strengthen the use of modern FASP tools for quantification of programme and essential health commodities at all levels.

Strategic intervention 5.2

Strengthen the National Quantification Team and streamline quantification processes.

Activities will include

- Improve coordination for forecasting and supply planning by the NQT
- Align forecasting timelines for programmes and prioritise essential medicines.
- Strengthen advocacy to increase annual funding from stakeholders including GOG to conduct forecasting, supply planning, and monitoring.
- Conduct annual quantification; disseminate outputs to all stakeholders.

Strategic intervention 5.3

Capacity building to enable government-led quantification at central and regional levels.

Activities will include

- Develop training programme with modules.
- Run a pilot training programme.
- Implement through a "training of trainers" approach.

Performance Targets

2025: Update National Quantification Guideline

2026: Train central and regional level SC practitioners on modern FASP

2026: Align forecasting timelines for programmes and prioritized essential medicines

2025-2029: Develop annual FASP budget

2026: GHS coordinate FASP for programme health commodities across all levels.

2026: MOH coordinate FASP for essential health commodities across all levels.

3.6 PROCUREMENT AND CUSTOMS CLEARANCE

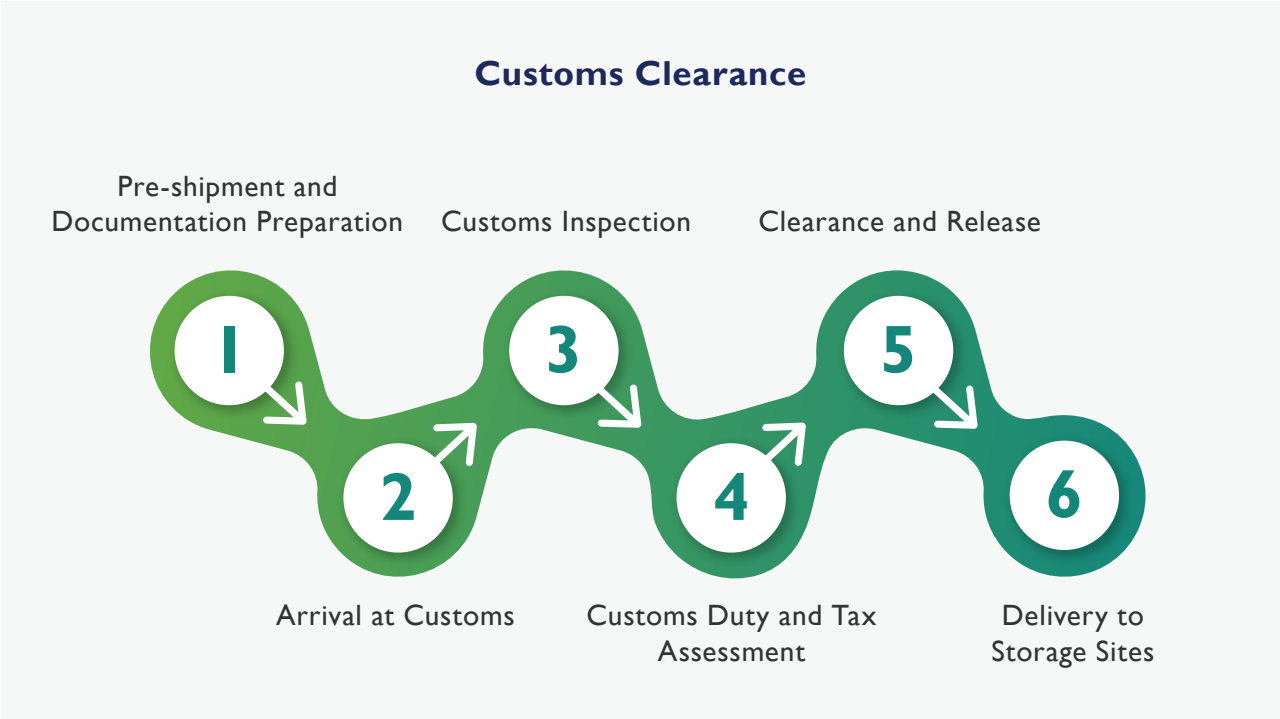
MATURITY ASSESSMENT, PROGRESS TO DATE, ONGOING CHALLENGES

Procurement processes are well-established and have designated approvers; SOPs have been developed to guide processes. Audits occur, and there is consistent documentation, especially at the higher levels of the system (regional hospitals, teaching hospitals, RMSs and the central level).

However, the procurement landscape in Ghana continues to be fragmented. The MOH and GHS headquarters have their own procurement units, even though they were noted as "unnecessary duplication" in the SCMP 2015-2020.

The visibility of the procurement system is strong at the central level and reduces as we move down to lower-level facilities. Despite a strong legal framework and well-established procedures, the public perception of the procurement of pharmaceuticals and medical equipment is that it is non-transparent and does not achieve value for money. There is high cost and price variability of medicines in the Ghana Health System. Delays are also experienced in GOG procurement.

Inadequate GoG budget allocation and delays in the issuance of tax exemption for clearance of health commodities including donor procured commodities have led to delays in clearance, high demurrage charges, suboptimal storage conditions, potential risk of expiries and commodity stockouts.



LINKAGE TO TRANSFORMATIONAL PILLARS

Coordination and Collaboration

The harmonisation of procurement processes amongst many procurement partners will require extensive partner coordination. Further coordination and collaboration will be needed between key stakeholders to increase budget allocation and reduce the time for the issuance of tax exemption for customs clearance.

Innovation

eProcurement is an innovative tool to increase efficiency, agility, and transparency. Through SCMP implementation, eProcurement will be enhanced within the public health sector. The MOH will consider piloting and introducing innovative project management, customs clearance and procurement tracking e-tools that are available at a low cost. These would complement government e-procurement and customs clearance tools. The MOH will leverage the introduction of the Ghana Electronic Procurement System (GHANEPS) and Integrated Customs Management System (ICUMS) and encourage system use for procurement and customs clearance activities in the public health sector.

Transparency

An action plan for framework contracting has been implemented successfully for selected essential medicines in the regions. This initiative has inspired high-level cooperation between regions and central health entities, as well as full, transparent outreach to the private sector. The SCMP must build on this momentum to increase procurement transparency for health commodities, to eliminate administrative bottlenecks in tax exemption and custom clearance, reducing average clearing time.

Sustainability

For procurement processes to be sustainable, flexible co-financing arrangements on key disease areas must be introduced with the concurrent use of national procurement systems. There should be advocacy for the rationalization and reduction of taxes and levies at the ports affecting the importation and clearance of all health commodities. The SCMP must explore boosting local production of pharmaceuticals and medical equipment to support national procurement. The MOH must work with relevant stakeholders to develop a Policy for implementation of framework contracting arrangements for the procurement of pharmarceuticals and other related health products, at all levels.

COMPETENCY-BASED IMPROVEMENT PATHWAY

Current State

Framework contracting is implemented for selected essential medicines by the MOH under the national procurement legal framework. Framework contracting for HIV/AIDS, Malaria, TB and Family Planning is conducted under multiple donor legal frameworks through donor-supported technical assistance. Procurement delays and delays in customs clearance processes are frequently experienced.

Future State

The MOH is responsible for implementing framework contracts for HIV/AIDS, Malaria, TB and Family Planning. It participates in co-financing health commodities in areas that were previously fully funded by donors. Responsive, transparent procurement systems are intact. Customs clearance processes are well-documented and efficient.

Strategy

To achieve the desired future procurement state, the SCMP will promote e-procurement at all levels to enhance transparency; enhance the capacity of procurement entities (staff at all levels) in procurement best practices, including e-procurement; develop mechanisms that promote regular procurement monitoring at all levels, including vendor performance; enforce strict adherence to prevailing procurement laws and guidelines to improve transparency; advocacy to reduce taxes and levies and improve customs processes for health commodities. A critical element will be to interface all procurements from different funding sources including GOG onto a common platform to promote visibility.

Strategic intervention 6.1

Roll out an integrated electronic procurement system.

Activities will include

- Train identified stakeholders on e-procurement at all levels.
- Develop a framework to monitor the system utilization.

Strategic intervention 6.2

Advocate for incremental annual funding for GOG to procure health commodities.

Activities will include

- Develop a comprehensive funding strategy aimed at ensuring sustainable procurement of programme and other essential health commodities.

Strategic intervention 6.3

Outline clear procurement oversight processes per existing procurement laws and regulations.

Activities will include

- Adapt and disseminate FWC guidelines for implementation at all levels.
- Institute monitoring mechanism to improve compliance with FWC guidelines.
- Monitor and enforce compliance with the Public Procurement Laws and Regulations.
- Develop and monitor KPIs for the framework contracting mechanisms.
- Strengthen compliance with the certificate of non-availability process and the application of sanctions.

Strategic intervention 6.4

Address tax exemption and customs clearance bottlenecks to improve clearance time.

Activities will include

- Map and streamline processes to obtain tax Review the donation guidelines to align with current regulations.
- Advocate for permanent tax exemption protocols for health commodities in public health sector
- Develop strategies to reduce delays in the tax exemption and customs clearance processes.
- Update procurement lead time to include tax exemption, clearing processes and FDA quality control.

Performance Targets

2025: Develop a five-year Funding Strategy for Health Commodity Procurement

2025: Develop framework contract guidelines with KPIs

2025: 90 days procurement lead time for national competitive tendering;180 days for international competitive tendering

2026: Develop strategies to address delays in tax exemption and custom clearance

2029: 100% utilisation of e-procurement system (GHANEPS)

2029: 100% adherence to procurement procedures by procurement entities

3.7 WAREHOUSING AND STORAGE

MATURITY ASSESSMENT, PROGRESS TO DATE, ONGOING CHALLENGES

Warehousing and storage capabilities are well below optimal levels across the system. Overall, the IHS warehouse has the strongest performance, measured by the existence of, and its adherence to, storage and inventory management SOPs; adequate physical infrastructure and safety equipment to store commodities; and appropriate security and accountability. Amongst GOG-owned entities, the RMSs had the strongest performance. National SOPs for warehousing and storage exist but are not widely disseminated: Only 6% of CHPS had a copy accessible. Access to SOPs improves at district and regional levels but remains suboptimal. Limited SOPs access limits the opportunity to improve performance and adhere to guidelines.

Improvements in specialised storage capabilities are needed urgently. There is an overall lack of sufficient infrastructure and equipment to optimise warehousing. Storage conditions, especially at lower levels in the system, are subpar; stockouts of key medicines are rampant at all levels. Stock card accuracy issues are pervasive throughout the system. At lower levels, staff understanding of the minimum/maximum levels is inconsistent.

An optimised warehouse strategy is available, but it has yet to be implemented. It recommends a one-hub central warehouse with significant cost savings over the status quo. Currently, each level (national and regional) is responsible for its operational financing.

LINKAGE TO TRANSFORMATIONAL PILLARS

Coordination and Collaboration

There are two primary issues required for better coordination: 1) lack of a permanent, functional CMS that is empowered as the top of the commodity health SC; and 2) limited coordination between central and regional warehouses. The MOH will address these by securing a singular, permanent, functional CMS that is mandated to function as an independent business unit and by creating an enabling coordinating mechanism to ensure an effective, seamless operational relationship between CMS and RMS.

Innovation

The MOH will create an environment to acquire high-performing, financially efficient warehouse and storage services from the private sector for central and regional operations. The MOH will explore the expansion of market entry for capable logistics providers to service the public sector.

Transparency

The visibility of functional performance needs to be tracked individually by supply chain entities (CMS, RMSs and SDPs) and cumulatively by central and regional levels to show the overall level of performance. With transparent functional performance and financing data, the overall situation can be diagnosed and improved. As financial and operational performance become better linked, performance issues' root causes will become more transparent. A targeted understanding of warehousing and storage issues will enable stakeholders to develop effective solutions; it also will reveal outliers that are driving down overall performance. For example, within each region, data will be applied to reveal whether the lack of on-shelf availability is due to insufficient funds, lack of SOPs, incorrect minimum/maximum levels (due to staff inability), or inadequate storage space; and whether inventory data issues at the regional level are concentrated in a few SDPs or widespread.

Sustainability

For sustained improved performance of warehouse operations, the MOH will collaborate with GHS to disseminate SOPs to public and private sector-operated warehouses and storage areas at central, regional, and health facilities. It also will ensure regular performance reviews to improve adherence to SOPs. The use of the private sector as a viable source of warehousing for public sector commodities will also enhance operational efficiency.

COMPETENCY-BASED IMPROVEMENT PATHWAY

Current State

The Ghana public health SC operates eleven (11) regional warehouses that are renovated intermittently. At the facility level, storage is generally poor, and the physical condition of storage places is highly variable. There is limited performance coordination across and within SC levels. Each level manages its own performance and financing, which presents challenges.

Future State

By 2029, warehousing and storage performance will be consistently monitored by standardised KPIs across all levels. Commodities will see constant stock turnover (consistent, frequent stock cycles) according to minimum/maximum levels with resultant cost benefits. It is envisaged that, in the next five years, there will exist a standardised, modern warehousing infrastructure at all levels. Regional warehouses will be established and operationalized in all the new regions. To ensure Good Warehousing Practice (GWP), central and regional warehouses will be FDA accredited.

Strategy

To achieve this desired future state, the MOH will invest in physical and human capacity to bring all warehouses at central, regional, and SDP levels to Ghana FDA standards. It also will ensure that SOPs and other tools are prepared to international practice levels and implemented by well-trained commodity managers. The plan will implement strategies that enhance labour efficiency and improve the management capacity of all warehouses; it also will implement an optimised one-hub central warehousing strategy. In addition, it will create an enabling environment for a standardised, modern warehousing infrastructure that promotes good warehousing practices.

Strategic intervention 7.1

Expedite the completion of the new CMS one-hub warehouse.

Activities will include

- MOH to collaborate with key stakeholders including partners to complete the one-hub CMS warehouse.
- Provide the necessary resources, tools and systems to operationalize the completed CMS ensuring its efficient functioning.

Strategic intervention 7.2

Address outstanding gaps in warehousing capabilities and performance at all levels.

Activities will include

- GHS to collaborate with stakeholders including partners to accelerate the establishment of RMSs at designated sites in the newly established regions.
- Address challenges with inadequate material handling equipment, storage space (including receiving and dispatch areas), and standby power supply at CMS and RMSs.
- FDA to assess and support CMS, RMSs, teaching, and regional hospital warehouses to obtain and maintain FDA accreditation for good storage and distribution practice.
- Implement phased installation of smart temperature monitoring systems in CMS, RMSs, teaching and regional hospitals.

Strategic intervention 7.3

Ensure full dissemination and consistent application of inventory management practices.

Activities will include

- Distribute inventory management SOPs to all facilities, paired with refresher training.
- Establish a mechanism to monitor adherence to SOPs.

Strategic intervention 7.4

Develop and implement risk mitigation mechanisms to ensure the safety and accountability of stored commodities at all warehouses.

Activities will include

- Prepare and disseminate risk mitigation mechanisms to improve the safety and accountability of commodities stored at various warehouses across the entire SC entities.

Performance Targets

2025-2029: FDA accreditation for CMS, RMSs, teaching and regional hospital warehouses.

2025-2029: Install smart temperature monitoring systems in CMS, RMSs, teaching and regional hospital warehouses.

2026: 100% availability of SOPs in health facilities

2026: 100% of warehouses implementing Risk Mitigation Mechanism

2029: Construct and operationalize new CMSs.

3.8 DISTRIBUTION

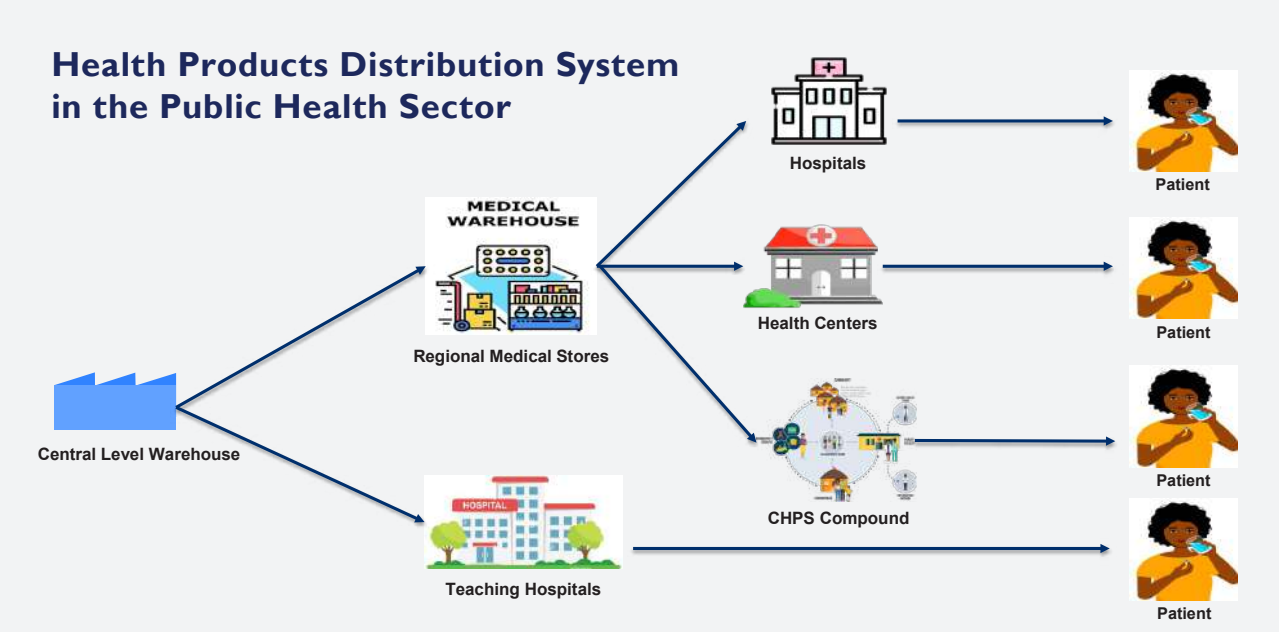
MATURITY ASSESSMENT, PROGRESS TO DATE, ONGOING CHALLENGES

The MOH uses its own fleet and 3PL services to deliver from CMS to RMSs to SDPs. There is no formal relationship between the CMS and the RMS. Most distribution operations are focused on the CMS and RMS. The CMS and RMSs have 100% approved distribution plans, distribution routes, and schedules communicated in advance to recipients.

Most RMSs (90%) maintain proof of delivery for outbound commodities, and 80% of RMSs use those proofs of delivery to reconcile delivery quantities. Cold chain infrastructure is available at 100% of RMSs.

There is a low awareness of policies that govern commodities distribution and transportation. Some RMSs (40%) have a system to capture and maintain transportation data, and few (20%) monitor KPIs. Outbound shipment tracking is conducted, but it is done manually. On-time delivery rates range from 59% to 88%. The inadequate stocking of RMSs because of SDPs' high indebtedness results in the inability of suppliers to meet demand due to liquidity challenges at the RMS level.

RMSs do not actively collect or use cost data (only 20% collect any cost data); as such, cost data is not applied to implement interventions to reduce transport costs or operating costs. High debt across the system renders the RMS unable to stock adequately. Performance monitoring is hindered by limited data capture. There is an opportunity to standardise data collection to drive distribution performance. RMSs need to track and manage cost data closely to ensure operational sustainability.



LINKAGE TO TRANSFORMATIONAL PILLARS

Coordination and Collaboration

Through the implementation of the SCMP, high-level SC actors and the NHIA must coordinate to ensure prompt reimbursements to SDPs and, subsequently, prompt SDP reimbursement to RMSs. Delays in reimbursement across tiers result in sustained stockouts at RMSs and SDPs with dire consequences in health care delivery. Stronger coordination is needed between the CMS and RMSs and those who monitor supply plans, so the warehouses have sufficient commodities to fulfil requisitions on time.

Innovation

Innovative contract mechanisms and performance management of private sector logistics providers could propel the efficiency of distribution operations in terms of commodity delivery and cost. Unmanned aerial vehicles introduced by the MOH will complement conventional distribution with trucks. With this strategy, the distribution of health commodities and lab samples will be optimized.

Transparency

To increase transparency, the MOH and its agencies will implement a system to identify and record the root causes of stockouts at SDPs (i.e., downstream issues such as late delivery, late SDP requisitioning, insufficient funds, low RMS stock levels as well as upstream issues that impact distribution from central level to the regions.)

Sustainability

Analytical studies have shown that the use of 3PLs has cost and performance advantages. The MoH and its agencies will develop and implement a phased sustainability plan to roll out 3PL distribution from central level to the regional level and to SDPs. An optimised sustainability distribution plan requires choosing specific facilities or clusters of facilities for scheduled delivery, aiming to achieve an optimal mix of least cost and best performance.

COMPETENCY-BASED IMPROVEMENT PATHWAY

Current State

All RMSs (100%) have approved distribution plans, routes, and schedules communicated in advance to recipients. On-time delivery rates range from 59% to 88%. Distributions from RMSs consistently do not deliver full orders. RMSs need to track and manage cost data more closely to ensure operational sustainability; ABC has not yet been implemented.

Future State

Distribution across the public health SC is guided by a distribution sustainability plan for consistent performance improvements, reduction of costs, and cost sharing with stakeholders. CMS and RMSs conduct integrated distribution of health commodities to the SDPs. On-time and in-full distribution KPI are met for all deliveries to SDPs. Distribution costs are actively tracked at 1) central to RMS, and 2) RMS to SDP levels. Vendor-managed distribution to the last mile will be put in place.

Strategy

To achieve the desired future state, the SCMP will ensure that distribution plans are structured, implemented, and monitored to achieve regular on-time distribution to SDPs. An optimised distribution strategy will be implemented. A detailed sustainability plan will be developed, implemented, and monitored to ensure the continuity of LMD if donor funding is withdrawn. The use of unmanned aerial vehicles (UAVs) for the transportation of medical products including vaccines, pharmaceuticals, and emergency blood supplies is increasingly providing solutions to the distribution of commodities particularly to hard-to-reach areas. The MOH will therefore leverage existing experiences in-country and coordinate the development of a broad-based strategy -- through comprehensive consultative processes -- to provide clear regulatory guidance and operational procedures for the use of UAVs for the transportation of medical suppliers. The strategy will also address health-system integration and long-term sustainability in the use of UAVs.

Strategic intervention 8.1

Stronger coordination between the CMS and RMSs and all stakeholders (Programmes, SSDM, P&SC) involved in ensuring the timely sufficient requisition fulfilment from SDPs to the central level.

Activities will include

- Institute quarterly stakeholder meetings at the central and regional levels to evaluate distribution processes and use insights to inform performance improvements.

Strategic intervention 8.2

Systematise the collection of data around delivery; apply data-driven insights to improve performance.

Activities will include

- Conduct economic benefit analysis of central and regional level distribution to inform future investment decisions and sustainability of the initiative.
- Track KPIs at CMS and RMSs to identify distribution issues.
- Use results from distribution tracking exercise to address gaps and improve distribution efficiencies

Strategic intervention 8.3

Leverage lessons learned from the use of unmanned aerial vehicles (UAVs) for transportation of medical supplies.

Activities will include

- Review the UAV distribution strategy and SOPs and use them to drive necessary improvements.

Performance Targets

2025-2029: Hold quarterly distribution review meetings

2025-2029: Prepare action plan for CMS and RMSs to address distribution gaps based on KPI targets

2025-2029: Track distribution KPIs for CMS and RMSs; 90% on-time delivery, 70% fill rate

2026: Conduct Economic Benefit Analysis on central and regional level distribution.

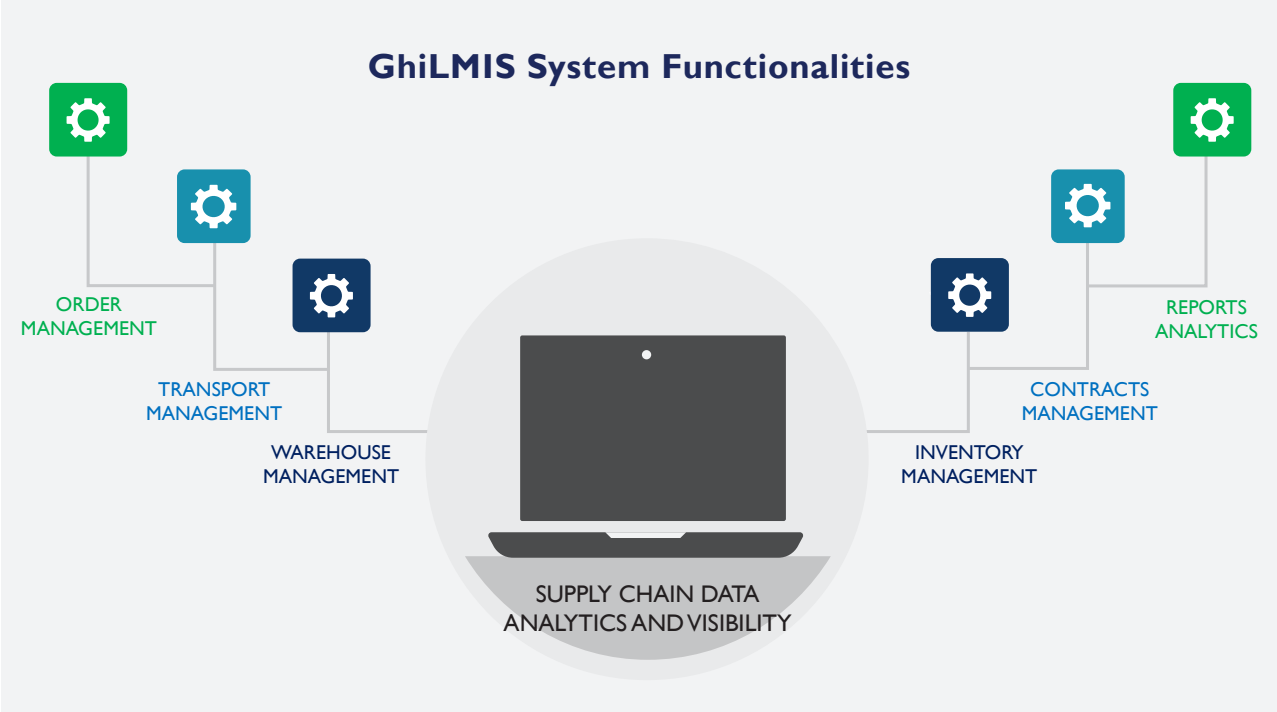
2026: Review the UAV distribution strategy and SOPs and use them to drive necessary improvements

3.9 LOGISTICS MANAGEMENT INFORMATION SYSTEM (LMIS)

MATURITY ASSESSMENT, PROGRESS TO DATE, ONGOING CHALLENGES

The NSCA 2019 identified that the Ghana Public Health SC operates largely on paper-based LMIS and there is wide variation in sites' capabilities and pervasive inaccuracies in reported data. The implementation of an integrated eLMIS, GhiLMIS, is in progress with capacity utilization at varying performance levels along functions and implementation tiers of the Ghana Health Supply Chain. The slow transition from paper to electronic-based and sub-optimal utilization of the GhiLMIS contributes to the existence of several reporting lines and the use of multiple LMIS reporting tools. The transition has faced other challenges, as well: process inputs, SOPs, and tools are not sufficiently present; infrastructure challenges are widespread (hardware and internet connectivity); regional and district leadership commitment is inadequate; and established system governance is lacking.

Additionally, the data quality is lacking, and significant data quality errors threaten to neutralise gains in capability. Internal data quality audits are not conducted regularly in last-mile facilities.



LINKAGE TO TRANSFORMATIONAL PILLARS

Coordination and Collaboration

Facilitate the development of eHealth architecture to facilitate the interoperability of GhiLMIS and other systems. Establish the use of a common infrastructure to provide efficiencies in the SC systems that facilitate information transfer between systems. Develop a Ghana-wide master data strategy for data management, highlighting critical data needs for each key stakeholder to meet performance objectives. Coordinate with regulatory bodies (FDA, NHIA) for the uniform application of policies across the value chain. Facilitate the establishment of industry-standard data management practices to inform decision-making.

Innovation

A key prerequisite for the development of GhiLMIS was to include a standardised master data file for relevant products and locations in the Ghana health value chain through a common business language — a global standard. This standard can be used by all trading partners, from manufacturer to dispenser, to identify, capture, and share information about pharmaceuticals and their movement in the SC. Thus, the MOH and its partners will 1) align master data with global standards and transition to the use of GS1 standards across the value chain; 2) establish a technology-enabled intelligent SC that leverages innovative technology to boost Ghana's competitive edge with advanced analytics to predict outcomes, optimise and automate business operations, and take informed action; 3) ensure an audit trail and support encryption for detecting falsified and substandard drugs in the system; and 4) leverage GhiLMIS as a decision support system that connects and integrates all SC functions. In the future, Ghana's SC will leverage machine learning and artificial intelligence to perform relevant SC functions across the entire chain.

Transparency

Ensure and maintain system security and audits to determine regulatory compliance and information-handling processes at all times and all levels; develop and establish a culture of quality data production and use to perpetuate better data production and enhanced information use for decision making; facilitate end-to-end visibility and analytics across all SC tiers through the provision of real- or near-real-time quality transactional data; leverage GhiLMIS as a decision support system that is capable of connecting all SC functions; ensure data timeliness, completeness, consistency, and accuracy to improve quality.

Sustainability

Ensure efficient, sustainable GhiLMIS use at all levels by developing organisational capacity and coordination amongst stakeholders and users. Implement sustainability drivers, ensuring the availability of political will and government leadership, alignment of system objectives with MOH vision/intervention, and

inclusion of all key stakeholders. Establish a sustainability framework that supports realisation of GhiLMIS' full use and benefits. Conduct post-implementation evaluation to identify cost benefits and operational efficiencies; and develop continuous process-improvement strategies to ensure organisational capabilities and infrastructure support the system's full utilisation.

COMPETENCY-BASED IMPROVEMENT PATHWAY

Current State

Launch and roll out of GhiLMIS are achieved in a timely fashion. Infrastructure supports a high-functioning eLMIS. Data management for decision-making is improving. Interoperability with other systems is currently in progress.

Future State

A fully mature, secure eLMIS facilitates end-to-end SC visibility through interoperability with other systems. A system that supports in-country SC operations and global solutions is supported by better data production and enhanced information use to improve health systems' performance whilst reducing inventory operation costs and maximising resource utilisation . MOH is leveraging AI and machine learning capabilities to optimise data management and use in the health supply chain processes.

Strategy

Ensure full utilization of the GhiLMIS in decision-making across the value chain by establishing performance metrics to enhance data management and foster a culture of data use that leads to better decisions and improved health outcomes. Establish a visibility and analytic network that 1) is interoperable with in-country SC systems and global solutions; 2) supports end-to-end visibility; and 3) is used by a highly skilled team to deliver efficient SC services, perform complex analytics, and provide optimised plans and proactive actions to meet value chain needs.

Strategic intervention 9.1

Distribution of SOPs, stock cards, and other necessary LMIS-related tools to all facilities in the health sector.

Activities will include

- Disseminate logistics SOPs and LMIS tools to all stakeholders leveraging available platforms.
- Use the SOPs and LMIS tools to enhance the utilization of system functionalities at all levels

Strategic intervention 9.2

MOH to establish a SC data governance structure that will promote data-driven decision making and enhance data quality across the entire SC.

Activities will include

- Establish a SC data governance structure to develop policies, procedures, and standards for managing, protecting, and ensuring the quality and integrity of data throughout the supply chain.
- Promote data exchange and interoperability across identified health information systems.
- Develop site and item registries to support data sharing and exchange.

Performance Targets

2025: Establish Data Governance Structure

2025-2027: Develop health information data exchange platform

2026: Develop Data quality improvement action plan

2029: 100% GhiLMIS utilisation of prioritised functions

3.10 QUALITY AND PHARMACOVIGILANCE (PV)

MATURITY ASSESSMENT, PROGRESS TO DATE, ONGOING CHALLENGES

Pharmacovigilance is the science and activities relating to the detection, assessment, understanding and prevention of adverse effects or any other medicine/vaccine-related problem (WHO, 2023). PV in Ghana is considered to be the responsibility of the FDA. Therefore, the cooperation between FDA and SC must be bolstered to improve the PV system.

The PV system has no widespread availability of SOPs, reporting tools, or prepared staff at last-mile facilities (CHPS, clinics, district hospitals). QA/QC processes at the CMS and RMS level, a critical node in the SC, are in nascent stages. The quality of FDA post-market surveillance was identified as a weakness in the stakeholder SWOT analysis. Results of post-market surveillance are not easily accessible and, therefore, not routinely applied to inform SC procurement decisions. Overall, the enforcement and continuous quality monitoring of goods in storage and transit is insufficient.

In its quest to maintain the quality of pharmaceuticals and other health commodities, the FDA has established a monitoring system that keeps regulatory/enforcement coverage at pace with developments in the environment.

LINKAGE TO TRANSFORMATIONAL PILLARS

Coordination and Collaboration

The SCMP will promote enhanced collaboration with the FDA. The FDA will be co-opted into relevant SC TWGs.

Innovation

The SCMP will explore leveraging GhiLMIS for commodity tracking and traceability in SC using national traceability standards. Analytical mini-LABs may be introduced at the CMS, RMSs and teaching hospitals to ascertain the quality of products supplied.

Transparency

Through the SCMP, the annual PV report will be shared by the FDA with the MOH for onward distribution to its agencies for feedback. Substandard and falsified products will be investigated vigorously for root causes by the FDA, and investigation results shared widely with stakeholders. Expiries will be investigated vigorously by the RMS and health facilities for root causes by the responsible region, and investigation results shared widely.

Sustainability

To promote PV sustainability in the SC, PV reporting will be introduced into SC performance monitoring.

COMPETENCY-BASED IMPROVEMENT PATHWAY

Current State

The FDA ensures GWP and conducts product quality testing, registration, and post-market surveillance. The FDA has systems for PV data collection, reporting, and dissemination. Collaboration between the FDA and SC sector must be deepened. A Ghana National Traceability has been developed.

Future State

The FDA proactively provides feedback on the quality of pharmaceuticals and medical equipment. Proactive intervention for substandard and falsified products is in place through improved quality testing at CMS, RMS and teaching hospitals. There is a system in place for the verification and traceability of pharmaceutical products.

Strategy

To achieve the desired future state, the MOH will improve patient care and safety through its agencies by strengthening the recall system of health commodities and medical devices (e.g., batch management of inventory, adopting GS1 coding) and by establishing mini labs at the CMS, RMS and teaching hospitals and identify qualified persons to manage these labs. The human resource capacity for institutional contact persons for pharmacovigilance at health facilities will be developed. The MOH and its regulatory agency, the FDA, operationalise the pharmaceutical traceability strategy.

Strategic intervention 10.1

Staff understand and execute quality assurance (QA) and Pharmacovigilance (PV) functions in accordance with SOPs; they properly and regularly use reporting tools and job aids to provide quality service to patients.

Activities will include

- MOH and its agencies (GHS and FDA) review all PV SOPs, reporting tools, and job aids for accurate, appropriate, and up-to-date information.
- MOH and its agency GHS print and distribute PV tools to health facilities.
- MoH to collaborate with its agencies (FDA, GHS, etc.) to coordinate monitoring of PV activities.
- MOH collaborating with its agencies (FDA and GHS) to build the capacity of institutional contact persons for PV at health facilities.

Strategic intervention 10.2

Quality assurance process for warehousing — FDA certification of warehouses.

Activities will include

- Establish mini labs at CMS, RMSs and teaching hospitals.
- Identify and build the capacity of qualified persons to manage the mini labs.
- FDA to monitor and certify mini labs for CMS, RMSs and teaching hospitals to ensure the quality of medicines routing through these warehouses.

Strategic intervention 10.3

- Implementation of the Ghana National Pharmaceutical Traceability strategy.

Activities will include

- Conduct a multisectoral landscape assessment on National Traceability Strategy implementation to enable early detection of challenges and opportunities for effective implementation of strategy.
- Establish track and trace system leveraging global standards for pharmaceuticals from the port of entry to service delivery points.
- Build the capacity of health facilities and provide them with the technology to support pharmaceutical traceability implementation.
- Disseminate the Ghana National Pharmaceutical Traceability strategy to the general public.

Performance Targets

2025: Update all PV SOPs, reporting tools and job aids

2025-2029: Establish mini labs at CMS, RMSs and teaching hospitals.

2025-2029: Develop a track and trace system

2025-2029: Collaborate with FDA to establish TWG Monitoring committee and to issue annual PV action plans

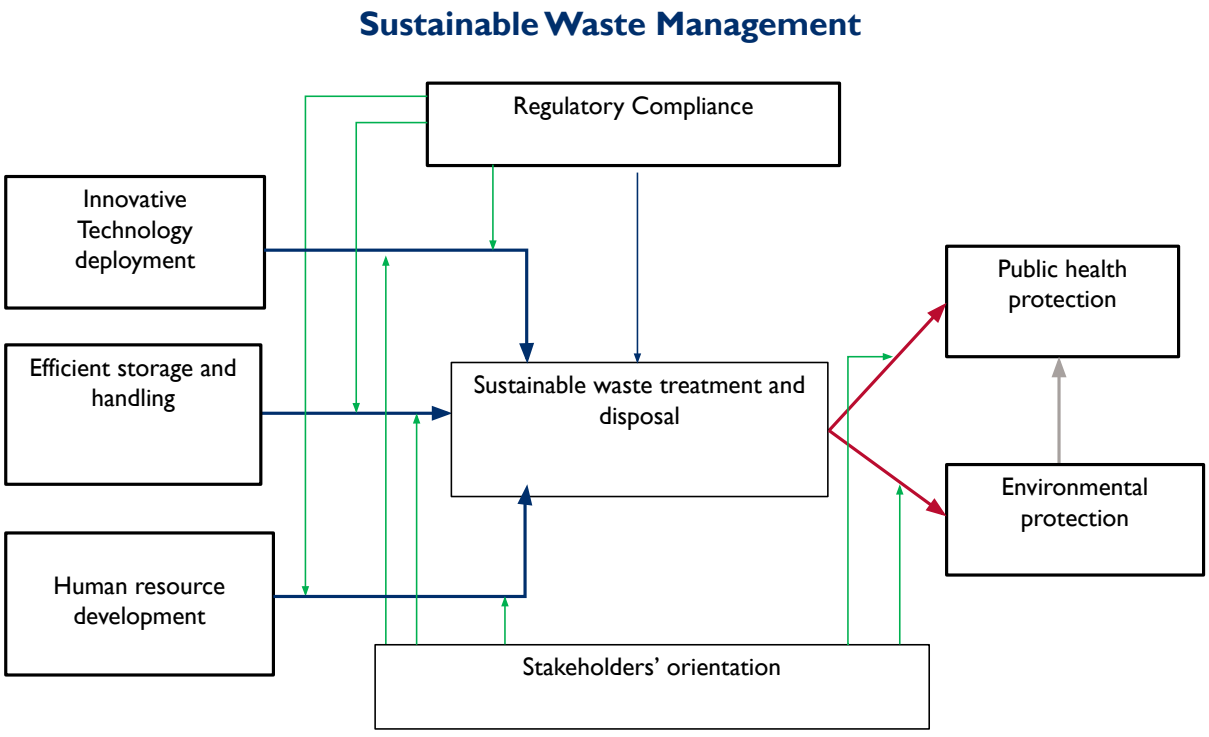
3.11 HEALTHCARE WASTE MANAGEMENT

MATURITY ASSESSMENT, PROGRESS TO DATE, ONGOING CHALLENGES

Healthcare waste management policies, SOPs, and regulations exist within the public health systems. Best practices in healthcare waste management are followed primarily at regional hospitals, RMSs, and CMS. Existing policies and SOPs have yet to be disseminated throughout the system, especially at lower levels.

Multiple methods of healthcare waste management are available; the most predominant is transport to higher-level government facilities (DHAs) or warehouses. There is no clear pathway, however, for reverse logistics in the SC. Further effort and research need to be done to develop an eco-friendly SC that is not detrimental to the environment.

Healthcare waste management is partially integrated into the LMIS, however, information on what is healthcare waste and how the waste is captured is missing. The frequency with which lower-level facilities report relying on "transport to higher facilities" as the main healthcare waste management method exceeds the integration of healthcare waste management reporting into LMIS. Healthcare waste management information is not fully available, and there is a need to capture information on reverse logistics in general, not on healthcare waste management in isolation.



LINKAGE TO TRANSFORMATIONAL PILLARS

Coordination and Collaboration

Focus on healthcare waste management information, working to make it usable and accessible. With increased access to information on healthcare waste management, actors along the SC will have a clear idea of who is managing and responsible for which waste, and when.

Innovation

The SCMP will consider innovative medical packaging. It also will look at innovative healthcare waste handling and treatment/disposal and how bulk packaging could decrease costs.

Transparency

The SCMP will promote transparency by sharing information on how healthcare waste is collected, assessed and transported to official treatment, recycling and disposal facilities. The SCMP will look at healthcare waste flow visibility and what happens at product expiration, documentation, and regulation.

Sustainability

The establishment of institutional and human resource capacity for proper healthcare waste management will promote a more eco-friendly, sustainable SC. The MOH will work with the FDA, Environmental Protection Agency (EPA), and other relevant waste management agencies (e.g. district environmental unit) to ensure that SC waste is not detrimental to the environment through alternate recycling options.

COMPETENCY-BASED IMPROVEMENT PATHWAY

Current State

In some SDPs pharmaceutical and healthcare waste is managed as regular waste, without the use of special waste collection containers and transportation to dedicated disposal facilities.

Future State

Coordinated reverse logistics system for pharmaceutical and healthcare waste is governed by well-understood policies and best practices. Waste is reported consistently. Pharmaceutical and healthcare waste management is an active initiative that is not mixed with household waste.

Strategy

Through the SCMP, we will review policies and SOPs on specialised waste disposal at all levels and improve 1) dissemination to improve implementation at all levels, and 2) budget allocation to improve the pharmaceutical and healthcare waste infrastructure at all levels.

Strategic intervention 11.1

Evaluate how healthcare packaging affects the environment and identify measures to mitigate its effects.

Activities will include

- Conduct LLIN campaigns that include waste management mechanisms.
- Conduct a waste management study to determine the environmental effect of healthcare waste; and identify eco-friendly options for improved waste disposal.

Strategic intervention 11.2

Improve awareness and adherence to policies for healthcare waste management.

Activities will include

- Review and disseminate updated waste management policies, guidelines, and SOPs.
- Strengthen supervisory support systems to ensure adherence to policies for healthcare waste management.

Strategic intervention 11.3

Optimise the use of healthcare waste management infrastructure.

Activities will include

- Complete the healthcare waste management study and use findings to inform policy revision and ensure efficiency in the use of waste disposal mechanisms.

Strategic intervention 11.4

Ensure healthcare waste management is incorporated into LMIS to inform efficient reverse logistics practices in the disposal of healthcare waste.

Activities will include

- Strengthen reporting and tracking of healthcare waste through the LMIS.

Strategic intervention 11.5

MOH to develop a coordination mechanism with the FDA, local government, EPA and other relevant authorities.

Activities will include

- Strengthen stakeholder collaboration (MoH, FDA, local government, EPA and other health agencies) to improve disposal of healthcare waste.

Performance Targets

2025: Update healthcare waste management policies, guidelines, and SOPs

2025: Complete healthcare waste management study; develop Optimisation Plan

2027: Conduct environmental impact assessment of healthcare waste

2025-2029: 100% of warehouses (CMS and RMSs) and health facilities reporting/capturing healthcare waste in LMIS

3.12 PARTNERING WITH THE PRIVATE SECTOR

Whilst partnerships with the private sector have advantages, these arrangements can be complex to design, implement, and manage. The profit-driven approach of most private sector firms can spur operational efficiency but must be kept in check to ensure the quality and integrity of products and services. The MOH will ensure that each partnership with the private sector has a demonstrable value-addition and that effective implementation mechanisms are in place to attain the objectives of all partnership parties.

Because health is a public good, a conscious effort will be made to ensure that engagements with the private sector do not lead to high costs which defeat the underlying vision of providing UHC in Ghana.

MATURITY ASSESSMENT, PROGRESS TO DATE, ONGOING CHALLENGES

Traditionally, health care provision has been the government's responsibility. However, with government's growing fiscal constraints, coupled with the private sector's growth in expertise and funding, partnership between the public and private sectors has become imperative, particularly to achieve UHC and reach sustainable development goals. Increased private sector engagement has been driven by public funds' limitations to cover investment needs, and by efforts to increase public services' quality and efficiency. There are multiple viable mechanisms by which the GOG and its sub-entities can increase partnerships among global, regional, and local private sector markets, including outsourcing SC functions to private sector providers; acquiring advisory services from private sector firms; and executing Public Private Partnerships (PPPs).

There exists interaction dialogue and agreement between the private sector and the public sector on health needs in Ghana. Private sector actors play a complementary role on health commodity supplies. Private sector engagements have provided increased access to skills, expertise, investment, and innovation; improvement in operational efficiencies; shared risk; and improved availability of health commodities. Major financial arrangements between private and public sector actors through the NHIS tariff regime have increased financing of health commodity SCs. However, integrating the private actor's information systems into the public health LMIS has been minimal.

The health commodity supply chain faces significant challenges that impede its efficiency. These challenges include disparities in data usage between the private and public sectors, short contract lengths, unfavourable payment terms, and rising supply costs due to uncontrolled tariffs. These issues result in difficulties in accurate demand forecasting, reduced supplier participation, financial uncertainty, and escalating prices, all of which compromise the availability and affordability of health

commodities. In addition, the Lack of stringent regulatory systems from under-resourced regulatory agencies leads to the distribution of substandard products, further undermining public health and trust in the system. Furthermore, the private sector supply chain is burdened by inadequate technical training for supply chain management, poor warehousing and distribution infrastructure, and challenges accessing financing for private suppliers. The lack of integrated enterprise systems exacerbates these problems, resulting in fragmented and inefficient supply chain operations. Addressing these issues requires a comprehensive approach, including improving data integration, revising financial and contractual policies, strengthening regulatory oversight, enhancing training, and upgrading infrastructure to ensure a resilient and efficient health commodity supply chain.

LINKAGE TO TRANSFORMATIONAL PILLARS

Coordination and Collaboration

The MOH will incorporate effective coordination and collaboration between private and public sector stakeholders. It is important to note that the focus of the engagement is to generate increased availability, affordability, and effective and efficient use of health commodities. This is expected to lead to greater access to skills and expertise, operational efficiencies, access to capital investment, innovation, and shared risk.

Innovation

The focus will be on improving performance through novel and locally relevant solutions for sourcing, warehouse configuration, and information technology. The integration of GhiLMIS with private sector enterprise systems will increase the visibility of health commodities supply across the entire health supply chain. The adoption of innovative operating models (including network optimisation and redesign of transport loops) for last-mile distribution will help increase access to health commodities. The creation of health commodities desks in existing banks will provide tailored support for health commodities SC financing.

Transparency

Increasing the level of trust will result in a successful partnership and collaboration between private and public sector partners. A high degree of openness and increased willingness to dialogue, interact, and engage with stakeholders in the private sector will help boost confidence and trust in any public-private collaboration. The integration of LMIS with the private sector enterprise system will increase the visibility of health commodities supply across the entire health supply chain.

Sustainability

Effective collaborative planning between public and private sector actors will boost the sustainability of health commodities SCs. This partnership and collaboration must be based on mutual trust and shared benefits. Private stakeholders must receive their due as and when required to guarantee the continuity of support and collaboration.

COMPETENCY-BASED IMPROVEMENT PATHWAY

Current State

The private sector does not have adequate capability (financial, expertise, and infrastructure) to complement the public sector in the delivery of quality health services. Engagement between the public and private actors in the health commodities SC is limited, resulting in private sector actors' struggling to complement the public sector to provide quality health services.

Future State

Involvement of the private sector is enhanced through interaction, dialogue, and joint contract design and implementation between the private and public sectors on the health needs of the populace. The private sector has enhanced capability to complement the public sector more collaboratively to deliver superior quality health services. An enabling environment spurs the private sector to invest in the SC in Ghana whilst ensuring value for money and a win-win for all partners.

Strategy

Review the standing interactive and dialogue platform for the public and private sectors for joint health commodity demand planning and implementation. Create health commodities financing packages (Pharma desks, Pharma banks, Fintech, group loans, etc.) to enhance the financial capability of the private sector. Provide appropriate and realistic tariff regimes to sustain private sector participation. Improve the integration of the private sector information systems into the public health LMIS to increase visibility, demand planning, and product availability along the health commodities SC.

Strategic intervention I2.1

Establish strategic framework for engagement of the private sector.

Activities will include

- Analyse the landscape of current private sector partners, identify barriers to further market entry, and design interventions to expand the market accordingly. Develop a private sector engagement strategy.

Strategic intervention I2.2

Review the standing interactive and dialogue platform for public and private sectors for joint health commodity demand planning and implementation.

Activities will include

- Update existing interactive and dialogue platforms for public and private sectors.

Strategic intervention I2.3

Create a health commodities financing package to enhance the financial capability of the private sector.

Activities will include

- Develop and implement a framework for sustainable health commodities financing for the private sector.

Strategic intervention I2.4

Provide appropriate and realistic tariff regimes to sustain private sector participation in health commodity supply in the public health sector.

Activities will include

- Update existing tariffs regime framework with MOH and NHIA.

Strategic intervention I2.5

Improve the integration of the private sector information systems into the public health LMIS to increase visibility, demand planning, and product availability along the health commodities SC.

Activities will include

- Integrate private sector systems into public health commodity LMIS.

Performance Targets

2026: Design a Framework for private sector SC market expansion

2025-2029: Integrate private and public sectors' LMIS systems

2025-2029: Develop and implement health commodities SC financing implementation framework for the private sector

4.0 CONCLUSION

The SCMP 2025-2029 retains the essence and structure of the SCMP 2021-2025. While maintaining certain strategic interventions from the previous plan, some have been omitted, others revised, and new interventions introduced to align with current priorities and relevance. The SCMP 2025-2029 is developed in collaboration with SC sector stakeholders. If the GOG implements these strategic interventions to transform the Ghanaian public health SC into a transparent, well-coordinated SC that infuses innovation with a commitment to reaching self-reliance, then it will achieve key gains toward UHC. Successful implementation will require the commitment of the GOG, its agencies, the donor community, and all health sector stakeholders. Implementation will be monitored and evaluated according to annual performance targets for each programmatic area.

5.0 ANNEXES

5.1 MONITORING AND EVALUATION PLAN FOR SCMP

Technical Area	Intervention (SCMP 2025-2029)	Activity (SCMP 2025-2029)	Output	Means of Verification	Outcome	Indicator	KPIs	Data Source	Frequency of Data Collection	Responsible Units/Entities	Baseline	Target
Strategic Planning and Management	1.1: Clarify the division of all SC functional and strategic roles and responsibilities.	Conduct a mapping exercise of the respective roles, responsibilities, and authorities of each central-level SC entity. include interviews with key stakeholders of each entity, strategic forums for discussion, and finalisation of clear roles	Roles, responsibilities and authorities of each central-level SC entity defined and mapped	Report specifying roles, responsibilities and authority matrix for central level supply chain entities	Roles, responsilbities and authorities matrix streamlined for improved coordination and efficient implementation of activities	1. Percentage of central level SC entities adhereing to revised roles, responsibilities and authorities matrix. 2. Turnaround time for completion of key supply chain activities i. Forecasting and supply Planning ii. Procurement (central level) iii. Distribution (central level)	Pecentage of central level SC entities adhering to revised roles, responsibilities and authority's matrix.	i. Adherence (Survey) ii. Turnaround time (Transactional Data)	Annual	i. Procurement and Supply Chain Directorate (P&SC) of Ministry of Health (MoH) ii. Supplies, Stores and Drug Management Department (SSDM) of Ghana Health Service (GHS) iii. Policy, Planning, Monitoring and Evaluation Directorate (PPMED) of MoH iv. Policy, Planning, Monitoring and Evaluation Division (PPMED) of GHS	Unavailable	80% adherence
		Designate an authorities' matrix to provide coordinated leadership across the MOH and agencies	Authorities' matrix developed	i. Authorities matrix ii. Meeting minutes								
		Design and monitor KPIs for SC actors based on the agreed roles and responsibilities from stakeholders' consultations and engagements	KPIs on roles and responsibilities for SC actors developed and monitored	i. Indicator Performance Reference Sheet. ii. Monitoring report on KPIs for SC actors								
	1.2: Institutionalise strategic planning practices at all levels (with emphasis on the central and regional levels)	Design region-specific SC strategic plans within the SCMP context; review annually based on attainments or otherwise of KPIs	Region specific strategic plan developed for all regions.	i. Region specific strategic plans ii. Report/minutes of stakeholder meetings	Improved resource allocation and implementation of interventions	i. Percentage of interventions implemented within a specified time period ii. Allocated budget for strategic plan interventions within a specified period iii. Percentage spent on strategic plan interventions within a specified period		i. Warehouse records	Biannual	i. Procurement and Supply Chain Directorate (P&SC) of Ministry of Health (MoH) ii. Supplies, Stores and Drug Management Department (SSDM) of Ghana Health Service (GHS) iii. Policy, Planning, Monitoring and Evaluation Directorate (PPMED) of MoH iv. Policy, Planning, Monitoring and Evaluation Division (PPMED) of GHS		
		Disseminate the SCMP to all stakeholders at central and subnational levels	SCMP disseminated at central and regional levels	i. SCMP available ii. Minutes of dissemination meetings								
		Review implementation progress of the SCMP annually against performance targets	SCMP implementation progress reviewed annually	i. Assessment monitoring tools ii. Annual review reports on implementation progress								

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Strategic Planning and Management	1.3: Formalise the practice of assessing SC risks at the central and regional levels	Conduct regular (annual) SC risk assessments at all levels	Supply chain risk assessment conducted	i. Risk assessment report ii. Risk mitigation plan iii. Meeting minutes	Supply chain risk mitigated for optimised supply chain activities at the central and regional levels	i. Holding cost ii. Stock wastage due to expiry or damage iii. Shrinkage due to pilferage and diversion iv. Inventory Accuracy v. Stockout vi. Percentage of shipments accurately delivered.		i. Warehouse records	Biannual	i. Procurement and Supply Chain Directorate (P&SC) of Ministry of Health (MoH) ii. Supplies, Stores and Drug Management Department (SSDM) of Ghana Health Service (GHS) iii. Policy, Planning, Monitoring and Evaluation Directorate (PPMED) of MoH iv. Policy, Planning, Monitoring and Evaluation Division (PPMED) of GHS		
		Design relevant advocacy mechanisms to address SC risks emanating from the risk assessment	Meetings, workshops, seminars on supply chain risk assessment organized	Reports/minutes of meetings, workshops, seminars on SC risks								
	1.4: Transform the RMSs and Teaching Hospital (TH) Medical Stores into business units.	Hold consultative engagements with the management of Regional Health Directorates (RHD) and THs on RMSs and Teaching Hospital Medical Stores transition into business entities.	Meetings on RMSs' transition into business entities conducted	Report/meeting minutes on stakeholder engagements	Efficiency in RMS operations	i. Sales Volume ii. Return on investment iii. Cost control iv. Inventory Turnover v. Days Inventory Outstanding vi. Days Sales Outstanding		i. Warehouse records ii. Sales records	Biannual	i. Procurement and Supply Chain Directorate (P&SC) of Ministry of Health (MoH) ii. Supplies, Stores and Drug Management Department (SSDM) of Ghana Health Service (GHS) iii. Policy, Planning, Monitoring and Evaluation Directorate (PPMED) of MoH iv. Policy, Planning, Monitoring and Evaluation Division (PPMED) of GHS		
		Conduct activity-based costing (ABC) in all regions and THs to identify true operations costs; use findings to guide transitions into business units.	Activity-based costing conducted for all regions	i. Labour report ii. Financial report iii. Warehouse activity planner iv. Activity-based costing report								
		Assess the viability of transforming the RMSs and Teaching Hospital Medical Stores into business units.	Assessment on RMS viability conducted	Assessment report on viability of transforming RMSs into business units.								
		Prepare business plans for each RMS and TH.	Business plans developed for all RMSs	Business plans available								
	1.5: Introduce a focus on financial sustainability, including sustained advocacy for increased resources for SC interventions	Develop strategies to align framework contracting with NHIA price reaview process.	Strategies for alignment of FWC and NHIA price review developed	i. FWC/NHIA price review strategy available ii. Meeting reports/ minutes	Adequate and sustainable funding for supply chain activities	i. Percentage of total spent on the procurement of health commodities by supply chain entities. ii. Percentage of total spent on supply chain activities by supply chain entities iii. Funding Gap		i. Accounting sheets on procurement ii. Accounting sheet on distribution	Annual	i. Procurement and Supply Chain Directorate (P&SC) of Ministry of Health (MoH) ii. Supplies, Stores and Drug Management Department (SSDM) of Ghana Health Service (GHS) iii. Policy, Planning, Monitoring and Evaluation Directorate (PPMED) of MoH		
		Review the private sector engagement strategy to include PPPs in supply chain.	i. Private secor engagment strategy reviewed to include PPPs in the supply chain ii. Stakeholder meetings, seminars, workshops, etc on health supply chain financing organized	i. Updated private sector engagement strategy ii. Report/ meeting minutes on stakeholder engagements								
		Develop advocacy mechanisms for improved funding for SC interventions										

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Strategic Planning and Management		Organise regular resource mobilisation at least annually for SC performance, including procurement of programme commodities	Funding gap analysis conducted and used for advocacy	i. Gap analysis report ii. Meeting minutes						iv. Policy, Planning, Monitoring and Evaluation Division (PPMED) of GHS		
	1.6: Institutionalise monitoring of SC strategic interventions.	Consolidate the monitoring of interventions for all functional supply chain areas.	Consolidated checklist developed and used for monitoring	i. Consolidated monitoring checklist ii. Monitoring report on implementation of SC interventions	Enhanced monitoring of supply chain performance for improved decision making at the regional level	i. Usage of supply chain monitoring checklist ii. Percentage of planned monitoring activities conducted within a specified period		i. Survey	Quarterly	i. Procurement and Supply Chain Directorate (P&SC) of Ministry of Health (MoH) ii. Supplies, Stores and Drug Management Department (SSDM) of Ghana Health Service (GHS) iii. Policy, Planning, Monitoring and Evaluation Directorate (PPMED) of MoH iv. Policy, Planning, Monitoring and Evaluation Division (PPMED) of GHS		
Policy and Governance	2.1: Update NEML and STGs bi-annually and develop a Non-Medicines Tracer List to align with the national medicines policy and other relevant guidelines	Develop SOPs and scorecards for bi-annual reviews	SOPs and scorecards for annual reviews developed	i. SOP available ii. scorecards available	Stocking and management decisions guided by the Non-Medicines Tracer List, updated NEML and STG	i. Adherence to updated NEML ii. Adherence to updated STG iii. Adherance to the Non-Medicines Tracer List	Adherence to supply chain policies	i. Survey	i. Annual	i. Procurement and Supply Chain Directorate (P&SC) of Ministry of Health (MoH) ii. Supplies, Stores and Drug Management Department (SSDM) of Ghana Health Service (GHS) iii. Policy, Planning, Monitoring and Evaluation Directorate (PPMED) of MoH iv. Policy, Planning, Monitoring and Evaluation Division (PPMED) of GHS	Unavailable	80% adherence
		Revise NEML and STGs accordingly	NEML and STG updated	i. Updated NEML and STG available ii. Minutes of NEML and STG review meeting								
		Develop National Health Commodity Non-Medicines Tracer List	Tracer list on non-medicines developed	i. National Health Commodity Tracer list ii. Minutes on Non-Medicines Tracer List meeting								
	2.2: Ensure awareness and availability of existing national policies at all levels	Include checks for physical copies of policies, guidelines, and SOPs in supportive supervision visits	Verification of policies and SOPs included in supervision visits	Updated supervision tool	Increased stakeholder awareness and implementation of key policies	i. Availability of supply chain policies ii. Level of awareness of supply chain policies iii. Adherance to supply chain policies		i. Survey	i. Annual	i. Procurement and Supply Chain Directorate (P&SC) of Ministry of Health (MoH) ii. Supplies, Stores and Drug Management Department (SSDM) of Ghana Health Service (GHS)		
		Introduce regular reviews of price regulatory mechanisms	Price regulatory mechanisms reviewed	i. Price regulatory mechanism review report ii. Minutes on price regulatory meetings								

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Policy and Governance		Disseminate key policies through national and regional public meetings, newspapers, nongovernmental organisation (NGO) visits, website,other media platforms, etc.	Meetings and workshops organized to disseminate key policies.	Meeting reports/ minutes						iii. Policy, Planning, Monitoring and Evaluation Directorate (PPMED) of MoH iv. Policy, Planning, Monitoring and Evaluation Division (PPMED) of GHS		
	2.3: Streamline management of donated commodities at regional level.	Increase regional involvement in managing vertical commodities for each step of the SC, from quantification, procurement, and financing to last-mile availability	Regional involvement in the management of program commodities increased	i. Attendance list ii. Meeting report/ minutes	Improved regional level particpation in the management (quantification, procurement, financing and distribution) of vertical commodities.	Level of involvement in key supply chain activities (quantification, procurement, financing and distribution)		i. Survey	Biannual	i. Procurement and Supply Chain Directorate (P&SC) of Ministry of Health (MoH) ii. Supplies, Stores and Drug Management Department (SSDM) of Ghana Health Service (GHS) iii. Policy, Planning, Monitoring and Evaluation Directorate (PPMED) of MoH iv. Policy, Planning, Monitoring and Evaluation Division (PPMED) of GHS		
	2.4: Improve performance management and accountability structures at central, regional, district, and SDP levels	Develop scorecards for performance management	i. Scorecards for performance management developed ii. Supply chain performance management initiatied at all levels iii. Meetings and workshops organized to disseminate SC policies	i. Scorecard ii. Monitoring report iii. Dissemination meeting report	Standardized performance framework to measure supply chain activities at all levels.	Adherence to standardized framework for performance measurement		i. Survey	Annual	i. Procurement and Supply Chain Directorate (P&SC) of Ministry of Health (MoH) ii. Supplies, Stores and Drug Management Department (SSDM) of Ghana Health Service (GHS) iii. Policy, Planning, Monitoring and Evaluation Directorate (PPMED) of MoH iv. Policy, Planning, Monitoring and Evaluation Division (PPMED) of GHS		
		Initiate supply chain performance management including monitoring the implementation of policies and governance processes to ensure commodity availability at all levels										

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Human Resources	3.1: Ensure the infusion of critical inputs to improve SC workforce.	Advocate for more visibility of Supply Chain Management practitioners in the Human Resource for Health Strategy Document.	Stakeholder meetings and symposium organized to discuss SC HR visibility, resource allocation and SC performance tracking at all levels.	Meeting report/ minutes, communique, policy briefs and reports available	Commitment for increased resource allocation for supply chain performance improvement	i. Budget allocation for supply chain workforce development ii. Percentage of budget allocation spent on supply chain workforce development iii. Level of stakeholder commitment for SC human resource development iv. Number of funding options for supply chain workforce development.	i. Adherence to supply chain practice guidelines ii. Turnaround time for task completion	i. Annual accounting sheets ii. Survey	Annual	i. Procurement and Supply Department (P&S) of Ministry of Health (MoH) ii. Supplies, Stores and Drug Management Department (SSDM) of Ghana Health Service (GHS) iii. Policy, Planning, Monitoring and Evaluation Directorate (PPMED) of MoH iv. Policy, Planning, Monitoring and Evaluation Division (PPMED) of GHS v. Human Resource for Health Development Directorate (MoH) vi. Human Resource Division (GHS)	i. Unavailable	i. 80% adherence
		Strengthen advocacy for increased resource allocation for SC functions in Ghana										
		Advocate for increased resources to improve SC staff performance at all levels										
		Advocate for performance-based motivation for SC practitioners and institutions.	Advocacy meeting on performance-based motivation organized	Report/meeting minute								
	3.2: Accelerate professionalisation of the SC workforce.	Define qualifications and required skills set for key supply chain managerial roles at all levels.	Qualification and required skills set for key supply chain managerial roles defined	Job description for regional level SC practitioner	Enhanced recognition and professionalism of supply chain workforce for improved productivity and organizational performance.	i. Job satisfaction ii. Staff turnover rate iii. Turnaround time for task completion iv. Percentage of supply chain practitioners in management positions		i.Survey ii. HR Management Information System	Annual	i. Procurement and Supply Department (P&S) of Ministry of Health (MoH) ii. Supplies, Stores and Drug Management Department (SSDM) of Ghana Health Service (GHS) iii. Policy, Planning, Monitoring and Evaluation Directorate (PPMED) of MoH iv. Policy, Planning, Monitoring and Evaluation Division (PPMED) of GHS		
		Develop or identify CPDs accreditation opportunities for SC professionals	Meeting on CPD accreditation opportunities organized	Meeting minutes								
	3.3: Enhance supportive supervision practices.	Harmonise supportive supervision exercises with SC SOPs.	i. SC SOPs integrated into supportive supervision exercises ii. Number of SC practitioners benefitting from supportive supervision exercise	i. Revised SC supportive supervision checklist ii. Report on supportive supervision visits conducted	Enhanced capacity of supply chain practitioners to perform supply chain functions	Adherence to practice guidelines		i. Survey	Annual			
		Conduct on-the-job training to reinforce knowledge and skills for SC practitioners										

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Human Resources	3.4: Improve recruitment and retention of SC personnel	Conduct SC labour market assessment for the health sector.	Labour market assessment conducted	Report on labour market assessment	Improved availability of SC professionals at all levels	i. Number of SC professionals recruited ii. Staff turnover ratio iii. Number of SC vacancies		i. HR Management Information System	Annual	v. Human Resource for Health Development Directorate (MoH) vi. Human Resource Division (GHS)		
		Adapt the World Health Organisation Workload Indicators of Staffing Need (WISN tool) human resource management tool for supply chain workforce planning.	WHO workload indicator for staffing need adapted for SC human resource planning	i. Tracking tool with supply chain workload indicator ii. SC HR plans with targets based on adapted WISN tool								
		Improve recruitment processes for SC professionals in the public health sector.	Advocacy meetings on SC human recruitment organized	Guideline/communique on SC human resource recruitment								
		Explore strategies to address geographic disparities in recruitment and retention of health workers, including SC professionals into the public health sector.	i. Stakeholder meeting on recruitment and retention strategy for SC professionals organized	i. Desk review report on SC recuitment and retention strategy ii. Minutes iii. Guideline on recruitment of SC professionals								
	3.5: Engagement with relevant accredited academic institutions and professional bodies on provision of institutionalised capacity for SC staff at all levels.	Develop memoranda of understanding with relevent training institutions	i. MOU with relevant training institutions developed ii. Consultative meetings on relevant institutions organized	i. MOU available ii. Meeting minutes/ reports	Enhanced capacity of supply chain practitioners to perform supply chain functions	i. Adherence to supply chain practice guidelines		i. Survey	Annual			
		Monitor performance of SC professionals	Number of SC professionals monitored on supply chain performance	Monitoring report for SC human resources								
		Explore opportunities to develop open-source e-learning modules on SC functions.	Consultative meetings with relevant stakeholders organized	Open-sourced e-learning application available								
	3.6: Strengthen collaboration between professional networks of health SC professionals	Advocate for strengthened collaboration between public and private health SC practitioners	Advocacy meetings and conference for SC professionals organized	Meeting minutes, communique and policy brief emanating from advocacy meetings and SC conference	Enhanced collaboration and networking among supply chain practioners	i. Number of advocacy platforms created ii. Percentage of SC practitioners who are members of professional bodies		i. Survey ii. List of certified members	Annual			
		Organise and participate in annual conference of SC professionals										
		Support SC practitioners to become members of SC professional bodies (e.g., International Association of Public Health Logisticians)	Number of SC practitioners who are members of professional bodies	List of certified members								

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Financial Sustainability	4.1: Prioritise a national effort to settle outstanding debts, establish and enforce future payment deadlines	Determine the magnitude of outstanding debts	Magnitude of outstanding debts established	i. Financial sustainability report ii. TWG meeting minutes	Improved and sustainable financing of the health supply chain system	i.Cash flow ii. Debt / Income Ratio iii. Working Capital	Cash flow	i. Financial Reports (RMS and Facilities)	Quarterly/ Biannual	i. Procurement and Supply Chain Directorate (P&SC) of Ministry of Health (MoH) ii. Supplies, Stores and Drug Management Department (SSDM) of Ghana Health Service (GHS) iii. Regional Health Management Team	Unavailable	NVP>0
		Develop mechanisms for outstanding debt clearance	Mechanisms for clearing outstanding debts developed	i. Framework for outstanding debt clearance available ii. Meeting minutes/ reports								
		Prepare a five-year costed financial implementation plan for teaching hospitals/regions	5-year costed financial implementation plan for regions/teaching hospitals developed	i. Costed financial implementation plan for regions and teaching hospitals								
		Design appropriate mechanisms to ensure prompt SDP payment to RMSs	Mechanisms for SDP payment to RMSs developed	i. SDP payment framework ii. TWG meeting minutes								
	4.2: Ensure the financial sustainability of the SC system	Conduct a financial sustainability assessment; use findings to plan a sustainability strategy	Financial sustainability assessment conducted	Financial sustainability assessment report								
		Develop a resource mobilisation strategy for incremental financing of SC interventions (including procurement of programme commodities)	Resource mobilization strategy for SC financing developed	i. Resource Mobilisation Strategy for SC financing ii. Meeting minutes								
		Strengthen continuous coordination between MOH and its agencies and partners	Stakeholder coordination meeting on financial sustainability organized	i. Minutes on stakeholder coordination meeting ii. Participants' attendance list								
		Advocate for enhancement of NHIA's reimbursement mechanisms	Advocacy meetings on NHIA reimbursement mechanisms organized	Minutes, communique and policy brief emanating from meetings								
		Make all financial management guidelines available to all stakeholders; operationalise their implementation	i. Number of guidelines disseminated to all stakeholders.	i. Financial management guideline available ii. Distribution list								
		Prepare SC annual budget at all levels, review quarterly	i. Number of Budget Management Centres entities that developed an SC annual budget at various levels	i. SC budget available								

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Financial Sustainability		Develop a tracking tool to monitor the implementation of the RDF at all levels	Tracking tool for RDF implementation monitoring developed	i. RDF implementation tracking tool ii. Meeting minutes								
	4.3: Develop Financial Sustainability Plan for 2025-2029	Develop a five-year SC financial sustainability and implementation plans for 2025-2029.	Five-year financial sustainability and implementation plans developed	Five-year financial sustainability and implementation plans available								
Forecasting and Supply Planning	5.1: Standardize SOPs and use of modern FASP across programmatic areas and in regions	Strengthen the quantification of essential medicines at the regional level including the use of modern FASP tools.	i. Number of supply chain practitioners trained on modern forecasting and supply planning tool. ii. Number of quantification meetings organized	i. Training report ii. Regional quantification report for essential medicines	Improved Forecasting and Supply Planning	Forecast Accuracy using Mean Absolute Percentage Error (MAPE) WAPE	Forecast Accuracy using Mean Absolute Percentage Error (MAPE)	Forecasting output • Consumption records • Issues records • Distribution records	Annually /biannually	i. Supplies, Stores and Drug Management Department (SSDM) of Ghana Health Service (GHS) ii. Regional Health Management Team	Unavailable	25%
		Update the national quantification guidelines.Include essential medicines, the regional level and KPIs in the scope	National Quantification Guideline updated	i. Updated National Quantification Guideline ii. TWG meeting minutes								
	5.2: Strengthen the National Quantification Team and streamline quantification processes.	Align national forecasting processes for each program.	i. Forecasting processes for each program aligned	i. Process map for FASP available ii. TWG meeting minutes								
		Strengthen advocacy to increase annual funding from stakeholders including GOG to conduct forecasting, supply planning, and monitoring.	Advocacy meetings on annual funding for quantification organized	i. Minutes/communique ii. Policy brief emanating from meetings iii. Annual FASP budget								
		Conduct annual quantification; disseminate outputs to all stakeholders	Annual quantification of health products conducted	Quantification report								
	5.3: Capacity building to enable government-led quantification at central and regional levels	Develop training program with modules	FASP training modules developed	i. FASP modules ii. Meeting minutes								
		Run a pilot training program	i. Number of SC practitioners trained through pilot program	FASP pilot training report								
		Implement through a training of trainers approach	i. Number of SC practitioners trained through ToT	i. Training report ii. Participants' list								

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Procurement and Customs Clearance	6.1 Roll out an integrated electronic procurement system.	Train identified central and regional-level stakeholders on e-procurement	Number of SC actors trained on e-procurement system (GHANEPS)	i. Training report available ii. Participants' list	A well funded and efficient procurement system that supports timely supply and access to health commodities at all levels.	i. Order compliance ii. Order lead time iii. Procurement lead time iv. Lead time for contract/purchase order issued (procurement cycle time) v. Percentage of procured products that were in the procurement plan	Lead time for contract/purchase order issued (procurement cycle time)	i. Order compliance (PO/contracts, Invoice, Order receipt vouchers) ii. Order lead time (Order or requisition forms, contracts, proof of delivery, procurement/e-LMIS database) iii. Lead time for contract/ purchase order issued (Procurement records, procurement plan) iv. Percentage of procured products that were in the procurement plan (Procurement plan, procurement records, Stores records)	Biannually/ Annually	i. Procurement and Supply Chain Directorate (P&SC) of Ministry of Health (MoH) ii. Supplies, Stores and Drug Management Department (SSDM) of Ghana Health Service (GHS) iii. Regional Health Management Team	Unavailable	i. 3 months for international tender (ICT/ICB) ii. 2 months for main tender (NCT/ NCB) iii. 1 week for call-off (FWC)
		Develop a framework to monitor the system utilization.	Framework for monitoring e-procurement system utilization developed	i. E-procurement (GHANEPS) system utilisation framework ii. GHANEPS system utilisation report								
	6.2: Advocate for incremental annual funding for GOG to procure health commodities.	Develop a comprehensive funding strategy aimed at ensuring sustainable procurement of programme medicines and other essential health commodities.	Funding strategy for sustainable procurement of program commodities developed	i. Funding Strategy for Health Commodity Procurement ii. TWG minutes/ report								
	6.3: Develop clear procurement oversight processes in accordance with existing procurement laws	Update and disseminate FWC guidelines to regions and teaching hospitals	i. FWC guidelines updated and disseminated ii. Number of regions and teaching hospitals that received FWC guidelines	i. Updated FWC guidelines ii. Stakeholder dissemination meeting minutes iii. Distribution list								
		Institute monitoring mechanism to improve compliance with FWC guidelines	FWC monitoring mechanism introduced	i. FWC monitoring tool ii. FWC scorecard								
		Monitor and promote compliance with the Public Procurement Act 663 (as amended) and Regulations	Number of entities monitored on compliance with the Public Procurement Act and regulations	i. Procurement monitoring tool ii. Procurement monitoring report iii. Auditor's report								
		Develop and monitor KPIs in respect to vendor (supplier) performance for the framework contracting mechanisms	FWC procurement KPIs developed and monitored	i. Performance Indicator Reference Sheet for FWC KPIs ii. FWC procurement tool iii. FWC monitoring report								
		Strengthen compliance with the certificate of non-availability process and the application of sanctions.	Compliance with certificate for non-availability and associated sanctions are embedded in activity 1 of 6.4.	Compliance with certificate for non-availability and associated sanctions are embedded in activity 1 of 6.4.								

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Procurement and Customs Clearance	6.4: Develop interventions to address tax exemption and customs clearance bottlenecks to improve clearance time	Map processes to obtain tax exemption and customs clearance	Tax exemptions and customs clearance processes mapped	i. Process map for tax exemption and customs clearance ii. Meeting minutes								
		Develop strategies to reduce delays in the process	Strategies for reducing customs clearance delays developed	i. Customs Clearance Improvemnet Strategy ii. Meeting report/ minutes								
		Update procurement lead time to include tax exemption, clearing processes and FDA quality control										
Warehousing and Storage	7.1: Expedite the completion of the new CMS one-hub warehouse	MOH to collaborate with key stakeholders including partners to complete the one-hub CMS warehouse.	One-hub CMS warehouse completed	Pharma-grade one-hub central warehouse	Optimized warehousing and accountability systems for enhanced management and supply of quality assured health commodities	i.Inventory Accuracy ii. Warehouse Order Processing Time iii. Stockout Rate iv. Stock Wastage due to Expiration or Damage v. Percentage of FDA accredited warehouses vi. Effeciency	Warehouse Order Processing Time	Survey,LMIS (electronic / manual), Physical Inventory	Quarterly, biannually, and annually	i. Procurement and Supply Chain Directorate (P&SC) of Ministry of Health (MoH) ii. Supplies, Stores and Drug Management Department (SSDM) of Ghana Health Service (GHS) iii. Regional Health Management Team	Unavailable	2 Weeks
		Provide the necessary resources, tools and systems to operationalize the completed CMS ensuring its efficient functioning.	Tools for CMS operationalization provided	i. CMS Operational Plan ii. List of tools/ equipment iii. Warehousing management system available								
	7.2: Address outstanding gaps in warehousing capabilities and performance at the RMSs	GHS to collaborate with stakeholders including partners to accelerate the establishment of RMSs at designated sites in the newly established regions.	Number of new regions with warehouses	Pharma-grade warehouses for new regions								
		Address challenges with inadequate material handling equipment, storage space (including receiving and dispatch areas), and standby power supply at RMSs	Number of RMSs implementing improvement plans	i. RMS Improvement Plan ii. Warehousing resources (inventory management software, pallets, shelves, forklift, standby power supply, etc.) available								
		Collaborate with the FDA to achieve and maintain FDA accreditation for good storage and distribution practice for all RMSs.	Number of RMSs that have obtained FDA certification	Accreditation certificates								
		Implement phased installation of smart temperature monitoring systems in all RMSs, teaching and regional hospitals	Number of RMSs, teaching and regional hospitals that have smart temperature monitoring systems	Smart temperature monitoring systems								

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Warehousing and Storage	7.3: Ensure full dissemination and consistent application of inventory management practices	Distribute inventory management SOPs to all facilities, paired with refresher training	i. Number of facilities that received SOPs ii. Number of facilities/ persons trained	i. Distribution list ii. Training report								
		Establish a mechanism to monitor adherence to SOPs.	i. Stakeholder meetings organized to develop a framework for monitoring adherence to SOPs.	i. Framework for monitoring adherence to warehousing SOPs. ii. Checklist for monitoring adherence to SOP iii. Monitoring report								
	7.4: Develop and implement risk mitigation mechanisms to ensure the safety and accountability of stored commodities at all warehouses.	Prepare and disseminate risk mitigation mechanisms to improve safety and accountability of commodities stored at various warehouses across the entire SC system	i. Stakeholder meeting on risk mitigation mechanism ii. Dissemination meeting iii. Number of warehouses implementing risk mitigation mechanisms	i. Risk assessment scorecard ii. Risk Mitigation Framework/Mechanism iii. Meeting minutes iv. Dissemination report								
Distribution	8.1: Stronger coordination between the RMSs and the logistics management unit (LMU) to ensure that RMSs have timely, sufficient commodities to fulfill requisitions from SDPs.	Institute quarterly stakeholder meetings (between the LMU, RMSs, 3PLs, etc) to evaluate distribution processes and use insights to inform performance improvements.	Stakeholder review meeting organized to evaluate distribution processes	Report with recommendations to drive improvements	Optimised distribution system guided by data-driven solutions and implementation of sound distribution policies	i. Order fill-rate ii. On-time delivery iii. Total transportation cost	On-time delivery	Procurement records, Proof of Delivery, Customs records, Vehicle logs, LMIS (electronic /manual), Yearly Accounting Sheets	Quarterly, biannually, and annually	i. Procurement and Supply Chain Directorate (P&SC) of Ministry of Health (MoH) ii. Supplies, Stores and Drug Management Department (SSDM) of Ghana Health Service (GHS) iii. Regional Health Management Team	90%	100%
	8.2: Systematise the collection of data around delivery; apply data-driven insights to improve performance	Conduct economic benefit analysis of central and regional level distribution to inform future investment decisions and sustainability of the initiative.	conomic benefit analysis on central and regional level distribution conducted	i. Tools/survey questionnaire/ Interview guide ii. Assessment Report								
		Track distribution KPIs within each RMS to identify issues for correction	i. Distribution KPIs tracked to identify issues for correction	i. Distribution KPI tracking tool ii. Distribution KPI scorecard iii. Distribution Performance Analytic dashboard/ report								

Technical Area	Intervention (SCMP 2025-2029)	Activity (SCMP 2025-2029)	Output	Means of Verification	Outcome	Indicator	KPIs	Data Source	Frequency of Data Collection	Responsible Units/Entities	Baseline	Target
Distribution		Use results from distribution tracking exercise to address gaps and improve distribution efficiencies.	Results from distribution performance disseminated and used to address gaps	i. Distribution Improvement Action Plan ii. Meeting minutes iii. Distribution Performance Update Report								
	8.3: Leverage lessons learned from the use of unmanned aerial vehicles (UAVs) for transportation of medical supplies.	Conduct consultative stakeholder engagements to develop a comprehensive strategy on the use of UAVs in the health sector.	Seminars/Symposia/ Meetings on UAV strategy development organized	i. Meeting minutes/ communique ii. Policy brief iii. UAV Utilization Strategy								
Logistics Management Information System (LMIS)	9.1: Distribution of SOPs, stock cards, and other LMIS-related tools to all facilities in the health sector	Disseminate SOPs to all stakeholders leveraging available platforms.	Refer to Intervention 7.3, Activity 1	Refer to Intervention 7.3, Activity 1	Improved supply chain performance and decision making through data governance and use	i. GhiLMIS Capacity Utilisation Rate ii. Data Confidence ** Data Accuracy ** Data Availability ** Data reporting timeliness	i. GhiLMIS Capacity Utilisation Rate	LMIS (electronic / manual), physical inventory, stiock cards, Survey,	Monthly, Quarterly, biannually, and annually	i. Procurement and Supply Chain Directorate (P&SC) of Ministry of Health (MoH) ii. Supplies, Stores and Drug Management Department (SSDM) of Ghana Health Service (GHS) iii. Regional Health Management Team	30%	70% in 2025; 25% annual increase between 2026 and 2029
		Develop site and item registries to support data sharing and exchange.	Site and item registries for data exchange developed	i. Site and item registry ii. Data exchange platform iii. Meeting minutes								
		Develop an action plan to strengthen data quality and management processes.	Action plan for data quality improvement organized	i. Gap Analysis Report ii. Data quality improvement action plan iii. Meeting minutes								
		Strengthen data exchange and interoperability across identified SC information systems.	Stakeholder meetings on data exchange and interoperability organized	i. Data exchange platform ii. Technical report on status of data exchange and interoperability iii. Meeting minutes								
		Formally set up a SC data governance structure to establish policies, procedures, and standards for managing, protecting, and ensuring the quality and integrity of data throughout the supply chain.	Supply chain data governance structure established to develop relevant policies and procedures	i. Minutes from Supply Chain Data Governance TWG ii. Data quality improvement policies and SOPs								

Technical Area	Intervention (SCMP 2025-2029)	Activity (SCMP 2025-2029)	Output	Means of Verification	Outcome	Indicator	KPIs	Data Source	Frequency of Data Collection	Responsible Units/Entities	Baseline	Target
Quality and Pharmacovigilance (PV)	10.1: Staff understand and execute quality assurance (QA) and Pharmacovigilance (PV) functions in accordance with SOPs; they properly and regularly use reporting tools and job aids to provide quality service to patients.	MOH and GHS review all PV SOPs, reporting tools, and job aids for accurate, appropriate, and up-to-date information	TWG meeting organized to review PV SOPs, reporting tools, and job aids	i.Meeting minutes ii. Updated SOPs, reporting tools and job aids	Improved adherence to FDA Pharmacovigilence guidelines	Percentage of facilities that are adhering to the FDA guidelines	Percentage of facilities that are adhering to FDA guidelines	Survey	Annually	i. Pharmacy Directorate of Ministry of Health (MoH) ii. Procurement and Supply Chain Directorate (P&SC) of Ministry of Health (MoH) iii. Supplies, Stores and Drug Management Department (SSDM) of Ghana Health Service (GHS) iv. Food and Drugs Authority (FDA) v. Regional Health Management Team	Unavailable	80% adherence
		MOH and its agency GHS print and distribute PV tools to health facilities.	i. Number of updated PV tools distributed ii. Number of health facilities with updated PV tools	Distribution list								
		MOH collaborating with its agencies, the FDA and GHS build the capacity of institutional contact persons for PV at health facilities.	i.Training on PV tools organised ii. Number of people trained	Training report								
		MoH to collaborate with FDA to coordinate monitoring of PV activities	Number of facilities monitored on PV activities	Monitoring report								
	10.2: Quality assurance process for warehousing — FDA certification of warehouses	Establish mini-labs at CMS, RMSs and teaching hospitals.	i. TWG Meeting on establisment of mini-labs ii. Number of entities with mini labs	i. TWG Meeting Report ii. Report on the establishment and functioning of mini labs								
		Identify and build the capacity of qualified persons to manage the mini labs.	i.Training on management of mini labs organised ii. Number of people trained	Training report								
		FDA to monitor and certify mini labs for CMS, RMS and teaching hospitals to ensure the quality of medicines routing through these warehouses.	i. Number of mini labs certified by the FDA	i. Quality Assurance Certification								
	10.3: Implementation of the Ghana National Pharmaceutical Traceability strategy.	Conduct a multisectoral landscape assessment on National Traceability Strategy implementation to enable early detection of challenges and opportunities for effective implementation of strategy.	Multisectoral Landscape Assessment on National Traceability Strategy Implementation conducted	i. Assessment report on the implementation of the National Traceability Strategy								
		Establish track and trace system leveraging global standards for pharmaceuticals from the port of entry to service delivery points.	Track and trace system established	i. Track and trace system available ii. Report on the establishment and utilization of a track and trace system								

Technical Area	Intervention (SCMP 2025-2029)	Activity (SCMP 2025-2029)	Output	Means of Verification	Outcome	Indicator	KPIs	Data Source	Frequency of Data Collection	Responsible Units/Entities	Baseline	Target
Quality and Pharma-covigilance (PV)		Build the capacity of health facilities and provide them with the technology to support pharmaceutical traceability implementation.	i. Training on track and trace system organised ii. Number of health facilities trained iii. Number of health facilities provided with appropriate technology to support pharmaceutical traceability	i. Training report ii. Periodic report on status of implementation of pharmaceutical traceability								
		Disseminate the Ghana National Pharmaceutical Traceability strategy to the general public.	i. Dissemination meeting on the Ghana National Pharmaceutical Traceability Strategy organized ii. Number of stakeholder websites with published traceability strategy	i. Dissemination report ii. Availability of traceabiity strategy on websites								
Healthcare Waste Management	11.1: Evaluate how health care packaging affects the environment and identify measures to mitigate its effects	Conduct LLIN campaigns that include waste disposal mechanism	Number of LLIN campaigns conducted with waste disposal mechanism	LLIN campaign report	Increased knowledge and awareness for optimized use of healthcare waste management systems	Percentage of facilities that are adhering to the guidelines	Percentage of facilities that are adhering to the pharmaceutical/ health care waste management guidelines	Survey	Annually	i. Procurement and Supply Chain Directorate (P&SC) of Ministry of Health (MoH) ii. Supplies, Stores and Drug Management Department (SSDM) of Ghana Health Service (GHS) iii. Food and Drugs Authority (FDA) iv. Regional Health Management Team	Unavailable	80% adherence
		Conduct a waste management study to determine the environmental effect of health care waste; identify eco-friendly options for disposal	Waste Management Study on Environmental Effect of Healthcare Waste conducted	i. Study tools/ interview guide/ questionnaire ii. Study report with recommendations on eco-friendly options for waste disposal								
	11.2: Improve awareness and adherence to policies for pharmaceutical and health care waste.	Review, update and disseminate existing waste management policies, guidelines, and SOPs	i. Review meeting on waste management policies, guidelines and SOPs organized ii. Dissemination meeting on updated waste management policies, guidelines and SOPs organized iii. Number of health facilities with updated policies, SOPs and guidelines	i. Meeting minutes ii. Policies/SOPs/ guidelines iii. Distribution list								
		Strengthen supervisory support systems to ensure adherence to policies for healthcare waste management	i. Supervisory support systems enhanced to improve adherence to healthcare waste mangement policies. ii. Number of facilities benefitting from supervisory support visit	i. Supervisory report								

Technical Area	Intervention (SCMP 2025-2029)	Activity (SCMP 2025-2029)	Output	Means of Verification	Outcome	Indicator	KPIs	Data Source	Frequency of Data Collection	Responsible Units/Entities	Baseline	Target
Healthcare Waste Management	11.3: Optimise use of healthcare waste management infrastructure	Complete the healthcare management study and use findings to inform policy revision and ensure efficiency in the use of waste disposal mechanisms.	i. Healthcare Waste Management Study conducted ii. Dissemination meeting on findings from Healthcare Waste Management Study organized	i. Healthcare Waste Management Study report ii. Healthcare Waste Management Optimisation Plan iii. Dissemination meeting minutes								
	11.4: Ensure waste management is incorporated into LMIS to inform efficient reverse logistics practices in the disposal of healthcare waste	Strengthen reporting and tracking of healthcare waste (expired products) through the LMIS.	i. Number of facilities capturing/reporting healthcare waste data in LMIS	i. LMIS Analytic reports								
	11.5: Develop a coordination mechanism with the FDA, local government, EPA and other relevant authorities.	Strengthen stakeholder collaboration (MoH, FDA, local government, EPA and other health agencies) to undertake disposal of special waste.	Seminars, symposia, workshops and meetings on the disposal of special waste organized	Meeting minutes, reports, communiques and policy briefs								
Partnering with The Private Sector	12.1: Establish strategic framework for engagement of the private sector.	Analyse the landscape of current private sector partners, identify barriers to further market entry, and design interventions to expand the market accordingly.	i. Landscape Analysis of Private Sector Supply Chain Partners conducted ii. TWG meeting organized to determine interventions for market expansion	i. Report on Private Sector Landscape Analysis of Supply Chain Partners ii. Framework on private sector SC market expansion iii. TWG meeting minutes on expansion of market access	Enabling environment that promotes private sector participation in health supply chain policy formulation and implementation	i. Percentage of planned meetings held with the private sector ii. Percentage of policies formulated through private sector participation iii. Percentage of policy initiative implemented with private sector	Percentage of policy initative implemented with private sector	Survey	Annually	i. MOH ii. Pharmacceutical Importers and Wholesalers Association of Ghana iii. Pharmaceutical Manufacturers Association of Ghana iv. Pharmacy Council v. Ghana National Chamber of Pharmacy vi. Academia	Unavailable	100%
	12.2: Review the standing interactive and dialogue platform for public and private sectors for joint health commodity demand planning and implementation.	Update existing interactive and dialogue platforms for public and private sectors.	Stakeholder meetings for public and private sectors organized	i. Meeting minutes ii. Framework for joint health commodity demand planning and implementation developed								
	12.3 Create a health commodities financing packages to enhance the financial capability of the private sector	Create and implement a framework for sustainable health commodities financing.	i. Stakeholder meeting on SC financing options organized	i. Meeting minutes/ reports ii. Framework on sustainable financing options								

Technical Area	Intervention (SCMP 2025-2029)	Activity (SCMP 2025-2029)	Output	Means of Verification	Outcome	Indicator	KPIs	Data Source	Frequency of Data Collection	Responsible Units/Entities	Baseline	Target
Partnering with The Private Sector	12.4: Provide appropriate and realistic tariff regimes to sustain private sector participation in health commodity supply in the public health sector	Update existing tariffs regime framework with MOH and NHIA	Refer to S.I. 1.5: Activity 1	Refer to S.I. 1.5: Activity 1								
	12.5 Improve the integration of the private sector information systems into the public health LMIS to increase visibility, demand planning, and product availability along the health commodities SC	Integrate private sector systems into health commodity LMIS.	Private sector systems integrated into health commodity LMIS	i. Report on the integration of private sector systems into health commodity LMIS. ii. Private Sector-LMIS Integration platform								

5.2 RISK MITIGATION PLAN FOR SCMP 2025 - 2029

Very Low — Very High

Technical Area	Intervention (SCMP 2025-2029)	Activity (SCMP 2025-2029)	Potential Risks	Description	Risk Rating	Mitigation Strategy	Risk Owner
Strategic Planning and Management	1.1: Clarify the inter and intra-agency SC functional and strategic roles and responsibilities.	Conduct a mapping exercise of the respective roles, responsibilities, and authorities of each central-level supply chain entity.	1. Role re-designation 2. Lack of stakeholder interest and acceptance 3. Lack of funding 4. Change Management 5. Political interference	1. MoH re-assigning functional roles and responsibilities to other agencies away from designated roles. 2. Stakeholders showing disinterest and unwillingness to accept newly designated roles 3. MoH not having adequate funding within the budget to complete the mapping exercise. 4. Mapping exercise resulting in the realignment of roles generating resistance. 5. Lack of 'political'/institutional will to implement or adhere to the requirements of the mapping outcome.		1. Extensive stakeholder engagement to gain buy-in and to solicit input into the role mapping exercise: taking the form of round table discussions involving consultants, MoH and GHS leadership. 2. MoH to advocate for additional funding from GoG and development partners for this activity. 3. MoH to incorporate change management models into the role mapping process.	Chief Director/ Director PSCD, MoH
		Designate an authorities' matrix to provide coordinated leadership across the MOH and agencies Conduct interviews with key stakeholders of each entity, strategic forums for discussion, and finalisation of clear roles	"1. Lack of leadership commitment 2. Change Management 3. 'Political'/nstitutional interference"	1. Top management showing disinterest or a lack of desire to coordinate activities across MoH and the agencies 2. Mapping exercise resulting in the realignment of roles generating resistance. 3. Lack of 'political'/institutional will to implement or adhere to the requirements of the mapping outcome.		1. Extensive stakeholder engagement to gain buy-in and to solicit input into the role mapping exercise: taking the form of round table discussions involving consultants, MoH and GHS leadership. 2. MoH to incorporate change management models into the role mapping process.	Chief Director/ Director PSCD, MoH
		Design and monitor KPIs for SC actors based on the agreed roles and responsibilities from stakeholders' consultations and engagements Disseminate findings for implementation across relevant levels.	1. Lack of clarity of KPIs to stakeholders 2. Unclear and ambiguous monitoring strategy 3. Lack of stakeholder interest	1. Stakeholders might not have a good appreciation of the KPIs 2. Monitoring stragegies that are confusing and obscure 3. Stakeholders showing disinterest in adhering to the KPIs and agreed roles		1. Extensive stakeholder engagement to discuss the design, implementation and monitoring strategy for KPIs. 2. MoH/GHS to strictly compliance with KPIs and provide feedback to actors.	Chief Director/ Director PSCD, MoH

Technical Area	Intervention (SCMP 2025-2029)	Activity (SCMP 2025-2029)	Potential Risks	Description	Risk Rating	Mitigation Strategy	Risk Owner
Strategic Planning and Management	1.2: Institutionalise strategic planning practices at all levels	Design region-specific SC strategic plans within the SCMP context.	1. Lack of ownership of the strategic plan at the regional level 2. Poor coordination of the regional strategic plan development process 3. Slow adoption of the strategic plans 4. Resistance to change 5. Setting over-ambitious targets in the regional specific plans 6. Lack of funding for the development and implementation of the plan 7. Lack of funding for the review of the plans	1. Regions demonstrating a lack of interest in developing a strategic plan. 2. Lack of understanding of the SCMP resulting in misalignemnt of region-specific strategic plan with the SCMP. 3. Regional capacity differences resulting in slow adoption of the SCMP 4. Regional-level resistance to the development of specific plans resulting from it being the first of its kind 5. Regional mangement team setting unrealistic targets 6. Non-availability of funding for the development and implementation of the plans. 7. Non-availability of funding for reviewing the plans		1. Extensive stakeholder engagement with regional leadership to discuss the design, implementation and monitoring of the region-specific supply chain strategic plans. 2. GHS to monitor the implementation of the region-specific plans using developed monitoring framework, on a quarterly basis. 3. Regional leadership to use CIP for strategic plans to source funding and mobilize resources for implementation. MoH/GHS to support this initiative.	Regional Directors of Health Services
		Conduct regular reviews of the region-specific plan.					
		Disseminate the SCMP to all stakeholders at all levels	1. Poor communication of the SCMP 2. Lack of interest in SCMP by regions	1. Poor communication of the SCMP at the regional level 2. Regional officers showing disinterest in the dissemination of the SCMP		MoH/GHS to leverage existing supply chain coordinating mechanisms at the central and regional levels to disseminate SCMP across all levels.	Chief Director/ Director PSCD, MoH
		Review implementation progress of the SCMP annually against performance targets	1. Lack of adequate information 2. Delays in submission of performance report	1. Lack of adequate information to measure implementation status of regional plans 2. Delays in submission of regional-level performance report		MoH/GHS to leverage existing performance monitoring mechanisms at the central and regional levels to review progress of implementation of SCMP across all levels.	Chief Director/ Director PSCD, MoH
	1.3: Formalise the practice of assessing SC risks at all levels	Conduct regular (annual) SC risk assessments at all levels	1. Delays in submission of performance report 2. Poor risk assessment at any of the levels	1. Delays in submission of information necessary for the conduct of the risk assessment 2. Poor risk assessment at any of the levels becoming a weak link in the risk assessment process		1. Develop standardized tools and processes to guide data collection and utilization for risk assessment. 2. Streamline and monitor adherence to commnuication guidelines.	Director SSDM

Technical Area	Intervention (SCMP 2025-2029)	Activity (SCMP 2025-2029)	Potential Risks	Description	Risk Rating	Mitigation Strategy	Risk Owner
Strategic Planning and Management		Design relevant mechanisms to address SC risks emanating from the risk assessment	1. Lack of interest in addressing supply chain risks 2. Poor communication in the advocacy 3. Lack of evidence-based data for advocacy	1. Disregard for advocacy resulting from the lack of interest in addressing supply chain risks 2. Use of inappropriate strategy in advocacy communication 3. Lack on evidence-based data for advocacy			
	1.4: Transform the RMSs and Teaching Hospital (TH) Medical Stores into business units.	Hold consultative engagements with the management of Regional Health Directorates (RHD) and THs on RMSs and Teaching Hospital Medical Stores transition into business entities.	1. Lack of leadership interest and commitment 2. Change Management 3. Limited capacity of personnel	1. Top management showing disinterest or a lack of desire to transition into business units 2. Top management resisiting the potential change to the operations of the medical stores 3. Personnel at the Medical Stores may lack the skills to manage the Medical Stores as a business entity		1. Extensive stakeholder engagement to gain buy-in and to solicit input into the development of business plans for Medical Stores. 2. MoH/GHS to incorporate change management models in plan to transition the Medical Stores into business units.	Director SSDM
		Conduct activity-based costing (ABC) in all regions and THs to identify true operations costs; use findings to guide transitions into business units.	1. Poor data acquisition and collation 2. Lack of leadership interest and commitment 3. Change Management 4. Poor selection of cost drivers 5. Varrying cost driver rates	1. Lack of proper record keeping at central and regional levels leading to poor data acquisition and collation 2. Top management showing lack of desire to ensure data on activity costs can be collected 3. Resistance to changes required to keep adequate and accurate data 4. Disparities in selecting cost drivers between the different regions 5. Disparities in the cost driver rates between the different regions			
		Assess the viability of transforming the RMSs and Teaching Hospital Medical Stores into business units.	1. Lack of interest at the central and regional levels by some stakeholders 2. Resistance in the RMS becoming autonomous 3. Lack of data for assessment	1. Some stakeholders may be disinterested in the activity 2. Potential resistance of some top regional leadership to cede power 3. Lack of data to support the feasibility assessment			
		Prepare business plans for each RMS and TH.	1. Poor data acquisition and collation 2. Lack of leadership interest and commitment	1. Lack of proper record keeping at the regional level leading to poor data acquisition and collation 2. Top management showing lack of desire to ensure business plan is developed			

Technical Area	Intervention (SCMP 2025-2029)	Activity (SCMP 2025-2029)	Potential Risks	Description	Risk Rating	Mitigation Strategy	Risk Owner
Strategic Planning and Management	1.5: Introduce a focus on financial sustainability, including sustained engagement for increased financial resources for SC interventions.	Develop strategies to align framework contracting with NHIA price review process.	1. Economic instability (inflation, exchange rates, money supply) 2. Supplier disinterest 3. Political interference 4. NHIA's slow response to price adjustment	1. Economic instability (inflation, exchange rates volatilities etc.) 2. Lack of interest from suppliers when market indicators are unsatisfactory 3. Government's unwillingness to comply with agreed strategies 4. NHIA has been slow over the past periods to reviewing their prices		1. Develop and implement price adjustment mechanism that ensures minimal variation between market rates and approved rates for framework contracting. FWC price changes must trigger a seamless NHIA's price review	Chief Director/ Director PSCD, MoH
		Review the private sector engagement strategy to include PPPs in supply chain.	1. Non comformance to regulatory and standard requirements 2. Private sector's orientation towards profit maximisation 3. Combactive competition	1. Inability of the private sector to comform to regulations and standards, a key requirement in the health sector 2. Private sector quest to set high margins to maximise profit 3. Unhealthy competition among private sector entities		1. MoH & its agencies to ensure wide dissemination of regulatory and standard requirements to the private sector. 2. MoH & its agencies to institute mechanism to monitor and enforce compliance with standards 3. Develop and implement price adjustment mechanism that ensures minimal variation between market rates and approved rates for framework contracting.	Chief Director/ Director PSCD, MoH
		Develop engagement mechanisms for improved funding for SC interventions.	1. Lack of interest by GoG in the advocacy for adequate funding for SC issues 2. Lack of evidence-based data for advocacy	1. Lack of interest by GoG in the advocacy for adequate funding for SC issues 2. Lack on evidence-based data for advocacy		1. MoH/GHS to strengthen data gathering mechanisms to highlight funding gaps for supply chain interventions. 2. Extensive stakeholder engagement to disseminate funding gaps and to mobilize resources to address the gaps.	Chief Director/ Director PSCD, MoH
		Increase resource mobilisation efforts at least annually for SC performance, including procurement of programme commodities.	1. Lack of interest among stakeholders for resource mobilization 2. Lack of funding for resource mobilization exercise	1. Lack of interest among stakeholders for resource mobilization 2. Inadequate budgetary allocation for resource mobilization exercise			
	1.6: Institutionalise monitoring of SC strategic interventions.	Update and consolidate the monitoring tools for interventions in all functional supply chain areas.	1. Lack of ownership of the process 2. Unclear and ambiguos checklist	1. Disinterest from regional leadership due to lack of ownership of the process 2. Unclear and ambiguos drivers of the checklist development process		1. MoH/GHS to extensively engage regional leadership on monitoring process and the development of region-specific checklist to drive ownership.	Director SSDM

Technical Area	Intervention (SCMP 2025-2029)	Activity (SCMP 2025-2029)	Potential Risks	Description	Risk Rating	Mitigation Strategy	Risk Owner
Policy and Governance	2.1: Update NEML and STGs bi-annually and develop a Non-Medicines Tracer List to align with the national medicines policy and other relevant guidelines	Develop SOPs and scorecards for bi-annual reviews.	1. Lack of ownership of SOPs. 2. Unclear and ambigious SOPs and scorecards 3. Lack of extensive training on SOPs and scorecards	1. Regions demonstrating a lack of interest in developing SOPs and scorecards due to inadequate involvement 2. Difficulty in application of scorecards due to the unclear and ambiguos nature of the SOPs and scorecards. 3. Lack of extensive training on SOPs and scorecards		1. MoH/GHS to engage stakeholders across the tiers to develop, regularly update and widely disseminate SOPs and scorecards. 2. MoH to advocate for additional funding from GoG and partnersto carry out this activity.	Director SSDM
		Revise NEML and STGs accordingly	1. Non-adherence to revision guidelines 2. Lack of funding	1. Non-compliance with the MoH guidelines on revision of NEML and STGs 2. Inadequate budgetary alloction to MoH to fund activity		1. MoH should ensure adherence to the review timelines for EML and STGs. 2. MoH to advocate for additional funding from GoG and partners to carry out revision of STGs and EML per agreed timelines.	Director of Pharmacy unit, MoH
		Develop National Health Commodity Non-Medicines Tracer List	1. Lack of prioritization by leadership 2. Lack of funds	1. Leadership showing disinterest in developing non-medicines tracer list 2. Inadequate budgetary alloction to MoH to fund activity		1. Extensive stakeholder engagement to develop an acceptable non-medicines tracer list. 2. MoH to advocate for additional funding from GoG and developing partners to develop non-medicines tracer list.	Chief Director/ Director PSCD, MoH
	2.2: Ensure awareness and availability of existing national policies at all levels	Checks for physical or electronic copies of policies, guidelines, and SOPs in supportive supervision visits.	1. Lack of adequate physical/ electronic copies of policies, guidelines and SOPs 2. Uneven distribution of the physical copies	1. Lack of adequate physical/electonic copies of policies, guidelines and SOPs 2. Uneven distribution of the physical copies		1. MoH to advocate for additional funding from GoG and partners to print and widely disitribute physical/ electronic copies of SOPs across all levels.	Chief Director/ Director PSCD, MoH
		Introduce regular reviews of pricing regulatory mechanisms	1. Lack of funding 2. Lack of leadership commitment 3. Lack of political will	1. Inadequate budgetary alloction to MoH to fund regular reviews of pricing regulatory mechanism 2. Leadership showing a lack of desire for the reviews 3. Lack of political will to implement price reviews		1. MoH to advocate for Increasing budgetary allocation to ensure adequate funding for regular pricing reviews and monitoring mechanisms.	Chief Director/ Director PSCD, MoH

Technical Area	Intervention (SCMP 2025-2029)	Activity (SCMP 2025-2029)	Potential Risks	Description	Risk Rating	Mitigation Strategy	Risk Owner
Policy and Governance		Disseminate key policies through national and regional public meetings, newspapers, websites, other media platforms, etc.	1. Poor communication of the key policies 2. Lack of interest in the policies by the stakeholders	1. Poor communication of the key policies at all the levels 2. Officers showing disinterest in the dissemination of the key policies		1. MoH/GHS to widely disseminate key policies on all existing platfoms. 2. MoH/GHS should ensure early involvement of key stakeholders in the development and dissemination of policies to drive interest.	Chief Director/ Director PSCD, MoH
	2.3: Streamline management of programme commodities at all levels.	Increase regional involvement in managing programme commodities for the following SC activities; quantification, storage, distribution to the last mile, inventory management and disposal of expired programme commodities	1. Resistance to change 2. Non-compliance with laid down processes	1. Management and/or staff resisting the new streamlined arrangement 2. Disregard for laid down processes for the management of donated commodities		1. Implement comprehensive change management strategies to address concerns and gain buy-in, from stakeholders.	Chief Director/ Director PSCD, MoH
	2.4: Improve performance management and accountability at all levels.	Develop scorecards for performance management	1. Innapropriate identification of drivers for scorecards development 2. Lack of accurate and sufficient data for tracking performance and accountability at the different levels	1. Misalignment of scorecard with prevailing circumstances at the different levels 2. Lack of accurate and sufficient data for tracking performance and accountability at the different levels		1. Implement comprehensive change management strategies to address concerns and gain buy-in, from stakeholders. 2. Strengthen monitoring mechanisms to ensure adherence to established procedures for accountability	Chief Director/ Director PSCD, MoH
		Initiate supply chain performance management including monitoring the implementation of policies and governance processes to ensure commodity availability at all levels				1. Statekeholder engagement in the development and implementation of scorecards. 2. Institute interventions to improve data quality for performance monitoring.	Director SSDM

Technical Area	Intervention (SCMP 2025-2029)	Activity (SCMP 2025-2029)	Potential Risks	Description	Risk Rating	Mitigation Strategy	Risk Owner
Human Resources	3.1: Ensure the infusion of critical inputs to improve SC workforce.	Ensure more visibility of Supply Chain Management practitioners in the Human Resources for Health Strategy Document.	1. Lack on evidence-based data for advocacy 2. Poor communication during advocacy	1. Lack of evidence-based data for advocacy 2. Poor communication during advocacy		1. MoH/GHS should carry out SC skill-mix gap analysis and to use outcome to advocate for additional SC professionals.	Chief Director/ Director PSCD, MoH
		Strengthen demand for increased resource allocation for SC functions in public health.	3. Lack of political will to increase resource allocation and perfomance-based incentives for SC function 4. Lack of adequate funding for HRH advocacy and motivation	3. Lack of political will to increase resource allocation for perfomance-based incentives for SC function 4. Lack of adequate funding for HRH advocacy and motivation		2. MoH/GHS leadership to deploy performance-based incentives for SC professionals	
		Establish performance-based motivation for SC professionals and institutions.					
	3.2: Accelerate professionalisation of the SC workforce.	Define qualifications and required skills set for key supply chain managerial roles at all levels.	1. Lack of desire for professional conduct on the part of the SC workforce 2. Unclear and ambiguous job description for SC function 3. Differential remunerations at different entities	1. Supply chain workforce acting in ways that do not engender efficiency 2. Conflict between SC function and other health care professionals 3. Differential remunerations paid to SC professionals within the public sector and between the public and private sector		1. MoH should define the required skilled set for the various SC managerial roles and their comensurate compensation 2. there is the need to develop a legal and regulatory framework for SC practice in the country 3. MoH/GHS leadership to deploy performance-based incentives for SC professionals. 4. MoH/GHS should conduct periodic training for SC professionals on ethics and professional conduct. 5. MoH should work with relevant stakeholders to tie the promotion of supply chain practitioners to some limited number of CPDs in a given period 6. MoH/GHS to periodically review supply chain functions and disseminate same to all levels.	Chief Director/ Director PSCD, MoH
		Develop or identify CPDs accreditation opportunities for SC professionals					

Technical Area	Intervention (SCMP 2025-2029)	Activity (SCMP 2025-2029)	Potential Risks	Description	Risk Rating	Mitigation Strategy	Risk Owner
Human Resources	3.3: Enhance supportive supervision practices.	Harmonise supportive supervision exercises with SC SOPs.	1. Donor fatigue in supporting supervision exercises 2. Lack of dedicated budget line for supervision on the part of MoH 3. Unclear and ambiguous supervision tools	1. Disinterest on the part of donors to continue to provide funding for supervision exercises 2. Lack of dedicated budget line for supervision on the part of MoH 3. Unclear and ambiguous supervision tools		MoH/GHS to advocate for additional GoG funding to support supervision practices.	Chief Director/ Director PSCD, MoH
		Conduct on-the-job training to reinforce knowledge and skills for SC practitioners	1. Lack of dedicated budget line for supervision on the part of MoH	1. Lack of dedicated budget line for supervision on the part of MoH			
	3.4: Improve recruitment and retention of SC personnel	Conduct SC labour market assessment for the health sector.	1. Lack of evidence-based data to support recruitment and retention exercise. 2. Challenges with employing SC professionals for SC functions at all levels 3. Lack of funding to conduct SC labour market assessment 4. Lack of desire on the part of SC professionals to accept postings to deprived commnuities 5. Lack of clearly laid down processes for appointing supply chain professionals to strategic positions	1. Lack of evidence-based data to support recruitment and retention exercise. 2. Challenges with employing SC professionals for SC functions at all levels 3. Lack of funding to conduct SC labour market assessment 4. Lack of desire on the part of SC professionals to accept postings to deprived commnuities 5. Lack of clearly laid down processes for appointing supply chain professionals to strategic positions		1. MoH/GHS should carry out SC skill-mix gap analysis and to use outcome to advocate for additional SC professionals. 2. MoH/GHS leadership to deploy performance and community-based incentives for SC professionals to increase recruitment and retention in deprived areas 3. MoH/GHS to advocate for additional funding to conduct SC HR labour market assessment	Chief Director/ Director PSCD, MoH
		Adapt the World Health Organisation Workload Indicators of Staffing Need (WISN tool) human resource management tool for supply chain workforce planning.					
		Improve recruitment processes for SC professionals in the public health sector.					
		Explore strategies to address geographic disparities in recruitment and retention of health workers, including SC professionals into the public health sector.					
		Develop memoranda of understanding with relevant accredited academic institutions and professional bodies.					

Technical Area	Intervention (SCMP 2025-2029)	Activity (SCMP 2025-2029)	Potential Risks	Description	Risk Rating	Mitigation Strategy	Risk Owner
Human Resources		Monitor performance of SC professionals					
		Explore opportunities to develop open-source e-learning modules for SC functions.					
	3.5: Strengthen collaboration between professional networks of health SC professionals	Advocate for strengthened collaboration between public and private sector health SC practitioners	1. Potential conflicts arising from ambiguity in organizational responsibilities and competition for acknowledgment 2. Mother institutions not prioritizing funding of SC professionals to participate in SC annual conferences	1. Potential conflicts arising from ambiguity in organizational responsibilities and competition for acknowledgment 2. Mother institutions not prioritizing funding of SC professionals to participate in SC annual conferences		1. MoH/GHS should engage SC professional associations on need for effective collaboration. 2. MoH/GHS to engage institutions on need to prioritize SC professionals' participation in supply chain conferences.	Chief Director/ Director PSCD, MoH
		Organise and participate in annual conference of SC professionals					
		Support SC practitioners to become members of SC professional bodies (e.g., International Association of Public Health Logisticians)					
Financial Sustainability	4.1: Prioritise a national effort to settle outstanding debts, establish and enforce future payment deadlines	Determine the magnitude of outstanding debts	1. Inadequate data for evidence-based debt analysis. 2. Lack of enforcement of laid down re-imbursement processes and timelines across the different levels 3. Lack of 'political'/institutional will to implement activities	1. Inadequate data for evidence-based debt analysis. 2. Lack of enforcement of laid down re-imbursement processes and timelines across the different levels 3. Lack of 'political'/institutional will to implement activities		1. MoH/GHS to strengthen data gathering mechanisms for effective debt profile analysis. 2. MoH/GHS to engage state institutions on need to adhere to laid down reimbursement processes and guidelines.	Chief Director/ Director PSCD, MoH
		Develop mechanisms for outstanding debt clearance					
		Prepare a five-year costed financial implementation plan for all levels.					
		Design appropriate mechanisms to ensure prompt SDP payment to RMSs					

Technical Area	Intervention (SCMP 2025-2029)	Activity (SCMP 2025-2029)	Potential Risks	Description	Risk Rating	Mitigation Strategy	Risk Owner
Financial Sustainability	4.2: Ensure the financial sustainability of the SC system	Leverage the findings from the MOH's financial sustainability assessment to guide the development and implementation of a five-year (2025-2029) SC financial sustainability plan.	1. Lack of evidence-based data for debt analysis. 2. Enforcement of laid down re-imbursement processes and timelines across the different levels 3.Servicing of newer regions' "legacy" debts to their former 'parent' regions 4. Bureaucratic redtapeism for the processing of claims and re-imbursement	1. Lack of evidence-based data for debt analysis. 2. Enforcement of laid down re-imbursement processes and timelines across the different levels 3. The management of "legacy" debt on the part of the new regions to their former 'parent' regions 4. Bureaucratic redtapeism for the processing of claims and re-imbursement		1. MoH/GHS to strengthen data gathering mechanisms for effective debt profile analysis. 2. MoH/GHS should engage health facilities to develop a plan to deal with legacy debts. 3. MoH/GHS to engage state institutions on need to adhere to laid down reimbursement processes and guidelines. 4. MoH to advocate for ring-fencing of NHIA funds	Chief Director/ Director PSCD, MoH
		Develop a resource mobilisation strategy for incremental financing of SC interventions (including procurement of programme commodities)					
		Strengthen continuous coordination between MOH and its agencies and partners					
		Advocate for enhancement of NHIA's reimbursement mechanisms					
		Make all financial management guidelines available to all stakeholders; operationalise their implementation					
		Develop a tracking tool to monitor the implementation of the RDF at all levels.					
		Prepare SC annual budgets at all levels (national, regional, district and sub-district) and review quarterly.					
		Develop separate guidelines specific to the management of DRF					

Technical Area	Intervention (SCMP 2025-2029)	Activity (SCMP 2025-2029)	Potential Risks	Description	Risk Rating	Mitigation Strategy	Risk Owner
Forecasting and Supply Planning	5.1: Standardise the use of modern FASP methods across programmes and essential health commodities	Strengthen the use of modern FASP tools for quantification of programme and essential health products at all levels	1. Lack of evidence-based data for standardization of forecasting 2. Lack of adequate capacity for the implementation of quantification 3. Misallignment of fiscal years of key stakeholders (GoG, development partners) 4. Misallignment of program priorities 5. Resistant to change on the part of programs 6. Donor fatigue	1. Lack of evidence-based data for standardization of forecasting 2. Lack of adequate capacity for the implementation of quantification 3. Misallignment of fiscal years of key stakeholders (GoG, development partners) 4. Different program priorities hindering allignment of quantificcation timelines 5. Donors re-prioritizing funding activities		1. MoH/GHS to standardize forecasting process by implementing mechanisms to improve the quality of data for the process. 2. GHS to collaborate with GHSC-PSM to enhance the capacity of the LMU to coordinate and lead quantification activities. 3. MoH/GHS to ensure National Quantification Team has the capacity to perform its functions. 4. MoH/GHS to engage stackeholders (development partners, disease programs) to align funding, quantification timelines etc. 5. MoH should advocate for GoG to increase funding for quantification of health commodities.	Director SSDM
		Update the national quantification guidelines.					
	5.2: Strengthen the National Quantification Team and streamline quantification processes.	Improve coordination for forecasting and supply planning by the NQT					
		Align forecasting timelines for programmes and prioritise essential medicines.					
		Strengthen advocacy to increase annual funding from stakeholders including GOG to conduct forecasting, supply planning, and monitoring.					
		Conduct annual quantification; disseminate outputs to all stakeholders					
	5.3: Capacity building to enable government-led quantification at central and regional levels.	Develop training program with modules					
		Run a pilot training program					
		Implement through a training of trainers approach					

Technical Area	Intervention (SCMP 2025-2029)	Activity (SCMP 2025-2029)	Potential Risks	Description	Risk Rating	Mitigation Strategy	Risk Owner
Procurement and Customs Clearance	6.1: Roll out an integrated electronic procurement system	Train identified stakeholders on e-procurement at all levels.	1. Lack of funding for GHANEPS training 2. Resistance to change to use of GHANEPS for procurement	1. Lack of funding for GHANEPS training 2. Resistance to change to use of GHANEPS for procurement		1. MoH/GHS to advocate for more funding for GHANEPS training. 2. MoH/GHS to incorporate change management modules in the trainings of personnel on GHANEPS	Director SSDM
		Develop a framework to monitor the system utilization.					
	6.2: Advocate for incremental annual funding for GOG to procure health commodities.	Develop a comprehensive funding strategy aimed at ensuring sustainable procurement of programme medicines and other essential health commodities.	1. Bureaucratic procedures 2. Political interference 3. Functional misallignment 4. Stakeholder unwillingness 5. Turf war 6. The willingness and ability of GoG to fully fund programme commodities	1. Inability to meet procurement timelines due to bureaucratic procedures 2. GoG's interest not alligned with donors and other stakeholders 3. Duplication of functions as a result of functional misallignment 4. Unwillingness of SC entities/individuals to rationalization of roles and responsibilities 5. Unwillingness of SC entities/individuals to relinquish channel power. 6. The willingness and ability of GoG to fully fund programme commodities		1. MoH/GHS to ensure lead time is built into procurement planning to ensure completion of process in time. 2. MoH to advocate for a special dispensation with procurement thresholds to reduce bureaucracy. 3. MoH should advocate for strict compliance to the procurement Act 4. MoH should engage GoG for adequate budgetary allocation on programme commodities 5. Extensive stakeholder engagement to gain buy-in and to solicit input into the role mapping exercise: taking the form of round table discussions involving consultants, MoH and GHS leadership.	Chief Director/ Director PSCD, MoH
						1. MoH/GHS to ensure lead time is built into procurement planning to ensure completion of process in time. 2. MoH to advocate for a special dispensation with procurement thresholds to reduce bureaucracy.	Chief Director/ Director PSCD, MoH

Technical Area	Intervention (SCMP 2025-2029)	Activity (SCMP 2025-2029)	Potential Risks	Description	Risk Rating	Mitigation Strategy	Risk Owner
						3. MoH should advocate for strict compliance to the procurement Act. 4. MoH should engage GoG for adequate budgetary allocation on programme commodities. 5. Extensive stakeholder engagement to gain buy-in and to solicit input into the role mapping exercise: taking the form of round table discussions involving consultants, MoH and GHS leadership.	
Procurement and Customs Clearance	6.3: Outline clear procurement oversight processes per existing procurement laws and regulations.	Adapt and disseminate FWC guidelines for implementation at all levels	1. Lack of funding 2. Non-adherence to developed guidelines	1. Lack of funding to institute monitoring mechanism to ensure adherence to framewok contracting arrangement. 2. Non-adherence to developed guidelines		1. MoH / GHS to advocate for funding to enable compliance monitoring. 2. Provide adequate training to procurement staff. 3. Conduct regular audits to ensure compliance with the procurement act and regulations 4. MoH/GHS to develop strategies to address external economic shocks	Chief Director/ Director PSCD, MoH
		Institute monitoring mechanism to improve compliance with FWC guidelines	1. Lack of funding 2. Non-adherence to developed guidelines	1. Lack of funding to institute monitoring mechanism to ensure adherence to framewok contracting arrangement. 2. Non-adherence to developed guidelines			
		Monitor and enforce compliance with the Public Procurement Laws and Regulations	1. Lack of funding 2. Practitioners willingness and ability to abide by the regulations of the Act	1. Lack of funding to monitor compliance 2. Practitioners willingness and ability to abide by the regulations of the Act			

Technical Area	Intervention (SCMP 2025-2029)	Activity (SCMP 2025-2029)	Potential Risks	Description	Risk Rating	Mitigation Strategy	Risk Owner
Procurement and Customs Clearance		Develop and monitor KPIs for the framework contracting mechanisms	1. Subjectivity in measurement bias 2. lack of vendor cooperation and transparency 3. Limited data availability and accuracy	1. KPIs may be subjective and difficult to measure introducing some degree of bias in its application 2. Vendors may be non-coorperative and hesitant to share relevant data for accurate performance measurement. 3. The necessary data may not be readily available or may be of poor quality and this can hinder the accurate assessment of vendor performance.		1. MoH/GHS to invest time and effort in developing clear KPIs. 2. MoH/GHS to maintain open communication and collaboration with vendors. 3. MoH/GHS to regularly review and update KPIs to ensure their continued relevance and effectiveness. 4. MoH to advocate for additional funding	Chief Director/ Director PSCD, MoH
		Strengthen compliance with the certificate of non-availability process and the application of sanctions.	1. Lack of funds 2. Inconsistent application of sanctions	1. Lack of funding to monitor compliance sanctions, they may be applied arbitrarily			
	6.4: Address tax exemption and customs clearance bottlenecks to improve clearance time.	Map and streamline processes to obtain tax exemption and customs clearance.	1. Change in government/leadership 2. Incomplete or inaccurate documentation 3. Regulatory changes	1. Tax exemption criteria can change with change in government leading to potential delays in acquisition. 2. Errors or missing information in the documentation can result in delays in obtaining tax exemption 3. Regulatory changes may have an impact in the tax acquisition process		MoH to regularly monitor the tax exemption acquisition processes, adapt to regulatory changes, and mitigate risks through effective communication and collaboration with relevant stakeholders.	Chief Director/ Director PSCD, MoH
		Review the donation guidelines to align with current r egulations.					
		Advocate for permanent tax exemption protocols for health products in public health sector					
		Develop strategies to reduce delays in the tax exemption and customs clearance processes.					
		Update procurement lead time to include tax exemption, clearing processes and FDA quality control					

Technical Area	Intervention (SCMP 2025-2029)	Activity (SCMP 2025-2029)	Potential Risks	Description	Risk Rating	Mitigation Strategy	Risk Owner
Warehousing and Storage	7.1: Expedite the completion of the new CMS one-hub warehouse	MOH to collaborate with key stakeholders including partners to complete the one-hub CMS warehouse.	1. Non-availability of funding for construction and operationalization of new central level warehouse.	1. Non-availability of funding for construction and operationalization of new central level warehouse.		MoH to advocate for additional funds from GOG and funding partners to construct and operationalize the new central-level warehouse.	Chief Director/ Director PSCD, MoH
		Provide the necessary resources, tools and systems to operationalize the completed CMS ensuring its efficient functioning.					
	7.2: Address outstanding gaps in warehousing capabilities and performance at all levels.	GHS to collaborate with stakeholders including partners to accelerate the establishment of RMSs at designated sites in the newly established regions.	1. Lack of funding	1. Lack of funding for the construction of the RMSs		MoH/GHS to advocate for funding from GoG and development partners for the construction of the RMSs	Chief Director/ Director PSCD, MoH
		Address challenges with inadequate material handling equipment, storage space (including receiving and dispatch areas), and standby power supply at CMS and RMSs	1. Lack of funding	1. Lack of funding for the procurement of critical warehousing equipment		1. MoH to advocate for additional funding from GoG and development partners for this activity. 2. GHS leadership to engage and build the needed interest of the leadership of the regions involved	Chief Director/ Director PSCD, MoH
		FDA to assess and support CMS, RMSs, teaching, and regional hospital warehouses to obtain and maintain FDA accreditation for good storage and distribution practice.	1. Lack of funding 2. Lack of regional leadership interest	1. Lack of funding to address identified warehousing and distribution gaps 2. Lack of interest by the regional leadership in the accreditation process			
		Implement phased installation of smart temperature monitoring systems in all RMSs, teaching and regional hospitals	1. Lack of ownership regarding the use of temperature monitoring devices 2. Lack of funds to procure and maintain temperature monitoring devices	1. Lack of ownership regarding the use of temperature monitoring devices 2. Lack of funds to procure and maintain temperature monitoring devices		1. GHS leadership to engage regional leadership on their commitment to the ABC 2. GHS to ensure RMS staff are well oriented on ABC and its importance to enhance the efficient running of the RMS	Director SSDM

Technical Area	Intervention (SCMP 2025-2029)	Activity (SCMP 2025-2029)	Potential Risks	Description	Risk Rating	Mitigation Strategy	Risk Owner
						3. GHS to orient RMS and district hospital management teams on temperature monitoring devices to enhance their understanding to drive ownership.	
Warehousing and Storage	7.3: Ensure full dissemination and consistent application of inventory management practices	Distribute inventory management SOPs to all facilities, paired with refresher training Establish a mechanism to monitor adherence to SOPs.	1. Lack of funding for printing, dissemination of SOPs and re-fresher trainings 2. Lack of funding 3. Lack of regional leadership interest	1. Lack of funding for printing, dissemination of SOPs and refresher trainings. 2. Lack of funding to establish mechanism and monitor adherence		1. MoH/GHS to advocate for funds from GOG and development partners to print and disseminate SOPs and organise re-fresher training for supply chain staff	Director SSDM
	7.4: Develop and implement risk mitigation mechanisms to ensure the safety and accountability of stored commodities at all warehouses.	Prepare and disseminate risk mitigation mechanisms to improve safety and accountability of commodities stored at various warehouses across the entire SC system	1. Inadequate use of SOPs to guide activities at different levels 2. Inadequate funding for the preparation, printing and disseminating of the SOPs	1. Inadequate use of SOPs to guide activities at different levels 2. Inadequate funding for the preparation, printing and disseminating of the SOPs		1. GHS/GHS to organise re-fresher trainings to re-orient supply chain staff on the use of SOPs 2. MoH/GHS to advocate for funds from GOG and development partners to print and disseminate SOPs and organise re-fresher training for supply chain staff	Director SSDM
Distribution	8.1: Stronger coordination between the CMS and RMSs and all stakeholders (Programmes, SSDM, P&SC) involved in ensuring the timely sufficient requisition fulfilment from SDPs to the central level.	Institute quarterly stakeholder meetings (between the LMU, RMSs, 3PLs, etc) to evaluate distribution processes and use insights to inform performance improvements.	1. Availability of all stakeholders for the meetings 2. Lack of funds	1. Stakeholders availability and commitment to the meetings 2. Lack of funds for the meetings		1. GHS to advocate for funding from GOG and funding partners to conduct studies 2. GHS to hold extensive stakeholder engagements with leadership of NHIA, health facilities, and RMS to streamline reimbursement processes 3. GHS to develop data collection tools to track KPIs	Director SSDM

Technical Area	Intervention (SCMP 2025-2029)	Activity (SCMP 2025-2029)	Potential Risks	Description	Risk Rating	Mitigation Strategy	Risk Owner
Distribution	8.2: Systematise the collection of data around delivery; apply data-driven insights to improve performance	Conduct economic benefit analysis of central and regional level distribution to inform future investment decisions and sustainability of the initiative.	1. Lack of funds 2. Availability of data	1. Lack of funds to conduct economic benefit study 2. Limited availability of data for the study		1. GHS to advocate for the optimal use of GhiLMIS	Director SSDM
		Track KPIs at CMS and RMSs to identify distribution issues.					
		Use results from distribution tracking exercise to address gaps and improve distribution efficiencies					
	8.3: Leverage lessons learned from the use of unmanned aerial vehicles (UAVs) for transportation of medical supplies.	Review the UAV distribution strategy and SOPs and use them to drive necessary improvements	1. Lack of stakeholder interest 2. Lack of political interest in developing a comprehensive strategy for UAV use for distribution 3. Lack of funding to organize the consultative stakeholder engagements	1. Lack of stakeholder interest 2. Lack of political interest in developing a comprehensive strategy for UAV use for distribution 3. Lack of funding to organize the consultative stakeholder engagements		1.MoH/GHS to hold extensive stakeholder engagements to comprehensively review existing UAV distribution strategies 2. MoH/GHS to advocate for funding from GoG and development partners to organise this activity	Chief Director/ Director PSCD, MoH
Logistics Management Information System (LMIS)	9.1: Distribution of SOPs, stock cards, and other necessary LMIS-related tools to all facilities in the health sector	Disseminate logistics SOPs and LMIS tools to all stakeholders leveraging available platforms.	1. Lack of funding for review, update and dissemination and training on SOPs	11. Lack of funding for review, update and dissemination and training on SOPs		1. GHS to advocate for funding from GOG and development partners to organise this conduct SOP revision, training and dissemination. 2. GHS to use non-costly dissemination modes such as dissemination of electronic versions of the SOP.	Director SSDM
		Use the SOPs and LMIS tools to enhance the utilization of system functionalities at all levels	1. Lack of stakeholder interest 2. Change Management 3. Lack of leadership commitment	1. Lack of stakeholder interest 2. Lack of leadership commitment to enforce the use of the tools		GHS to advocate for funding from development partners to organise site-level training for GhiLMIS users	Director SSDM

Technical Area	Intervention (SCMP 2025-2029)	Activity (SCMP 2025-2029)	Potential Risks	Description	Risk Rating	Mitigation Strategy	Risk Owner
Logistics Management Information System (LMIS)	9.2: MOH to establish a SC data governance structure that will promote data-driven decision making and enhance data quality across the entire SC.	Establish a SC data governance structure to develop policies, procedures, and standards for managing, protecting, and ensuring the quality and integrity of data throughout the supply chain. Promote data exchange and interoperability across identified health information systems. Develop site and item registries to support data sharing and exchange.	1. Weak governance framework for GhiLMIS utilization and data use 2. Unclear ownership structure for GhiLMIS data 3. Sustainability of subscription payment for GhiLMIS 4. Lack of funds	1. Weak governance framework for GhiLMIS utilization and data use 2. Unclear ownership structure for GhiLMIS data 3. Sustainability in subscription payment for GhiLMIS 4. Lack of funds for the development of guidelines		1. MoH/GHS to strengthen the governace framework for GhiLMIS utilisation and data use 2. MoH to develop an ownership structure for GhiLMIS data 3. MoH to create a budget line dedicated to the payment of GhiLMIS subscription and all data governance related activites	Chief Director/ Director PSCD, MoH
Quality and Pharmacovigilance (PV)	10.1 Staff understand and execute quality assurance (QA) and Pharmacovigilance (PV) functions in accordance with SOPs; they properly and regularly use reporting tools and job aids to provide quality service to patients.	MOH and its agencies (GHS and FDA) review all PV SOPs, reporting tools, and job aids for accurate, appropriate, and up-to-date information. MOH and its agency GHS print and distribute PV tools to health facilities. MoH to collaborate with its agencies (FDA, GHS, etc.) to coordinate monitoring of PV activities. MOH collaborating with its agencies (FDA and GHS) build capacity of institutional contact persons for PV at health facilities.	1. Lack of interest and willingness to execute QA and PV functions by facility personnel 2. Unavailability of PV tools at different levels of the system 3. Limited coordination of QA monitoring 4. Lack of funds 5. Poor feedback	1. Lack of interest and willingness to execute QA and PV functions by facility personnel 2. Unavilability of PV tools at the different levels of the system 3. Limited coordination of QA monitoring 4. Lack of funds 5. Poor feedback on reported cases will serve as a disincentive		1. MoH/GHS to hold re-orientation sessions with staff at all levels on the need to execute QA and PV functions 2. MoH/GHS to closely collaborate with FDA for regular supply and dissemination of PV tools 3. MoH/GHS to effectively collaborate with FDA on QA monitoring 4. MoH/GHS to engage GoG and devevelopment partners for needed funds 5. MoH to ensure FDA provides prompt feedback on reported cases	Director of Pharmacy unit, MoH

Technical Area	Intervention (SCMP 2025-2029)	Activity (SCMP 2025-2029)	Potential Risks	Description	Risk Rating	Mitigation Strategy	Risk Owner
Quality and Pharmacovigilance (PV)	10.2: Implementation of the Ghana National Pharmaceutical Traceability strategy.	Conduct a multisectoral landscape assessment on National Traceability Strategy implementation to enable early detection of challenges and opportunities for effective implementation of strategy.	1. Lack of funds 2. Lack of interest by the relevant stakeholders 3. Lack of quality data 4. Lack of 'political' will	1. Lack of funds to conduct the assessment 2. Lack of interest by the leadership to carry out such assessment 3. The possibility of not having quality data from the assessment due to the unavailabilty of qualified personnel to be interviewed during assessment 4. Lack of 'political' will by leasdership		1. MoH should engage GoG for funds for the activities 2. MoH should ensure an extensive stakeholder engagement at every step of the process 3. MoH should go for an open-source IT solutionto reduce the overall cost of implementation	
		Establish track and trace system leveraging global standards for pharmaceuticals from the port of entry to service delivery points.	1. Lack of funds 2. Ownership of the system 3. Interest to establish the system and make it functional 4. The ability of selected technology to interoperate with already existing systems	1. Lack of funds to establish the system 2. The ability to identify the right division/department to own and manage the system including its governance 3. Leadership's willingness to establish and support such a system and make it fully functional 4. The ability of the identified IT solution to interoperate with already existing systems			
		Build the capacity of health facilities and provide them with the technology to support pharmaceutical traceability implementation.	1. Lack of funds 2. Lack of HR 3. User friendliness of the technology	1. Lack of funds for capacity building activities 2. Unavailability of the required HR for traceability activity 3. The technology should have a short learning curve and be very user friendly			
		Disseminate the Ghana National Pharmaceutical Traceability strategy to the general public.	1. Lack of funding for the dissemination of the strategy	1. Lack of funding for the dissemination of the strategy			

Technical Area	Intervention (SCMP 2025-2029)	Activity (SCMP 2025-2029)	Potential Risks	Description	Risk Rating	Mitigation Strategy	Risk Owner
Quality and Pharmacovigilance (PV)	10.3: Quality assurance process for warehousing - FDA certification of warehouses	Establish mini labs at CMS, RMSs and teaching hospitals.	1. Lack of funds 2. Lack of HR 3. User friendliness of the technology	1. Lack of funds for capacity building activities 2. Unavailability of the required HR for traceability activity 3. The technology should have a short learning curve and be very user friendly			
		Identify and build the capacity of qualified persons to manage the mini labs.					
		FDA to monitor and certify mini labs for CMS, RMS and teaching hospitals to ensure the quality of medicines routing through these warehouses.	1. Lack of funds 2. The interest of RMS to go through the certification process 3. Lack of capacity of the RMSs to meet the standard requirement for FDA certification	1. Inability of the RMSs to meet the standard requirement for FDA certification 2. The interest of RMS to go through the certification process 3. Lack of capacity of the RMSs to meet the standard requirement for FDA certification		GHS to support the RMSs to meet the minimium WHO warehousing and distribution standards	Director SSDM
Heathcare Waste Management	11.1: Evaluate how health care packaging affects the environment and identify measures to mitigate its effects	Conduct LLIN campaigns that include waste management mechanisms.	1. Lack of funding for the conducting effective disposal of LLINs 2. Lack of stakeholder interest in conducting on waste disposal	1. Lack of funding for the conducting effective disposal of LLINs 2. Lack of stakeholder interest in conducting on waste disposal		1. GHS to advocate for funds from GOG and development partners for the research and implementation of waste disposal mechanism 2. GHS to hold extensive stakeholder engagements for the assessments and revision of policies on waste disposal	Chief Director/ Director PSCD, MoH
		Conduct a waste management study to determine the environmental effect of healthcare waste; identify eco-friendly options for improved waste disposal.					
	11.2: Improve awareness and adherence to policies for healthcare waste management.	Review and disseminate updated waste management policies, guidelines, and SOPs.	1. Lack of funding 2. Lack of stakeholder interest in conducting assessments and reviewing policies on waste disposal	1. Lack of funding for research and implementation, review, update and dissemination of management guidelines, SOPs and policies 2. Lack of stakeholder interest in conducting assessments and reviewing policies on waste disposal			
		Strengthen supervisory support systems to ensure adherence to policies for healthcare waste management					

Technical Area	Intervention (SCMP 2025-2029)	Activity (SCMP 2025-2029)	Potential Risks	Description	Risk Rating	Mitigation Strategy	Risk Owner
Heathcare Waste Management	11.3: Optimise use of health care waste management infrastructure	Complete the healthcare waste management study and use findings to inform policy revision and ensure efficiency in the use of waste disposal mechanisms.	1. Lack of funding for completion of study and implementation of assessment recommendations 2. Lack of stakeholder interest in conducting assessments to review current mix of waste disposal infrastructure	1. Lack of funding for completion of study and implementation of assessment recommendations 2. Lack of stakeholder interest in conducting assessments to review current mix of waste disposal infrastructure		1.MoH/GHS to advocate for funds from GOG and development partners for the research and implementation of waste disposal mechanism 2. GHS to hold extensive stakeholder engagements to engender stakeholders interest in waste disposal and for stakeholders to consider assessments and revision of current mix of waste disposal infrastructure	Chief Director/ Director PSCD, MoH
	11.4: Ensure healthcare waste management is incorporated into LMIS to inform efficient reverse logistics practices in the disposal of healthcare waste.	Strengthen reporting and tracking of healthcare waste through the LMIS.	1. Lack of interest to use of LMIS to track and report on waste commodities 2. The capacity of users to use the technology to track and report on waste	1. Lack of interest to use of LMIS to track and report on waste commodities 2. The capacity of users to use the technology to track and report on waste		1. MoH/GHS to hold stakeholder engagements to discuss the need to integrate waste management into the scope of LMIS 2. MOH/GHS to standardise procedures for reverse logistics pathways across all levels	Chief Director/ Director PSCD, MoH
	11.5: MOH to develop a coordination mechanism with the FDA, local government, EPA and other relevant authorities.	Strengthen stakeholder collaboration (MoH, FDA, local government, EPA and other health agencies) to improve disposal of healthcare waste.	1. Lack of funding for coordination activities 2. Stakeholder interest	1. Lack of funding for coordination activities 2. Lack of stakeholder interest for the collaborative efforts		1.MoH to lead the stakeholder engagement to discuss coordination between FDA, local government, environment authorities, and health facilities on sustainable waste disposal. 2. Moh to advocate for additional funding for this coordination.	Chief Director/ Director PSCD, MoH

Technical Area	Intervention (SCMP 2025-2029)	Activity (SCMP 2025-2029)	Potential Risks	Description	Risk Rating	Mitigation Strategy	Risk Owner
Partnering with The Private Sector	12.1: Establish strategic framework for engagement of the private sector.	Analyse the landscape of current private sector partners, identify barriers to further market entry, and design interventions to expand the market accordingly. Develop a private sector engagement strategy.	1. Political will to engage the private sector in supply chain reforms with mutual benefits 2. Willingness of the private sector to participate and adhere to laid down regulations 3. Unclear ownership of the engagement process 4. Divergent interest of private and public sector.	1. Political will to engage the private sector in supply chain reforms with mutual benefits 2. Willingness of the private sector to participate and adhere to laid down regulations 3. Poor interaction and dialogue due to a lack of clear ownership of the engagement process 4. Divergent interest of private and public sector.		MoH/GHS to engage the private sector on regular basis to discuss emerging issues bothering on supply chain reforms.	Chief Director/ Director PSCD, MoH
	12.2: Review the standing interactive and dialogue platform for public and private sectors for joint health commodity demand planning and implementation.	Update existing interactive and dialogue platforms for public and private sectors.	1. Stakeholder interest 2. Inadequate funding	1. Stakeholder interest for the review of the existing platform 2. Inadequate funding		1. Advocay for GoG funding for engagement with the private sector. 2. MoH to engage the private sector on regular basis to discuss effective strategies to review existing platform.	Chief Director/ Director PSCD, MoH
	12.3: Create a health commodities financing package to enhance the financial capability of the private sector	Develop and implement a framework for sustainable health commodities financing for the private sector.	1. Failure of framework to produce appropriate and realistic tariff regime to sustain private sector engagement 2. Inadequate funds to address existing financing gap	1. Failure of framework to produce appropriate and realistic tariff regime to sustain private sector engagement 2. Inadequate funds to address existing financing gap		1. MoH to engage donor partners and corporate bodies to raise funds to develop and implement a relaistic pricing framework 2. MoH to lead stakeholders to regularly review the framework 3. MOH to improve monitoring and enforcement of financial management standards	Chief Director/ Director PSCD, MoH

Technical Area	Intervention (SCMP 2025-2029)	Activity (SCMP 2025-2029)	Potential Risks	Description	Risk Rating	Mitigation Strategy	Risk Owner
Partnering with The Private Sector	12.4: Provide appropriate and realistic tariff regimes to sustain private sector participation in health commodity supply in the public health sector	Update existing tariffs regime framework with MOH and NHIA	1. Failure of framework to produce appropriate and realistic tariff regime to sustain private sector engagement 2. Lack of adequate funding for developing, implementing, evaluating and monitoring progress of new tariffs	1. Failure of framework to produce appropriate and realistic tariff regime to sustain private sector engagement 2. Lack of adequate funding for developing, implementing, evaluating and monitoring progress of new tariffs		1. MoH to engage donor partners and corporate bodies to raise funds to develop and implement a relaistic pricing framework 2. MoH to lead stakeholders to regularly review the framework	Chief Director/ Director PSCD, MoH
	12.5: Improve the integration of the private sector information systems into the public health LMIS to increase visibility, demand planning, and product availability along the health commodities SC	Integrate private sector systems into health commodity LMIS.	1. Lack of funding to pursue the integration of private sector information systems and public health LMIS 2. Lack of interest to integrate private and public sector information systems by stakeholders 3. Incompatibility between private and public sector information systems	1. Lack of funding to pursue the integration of private sector information systems and public health LMIS 2. Lack of interest to integrate private and public sector information systems by stakeholders 3. Incompatibility between private and public sector information systems		1. MoH to engage donor partners and corporate bodies to raise funds to pursue the integration of private sector information systems and public health LMIS 2. MoH to hold extensive stakeholder engagements to discuss challenges and identify solution related to private sector engagement	Chief Director/ Director PSCD, MoH

5.3 GHANA SUPPLY CHAIN MASTER PLAN (2025-2029) BUDGET

Strategic Interventions	Activity	Lead Implementer	Collaborators	Indicative Budget (GHS)	Indicative Budget (USD) @16.00	Budget Narrative	Source of Funding
Strategic Objective 3.1: Strategic Planning and Management							
Total Budget for Strategic Objective 3.1= GHC 45,422,600.00 / USD 28,38,912.50 @16.00							
1.1: Clarify the inter and intra-agency SC functional and strategic roles and responsibilities.	Conduct a mapping exercise of the respective roles, responsibilities, and authorities of each central and regional level supply chain entity.	Chief Director/ Director,P&SCD	GHS/THs/FDA/ NHIA/Faith-based organisation / GRA/Customs/ Ministry of Finance /Development Partners/Private Sector	3,663,000.00	228,937.50	*1. Two independent consultants 2. 6 RHMT members per region zoned into 3. 3 sectors Northern, Middle & Southern zones*	GOG and Partners
	Designate an authorities' matrix to provide coordinated leadership across the MOH and agencies					*No Budget input, taken care off by consultant in the previous activity*	
	Conduct interviews with key stakeholders of each entity, strategic forums for discussion, and finalisation of clear roles						
	Design and monitor KPIs for SC actors based on the agreed roles and responsibilities from stakeholders' consultations and engagements			2,046,400.00	127,900.00	*TWG meeting to designing the KPIs*	
	Disseminate findings for implementation across relevant levels			102,000.00	6,375.00	**Dissemination at the central level *1 TH and 4 RHDs with 6 reps each*	
1.2: Institutionalise strategic planning practices at all levels	Design region-specific SC strategic plans within the SCMP context	Director, SSDM	GHS/THs/FDA/ NHIA/Faith-based organisation / Development Partners/Private Sector	2,205,000.00	137,812.50	*This is for the old regions . To be carried out by RHDMT*	
	Conduct regular reviews of the region-specific plan.			556,000.00	34,750.00		
	Disseminate the SCMP to all stakeholders at all levels	Director, SSDM		3,822,400.00	238,900.00	*Dissemination will be carried out in all 16 regions*	
	Review implementation progress of the SCMP annually against performance targets	Director, Procurement & Supply Chain Directorate		24,734,000.00	1,545,875.00	*Annual meeting will be held in all the 16 regions for five (5) years which makes up the 80 Frequencies*	

Strategic Interventions	Activity	Lead Implementer	Collaborators	Indicative Budget (GHS)	Indicative Budget (USD) @16.00	Budget Narrative	Source of Funding
1.3: Formalise the practice of assessing SC risks at all levels	Conduct regular (annual) SC risk assessments at all levels			1,861,800.00	116,362.50	*TWG Meeeting to develop tools for assessment *Development, training and deployment of tools for assessment	
	Design relevant mechanisms to address SC risks emanating from the risk assessment			1,004,000.00	62,750.00	*TWG of 4 groups comprising 5 persons per group*	
1.4: Transform the RMSs into business units	Hold consultative engagements with the management of Regional Health Directorates (RHD) and THs on RMSs and Teaching Hospital Medical Stores transition into business entities.	Director, SSDM	RHDs	1,489,000.00	93,062.50	*16 RHDs & 6 THs comprising the RHMT, RMS manager, Proc Mananger & Reg. Supply Manager & 3 reps from the THs. Meetings to be held in the Northern and Southern Sectors. *3 each from MOH & GHS	
	Conduct activity-based costing (ABC) in all regions and THs to identify true operations costs; use findings to guide transitions into business units.			884,000.00	55,250.00	*Stakeholder Consultative Meeting at each RMS and TH*	
	Assess the viability of transforming the RMSs and Teaching Hospital Medical Stores into business units.						
	Prepare business plans for each RMS and TH.			2,072,000.00	129,500.00		
1.5: Introduce a focus on financial sustainability, including sustained engagement for increased financial resources for SC interventions.	Develop strategies to align framework contracting with NHIA price review process.	Director, Procurement & Supply Chain Directorate		179,000.00	11,187.50	*TWG to undertake the exercise*	
	Review the private sector engagement strategy to include PPPs in supply chain.					*No Budget input. Refer to the section on Partnering with the Private Sector (Strategic Intervention 12.1)*	
	Develop engagement mechanisms for improved funding for SC interventions			182,000.00	11,375.00	*TWG to identify funding gaps in procurement of programme commodities*	
	Increase resource mobilisation efforts at least annually for SC performance, including procurement of programme commodities.			197,000.00	12,312.50		
1.6: Institutionalise monitoring of SC strategic interventions.	Update and consolidate the monitoring tools for interventions in all functional supply chain areas.			425,000.00	26,562.50		GOG and Partners

Strategic Interventions	Activity	Lead Implementer	Collaborators	Indicative Budget (GHS)	Indicative Budget (USD) @16.00	Budget Narrative	Source of Funding
Strategic Objective 3.2: Policy and Governance							
Total Budget Strategic Objective 3.2: = GHC 9,700,400.00 / USD 606,275.00 @16.00							
2.1: Update NEML and STGs bi-annually and develop a Non-Medicines Tracer List to align with the national medicines policy and other relevant guidelines	Develop SOPs and scorecards for annual reviews	Chief Program Manager, Pharmacy/ MoH	GHS/THs/FDA/ NHIA/Faith-based organisation / GRA/Customs/ Ministry of Finance /Private Sector	1,092,000.00	68,250.00	*TWG to undertake this exercise *National Pharmaceutical Pricing Committee Meetings to review prices	GOG and Partners
	Revise NEML and STGs accordingly			1,092,000.00	68,250.00	TWG to undertake this exercise	
	Develop National Health Commodity Non-Medicines Tracer List	Director, Procurement & Supply Chain Directorate	GHS/THs/FDA/ NHIA/Faith-based organisation / NHIA	362,000.00	22,625.00	TWG to undertake this exercise	
2.2: Ensure awareness and availability of existing national policies at all levels	Checks for physical or electronic copies of policies, guidelines, and SOPs in supportive supervision visits	Minister of Health/Chief Director	GHS/THs/FDA/ NHIA/Faith-based organisation / NHIA			*No budget input. To be done during supportive supervision*	
	Introduce regular reviews of pricing regulatory mechanisms			3,188,000.00	199,250.00	*National Pharmaceutical Pricing Committee Meetings to review prices *Development of a technical solution to aid computation of pricing * 1 Systems and technology consultant * 1 Management alignment consultant * Cost of system	
	Disseminate key policies through national and regional public meetings, newspapers, websites, other media platforms, etc.	Minister of Health/Chief Director	GHS/THs/FDA/ NHIA/Faith-based organisation / NHIA	300,000.00	18,750.00	*Leverage on existing meetings to disseminate key policies *Perodic publications in selected national print media	
2.3: Streamline management of programme commodities at all levels.	Increase regional involvement in managing programme commodities for the following SC activities; quantification, storage, distribution to the last mile, inventory management and disposal of expired programme commodities	Minister of Health/Chief Director	GHS/THs/FDA/ NHIA/Faith-based organisation / NHIA	1,804,000.00	112,750.00	*Training of 5 and 2 persons each from RMSs and THs respectively*	GOG and Partners
2.4: Improve performance management and accountability at all levels.	Develop scorecards for key issues			1,862,400.00	116,400.00	*Refer to strategic intervention 2.1 Activity 1*	
	Initiate scorecard monitoring on implementation of policy and governance processes and in performance to ensure commodity availability at central, regional, and SDP levels					*6 member monitoring team per region for the 16 regions to undrtake this exercise*	

Strategic Interventions	Activity	Lead Implementer	Collaborators	Indicative Budget (GHS)	Indicative Budget (USD) @16.00	Budget Narrative	Source of Funding
Strategic Objective 3.3 Human Resources							
Total Budget Strategic Objective 3.3 = GHC 27,376,000.00 / USD 1,711,000.00 @16.00							
3.1: Ensure the infusion of critical inputs to improve SC workforce.	Ensure more visibility of Supply Chain Management practitioners in the Human Resources for Health Strategy Document.	MOH	MOFEP, MOH P&SC, GHS SSDM, Parliamentary Select Committee on Health	404,500.00	25,281.25	**Inception Meeting with the Consultant* **Findings Validation Meeting*	GOG and Partners
	Strengthen advocacy for increased resource allocation for SC functions in Ghana			158,000.00	9,875.00	*Dissemination of the findings from consultant for SC HR advocacy*	
	Establish performance-based motivation for SC professionals and institutions.						
3.2: Accelerate professionalisation of the SC workforce.	Define qualifications and required skills set for key supply chain managerial roles at all levels.	MOH P&SC/GHS SSDM	PPA, MOH/GHS HRHD	405,000.00	25,312.50	*Consultant with expertise in SCM*	
	Develop or identify CPDs accreditation opportunities for SC professionals					*Stakeholder engagements with consultants*	
3.3: Enhance supportive supervision practices.	Harmonise supportive supervision exercises with revised SC job description roles and responsibilities	GHS SSDM	MOH P&SC	23,590,000.00	1,474,375.00	*Half-yearly supportive supervision to provide on the job training to all 16 regions.* **8 regions visited per half year* ** 5 teams of 2 officers visting each region*	
	Conduct on-the-job training to reinforce knowledge and skills for SC practitioners						
3.4: Improve recruitment and retention of SC personnel	Conduct SC labour market assessment for the health sector.	MOH/GHS HRHD	MOH P&SC, GHS SSDM	697,500.00	43,593.75	*Consultancy with TORs for 3.4*	GOG and Partners
	Adapt the World Health Organisation Workload Indicators of Staffing Need (WISN tool) human resource management tool for supply chain workforce planning.					**Stakeholder engagements with consultant to present findings* **Stakeholder consultative meeting to adapt WHO WISN tool* **Stakeholder consultative meeting with accredited academic institutions and professional bodies*	
	Improve recruitment processes for SC professionals in the public health sector.						
	Explore strategies to address geographic disparities in recruitment and retention of health workers, including SC professionals into the public health sector.						
	Develop memoranda of understanding with relevant accredited academic institutions and professional bodies.						

Strategic Interventions	Activity	Lead Implementer	Collaborators	Indicative Budget (GHS)	Indicative Budget (USD) @16.00	Budget Narrative	Source of Funding
	Monitor performance of SC professionals						
	Explore opportunities to develop open-source e-learning modules for SC functions.						
3.5: Strengthen collaboration between professional networks of health SC professionals	Advocate for strengthened collaboration between public and private health SC practitioners	MOH/GHS HRHD	MOH P&SC, GHS SSDM	2,121,000.00	132,562.50	*Engagement with public and private health SC practioners for at least 2 times and 1 meeting for annual conference*	
	Organise and participate in annual conference of SC professionals						
	Support SC practitioners to become members of SC professional bodies (e.g., International Association of Public Health Logisticians)						
Strategic Objective 3.4 Financial Sustainability							
Total Budget Strategic Objective 3.4 = GHC 229,035,000.00 / USD 14,314,687.50 @16.00							
4.1: Prioritise a national effort to settle outstanding debts and establish and enforce future payment deadlines	Determine the magnitude of outstanding debts	RDHS	Budget Management Centers (BMCs)	100,852,000.00	6,303,250.00	*Validation meetings will be held in all 16 regions on quarterly basis *Consolidated RMS validation and financial reporting meeting at the national level	GOG and Partners
	Develop mechanisms for outstanding debt clearance	RDHS	Budget Management Centers (BMCs)	9,984,000.00	624,000.00		
4.2: Prioritise a national effort to settle outstanding debts and establish and enforce future payment deadlines	Prepare a five-year costed financial implementation plan for region-led recapitalisation	RDHS		2,092,500.00	130,781.25	**Engage a Consultant Consultant's inception Meeting with TWG* **Dissemination*	
	Design appropriate mechanisms to ensure prompt SDP payment to RMSs					**No budget Input* **Refer to strategic intervention 4.1, Activity 1&2*	GOG and Partners
4.3: Ensure the financial sustainability of the SC system	Leverage the findings from the MOH's financial sustainability assessment to guide the development and implementation of a five-year (2025-2029) SC financial sustainability plan.	Director, Procurement & Supply Chain Directorate	GHS/THs	194,000.00	12,125.00		

Strategic Interventions	Activity	Lead Implementer	Collaborators	Indicative Budget (GHS)	Indicative Budget (USD) @16.00	Budget Narrative	Source of Funding
	Make all financial management guidelines available to all stakeholders; operationalise their implementation	Minister of Health/Chief Director	GHS	3,020,000.00	188,750.00	** 5 financial policy documents*	
	Develop a resource mobilisation strategy for incremental financing of SC interventions (including procurement of programme commodities)	Minister of Health/Chief Director	GHS/THs	1,185,500.00	74,093.75	**Refer to Strategic Objective 4.2, bullet 1*	
	Strengthen continuous coordination between MOH and its agencies and partners			2,760,000.00	172,500.00		
	Advocate for enhancement of NHIA's reimbursement mechanisms	Minister of Health/Chief Director	GHS/THs/NHIA/ MoF	69,180,000.00	4,323,750.00	*The support will be quarterly to 216 districts in the 16 regions over a period of 5 years* *This will include* **Training for key claim officers* **Training for vetting officers* **Training for NHIA Focal persons and zonal cordinators on data analytics to track claims payment*	
	Prepare SC annual budgets at all levels (national, regional, district and sub-district) and review quarterly.	Minister of Health/Chief Director	GHS/THs/NHIA/ FDA/MoF/Private Sector	1,390,000.00	86,875.00		
	Develop separate guidelines specific to the management of DRF	Minister of Health/Chief Director	Budget Management Centers (BMCs)	1,660,000.00	103,750.00	*TWG Meeting with the Consultants*	
4.4: Develop Financial Sustainability Plan for 2026-2030	Develop a tracking tool to monitor the implementation of the DRF at all levels.	Minister of Health/Chief Director	GHS/THs	1,160,000.00	72,500.00	*Stakeholder engagement*	GOG and Partners
				17,7666,400.00	1,110,400.00	*Monitoring*	
				7,243,00.00	452,687.50	*Development of a DRF tracking system*	
				403,200.00	25,200.00	*Pilot in 3 regions to commence in year 2*	
				2,283,200.00	142,700.00	*Full Deployment to commence in year 2*	
				7,861,200.00	491,325.00	**Post Development technical support* **Quarterly supportive supervision starting from year 2*	

Strategic Interventions	Activity	Lead Implementer	Collaborators	Indicative Budget (GHS)	Indicative Budget (USD) @16.00	Budget Narrative	Source of Funding
Strategic Objective 3.5 Forecasting and Supply Planning							
Total Budget Strategic Objective 3.5 = GHC24,251,000 / USD 1,515,687.50 @16.00							
5.1: Standardise the use of modern FASP methods across programmes and essential health commodities	Strengthen the use of modern FASP tools for quantification of programme and essential health products at all levels	Director PSCD	Partners, GHS	2,945,000.00	184,062.50	*Training of quantification team on new FASP tools*	GOG and Partners
	Update the national quantification guidelines.					*Stakeholder engagement to review and update quantification guidelines*	
5.2: Strengthen the National Quantification Team and streamline quantification processes.	Improve coordination for forecasting and supply planning by the NQT	Director PSCD	GHS-SSDM, THs, Partners	770,000.00	48,125.00	*A coordination meeting between the LMU of SSDM/GHS, the public health programmes and other relevent stakeholders*	
	Align forecasting timelines for programmes and prioritise essential medicines.					*No budget input, *Refer to the activity before this	
	Strengthen advocacy to increase annual funding from stakeholders including GOG to conduct forecasting, supply planning, and monitoring.						
5.3: Strengthen the National Quantification Team and streamline quantification processes.	Conduct annual quantification; disseminate outputs of quantification to all stakeholders	Director PSCD	GHS-SSDM, THs, Partners	17,100,000.00	1,068,750.00	*One (1) quantification and one(1) review session every year for the four (4) programmes and essential medicines *Existing platforms will be used for dissemination	GOG and Partners
5.4: Capacity building to enable government-led quantification at central and regional levels	Develop training program with modules	Director SSDM	GHS SSDM, Partners, National Programs	793,500.00	49,593.75	*Stakeholders meeting to develop the training modules*	
	Run a pilot training program			816,000.00	51,000.00	*Piloting will be carried out in 3 regions, each from the northern, middle and southern belt. *10 persons from each of the 3 regions	
	Implement through a training of trainers approach			1,826,500.00	114,156.25	*Training of Trainers at the central level (2 persons each from the 13 regions who did not partake in the pilot) *Scale-up to the regions *10 persons each would be trained from the 13 regions who did not partake in the pilot	

Strategic Interventions	Activity	Lead Implementer	Collaborators	Indicative Budget (GHS)	Indicative Budget (USD) @16.00	Budget Narrative	Source of Funding
Strategic Objective 3.6 Procurement & Customs Clearance							
Total Budget Strategic Objective 3.6 = GHC18,457,650 / USD 1,153,603.13 @16.0							
6.1: Roll out an integrated electronic procurement system	Train identified stakeholders on e-procurement at all levels.	PPA, Director P&SCD, Director SSDM	MOH P&SC, GHS SSDM, Partners, PPA	9,776,000.00	611,000.00	*932 identified persons from all levels of the health sector inclusive of national, regional, district and facility levels*	GOG and Partners
	Develop a framework to monitor the system utilization.					*Engage a consultant*	
6.2: Advocate for incremental annual funding for GOG to procure health commodities.	Develop a comprehensive funding strategy aimed at ensuring sustainable procurement of programme medicines and other essential health commodities.	Director P&SCD/ Director PPME	Parliamentary Select Committee on Health, NHIA, MOFEP	2,680,000.00	167,500.00	**2 consultants for programme and essential medicines* **TWG will meet to make inputs into the consultants' submission* **Engage MOFEP/PSC on Health/Private Sector/GRA*	GOG and Partners
6.3: Outline clear procurement oversight processes per existing procurement laws and regulations.	Institute monitoring mechanism; issue guidelines for facilities and other entities to adhere strictly to the framework contracting arrangement tenets	Director P&SC	MOH P&SC, GHS SSDM, Partners	2,277,000.00	142,312.50	**Accommodation for half-yearly monitoring of FWC* **Stakeholder engagement for the Development of policy guidelines for FWC*	
	Monitor and enforce compliance with the Public Procurement Laws and Regulations	Director P&SCD/PPA	MOH P&SC, GHS SSDM, Partners	2,862,400.00	178,900.00	**Annual targeted monitoring and supportive supervision of Procurement practitioners .* **A 6- member team for all the 16 regions to conduct the exercise*	
	Develop and monitor KPIs for the framework contracting mechanisms	Director P&SCD	Dir P&SC, CHRAA, OSP, PIAC	500,750.00	31,296.88	*A 25-member TWG to develop KPIs for monitoring FWC mechanisms*	
	Adapt and disseminate FWC guidelines for implementation at all levels			16,000.00	1,000.00	*Printing and Distribution of guidelines*	
	Strengthen compliance with the certificate of non-availability process and the application of sanctions.					*No budget input, refer to the M&E plan*	
6.4: Address tax exemption and customs clearance bottlenecks to improve clearance time.	Map and streamline processes to obtain tax exemption and customs clearance.	Director P&SCD	MOFEP, GRA, MOH P&SC	193,500.00	12,093.75	*Stakeholder engagements*	
	Review the donation guidelines to align with current regulations.						
	Develop strategies to reduce delays in the tax exemption and customs clearance processes.					*Stakeholder engagements*	

Strategic Interventions	Activity	Lead Implementer	Collaborators	Indicative Budget (GHS)	Indicative Budget (USD) @16.00	Budget Narrative	Source of Funding
6.4: Address tax exemption and customs clearance bottlenecks to improve clearance time.	Update procurement lead time to include tax exemption, clearing processes and FDA quality control	Director P&SCD	MOFEP, GRA, MOH P&SC	152,000.00	9,500.00	*Stakeholder engagements*	GOG and Partners
	Advocate for permanent tax exemption protocols for health products in public health sector					*Stakeholder engagements*	
Strategic Objective 3.7 Warehousing and Storage							
Total Budget Strategic Objective 3.7 = GHC127,113,820.00 / USD 7,944,613.75 @16.0							
7.1: Expedite the completion of the new CMS one-hub warehouse	MOH to collaborate with key stakeholders including partners to complete the one-hub CMS warehouse.	Director P&SCD	GHSC-PSM, GHS/ SSDM partners including THs	376,000.00	23,500.00	*The initial meeting would involve brainstorming activities to review the existing systems.*	GOG and Partners
7.1: Expedite the completion of the new CMS one-hub warehouse	Provide the necessary resources, tools and systems to operationalize the completed CMS ensuring its efficient functioning.)	Director SSDM	GHSC-PSM, MoH/ P&SC, partners including THs	2,504,000.00	156,500.00	**3 meetings to be held to develop the Warehousing strategy.* **Printing of ledgers, tally cards, SOPs,- combined requisition*	
7.2: Address outstanding gaps in warehousing capabilities and performance at all levels.	Address challenges with inadequate material handling equipment, storage space (including receiving and dispatch areas), and standby power supply at CMS and RMSs	Director SSDM	GHSC-PSM, MoH/ P&SC, partners including THs	107,384,000.00	6,711,500.00	**Assessment of Needs at the RMS* **Purchase of Warehouse eqipment:- Forklifts (18), 2 at TCMS and 16 at each of the RMSs, Pallet Jacks and Trolleys (6 at each RMS and TCMS, 2 at each THs).*	GOG and Partners
	FDA to assess and support CMS, RMSs, teaching, and regional hospital warehouses to obtain and maintain FDA accreditation for good storage and distribution practice.	Director SSDM	GHSC-PSM, MoH/ P&SC, partners including THs	1,669,600.00	104,350.00	*Assessment of state of RMSs, Improve RMSs conditions and functionality, FDA initial assessment, FDA final assessment and certification* *This will be done for 6 RMSs, 6 THs & 16 regional hospitals*	
7.3: Address outstanding gaps in warehousing capabilities and performance at all levels.	Implement phased installation of smart temperature monitoring systems in all RMSs, teaching and regional hospitals	Director SSDM	GHSC-PSM, MoH/ P&SC, partners including THs	2,370,720.00	148,170.00	*Assess the needs of each of theTHs and Regional Hospitals, purhase and install temperature monitoring device and monitor performance. Access points, Sensors, Subscription and internet for 3 years.*	GOG and Partners
	MOH and GHS to collaborate with stakeholders including partners to accelerate the establishment of RMSs at designated sites in the newly established regions.	Director SSDM	GHSC-PSM, MoH/ P&SC, partners including THs	696,000.00	43,500.00	*Stakeholder Engagement*	

Strategic Interventions	Activity	Lead Implementer	Collaborators	Indicative Budget (GHS)	Indicative Budget (USD) @16.00	Budget Narrative	Source of Funding
7.4: Ensure full dissemination and consistent application of inventory management practices	Distribute inventory management SOPs to all facilities, paired with refresher training	Director SSDM	GHSC-PSM, MoH/ P&SC, partners including THs	11,952,000.00	747,000.00	**Training of trainers to be conducted across regions by national team* **Training of 4 persons per district for 261*	
	Establish a mechanism to monitor adherence to SOPs.	Director SSDM	GHSC-PSM, MoH/ P&SC, partners including THs	-	-	*Similar activity under Human Resource Activity 3.3.1*	
7.5: Develop and implement risk mitigation mechanisms to ensure the safety and accountability of stored commodities at all warehouses.	Prepare and disseminate risk mitigation mechanisms to improve safety and accountability of commodities stored at various warehouses across the entire SC system	Director SSDM	GHSC-PSM, MoH/ P&SC, partners including THs	161,500.00	10,093.75	*A TWG will develop the mechanism. TWG meetings will be engaged to continue the dissemination.*	
Strategic Objective 3.8. Distribution							
Total Budget Strategic Objective 3.8 = GHC16,748,500.00 / USD 1,046,781.25 @16.00							
8.1: Stronger coordination between the RMSs and those who monitor supply plans. This will ensure that RMSs have timely, sufficient commodities to fulfill requisitions from SDPs to the central level	Institute quarterly stakeholder meetings (between the LMU, RMSs, 3PLs, etc) to evaluate distribution processes and use insights to inform performance improvements.			13,104,000.00	819,000.00	*Four (4) representatives from regions with RMSs and 2 reps. from the five regions without RMS with six (6) Central level reps.*	GOG and Partners
8.2: Systematise the collection of data around delivery; apply data-driven insights to improve performance	Conduct economic benefit analysis of central and regional level distribution to inform future investment decisions and sustainability of the initiative.	GHS/SSDM	GHSC-PSM, MoH/ P&SC, partners including THs	1,139,500.00	71,218.75	*Two (2) consultants will be engaged to conduct the assessment in 2025 and 2027* *An inception meeting between the consultant and key stakeholder* *A validation meeting with key stakeholders* *A dissemination meeting to be conducted with key stakeholders*	
	Track KPIs at CMS and RMSs to identify distribution issues.	GHS/SSDM	GHSC-PSM, MoH/ P&SC, partners including THs			*No budget input, refer to previous activity (tools to track KPIs)*	
	Use results from distribution tracking exercise to address gaps and improve distribution efficiencies					*No costing needed (Operational)*	

Strategic Interventions	Activity	Lead Implementer	Collaborators	Indicative Budget (GHS)	Indicative Budget (USD) @16.00	Budget Narrative	Source of
8.3: Leverage lessons learned from the use of unmanned aerial vehicles (UAVs) for transportation of medical supplies.	Review the UAV distribution strategy and SOPs and use them to drive necessary improvements	GHS/SSDM	GHSC-PSM, MoH/ P&SC, partners including THs	2,505,000.00	156,562.50	*Consultative and Review meetings to be held in year one (1), Review meetings to be held bi-annually in Year 2 and 3. This will consists of 45 persons (2 reps from each regions, 5 each from MoH and GHS/HQ and 3 reps from Development Partners)*	
Strategic Objective 3.9 Logistics Management Information System (LMIS)							
Total Budget Strategic Objective 3.9 = GHC26,132,500.00 / USD 1,633,281.25 @16.00							
9.1: Distribution of SOPs, stock cards, and other necessary LMIS-related tools to all facilities in the health sector	Use the SOPs and LMIS tools to enhance the utilization of system functionalities at all levels	GHS/SSDM	GHSC-PSM, MoH/ P&SC, partners including THs	22,970,000.00	1,435,625.00	*Yearly monitoring and supportive supervision to monitor the use of the tools and provide on the job training where there is a gap to all 16 regions.* **8 regions visited per half year* ** 5 teams of 2 officers visting each region*	GOG and Partners
9.2: Distribution of SOPs, stock cards, and other necessary LMIS-related tools to all facilities in the health sector	Disseminate logistics SOPs and LMIS tools to all stakeholders leveraging available platforms	GHS/SSDM	GHSC-PSM, MoH/ P&SC, partners including THs	1,600,000.00	100,000.00	**Printing of the listed inventory tools.* **Soft copies of the SOPs will be disseminated to all levels*	GOG and Partners
9.3: MOH to establish a SC data governance structure that will promote data-driven decision making and enhance data quality across the entire SC.	Establish a SC data governance structure to develop policies, procedures, and standards for managing, protecting, and ensuring the quality and integrity of data throughout the supply chain.			1,562,500.00	97,656.25	*A TWG of about 30 memebers will be consituted to work with the consultant on this activity.*	
	Promote data exchange and interoperability across identified health information systems.						
	Develop site and item registries to support data sharing and exchange						

Strategic Interventions	Activity	Lead Implementer	Collaborators	Indicative Budget (GHS)	Indicative Budget (USD) @16.00	Budget Narrative	Source of Funding
Strategic Objective 3.10 Quality and Pharmacovigilance							
Total Budget Strategic Objective 3.10 = GHC79,200,291.84 / USD 4,950,018.24 @16.00							
10.1: Staff understand and execute QA and PV functions in accordance with SOPs; they properly and regularly use reporting tools and job aids to provide quality service to patients	MOH and its agencies (GHS and FDA) review all PV SOPs, reporting tools, and job aids for accurate, appropriate, and up-to-date information.	FDA, GHS Pharmacy Directorate	MOH Pharmacy Directorate, GHS SSDM, MOH P&SC, Partners	1,093,500.00	68,343.75	*A 30-member TWG to be consituted to review PV SOPs*	GOG and Partners
	MOH and its agency GHS print and distribute PV tools to health facilities			35,000.00	2,187.50	*Design of graphics, printing and distribution leveraging existing platforms e.g. SMMs, etc* **Soft copies to be shared with entities across all levels*	
10.2: Staff understand and execute QA and PV functions in accordance with SOPs; they properly and regularly use reporting tools and job aids to provide quality service to patients	MoH to collaborate with its agencies (FDA, GHS, etc.) to coordinate monitoring of PV activities. MOH collaborating with its agencies (FDA and GHS) build capacity of institutional contact persons for PV at health facilities.	FDA, GHS Pharmacy Directorate	MOH Pharmacy Directorate, GHS SSDM, MOH P&SC, Partners	27,450,000.00	1,715,625.00	**Yearly monitoring and supportive supervision to monitor the use of the PV tools and provide on the job training where there is a gap to all 16 regions.* **8 regions visited per half year*	GOG and Partners
10.3: Quality assurance process for warehousing — FDA certification of warehouses	Establish mini labs at CMS, RMSs and teaching hospitals.			392,000.00	24,500.00	*Consultant to conduct a needs assessment of the CMS,RMSs and THs and provide recoomendations and roadmap for setting up of the mini labs.* *A day's meeting of key stakeholders with the consultant to discuss findings from the assessment*	
	Identify and build the capacity of qualified persons to manage the mini labs.			812,000.00	50,750.00	**Training for 3 identified persons from each entity (CMS, RMS and THs)* **Training to be conducted in phases*	
	FDA to monitor and certify mini labs for CMS, RMS and teaching hospitals to ensure the quality of medicines routing through these warehouses.	FDA	FDA	7,290,000.00	455,625.00	*A 5-member team constituted to visit each region (RMS, THs and CMS)*	
10.4: Implementation of the Ghana National Pharmaceutical Traceability strategy.	Conduct a multisectoral landscape assessment on National Traceability Strategy implementation to enable early detection of challenges and opportunities for effective implementation of strategy.					*Refer to the Ghana National Pharmaceutical Traceability strategy CIP*	

Strategic Interventions	Activity	Lead Implementer	Collaborators	Indicative Budget (GHS)	Indicative Budget (USD) @16.00	Budget Narrative	Source of Funding
	Establish track and trace system leveraging global standards for pharmaceuticals from the port of entry to service delivery points.			42,127,791.84	2,632,986.99	*Refer to the Ghana National Pharmaceutical Traceability strategy CIP*	GOG and Partners
	Build the capacity of health facilities and provide them with the technology to support pharmaceutical traceability implementation.						
	Disseminate the Ghana National Pharmaceutical Traceability strategy to the general public.						
Strategic Objective 3.11 Health Waste Management							
Total Budget Strategic Objective 3.10 = GHC79,200,291.84 / USD 4,950,018.24 @16.00							
11.1: Evaluate how health care packaging affects the environment and identify measures to mitigate its effects	Conduct LLIN campaigns that include waste management mechanisms.	GHS/SSDM	GHSC-PSM, MoH/P&SC, partners including THs	11,353,500.00	709,593.75	**Engage and pay volunteers to collect debris.* **Districts to collaborate with the FDA to conduct disposal*	GOG and Partners
	Conduct a waste management study to determine the environmental effect of healthcare waste; identify eco-friendly options for improved waste disposal			122,000.00	7,625.00	*A day's dissemination meeting at the MoH Conference room*	
11.2: Improve awareness and adherence to policies for healthcare waste management	Review and disseminate updated waste management policies, guidelines, and SOPs			4,860,000.00	303,750.00	*A 30-member TWG to be consitituted to review the exisiting Health Care Waste Management Policy (2020-2025) and SOPs*	
	Strengthen supervisory support systems to ensure adherence to policies for healthcare waste management			553,200.00	34,575.00	*A 15-member team consitituted to develop monitoring tools to strengthen healthcare waste management supervisory support systems*	
				22,970,000.00	1,435,625.00	**Yearly supportive supervisory visits to all 16 regions* **Five(5) teams made up of 2 memebers will be constituted to visit each region.*	
11.3: Optimise use of healthcare waste management infrastructure	Complete the healthcare waste management study and use findings to inform policy revision and ensure efficiency in the use of waste disposal mechanisms.			0.00		**Acitivity completed* **Refer to SI 11.1 (Activity 2)*	GOG and Partners

Strategic Interventions	Activity	Lead Implementer	Collaborators	Indicative Budget (GHS)	Indicative Budget (USD) @16.00	Budget Narrative	Source of Funding
11.4: Ensure healthcare waste management is incorporated into LMIS to inform efficient reverse logistics practices in the disposal of healthcare waste.	Strengthen reporting and tracking of health-care waste through the LMIS.	GHS/SSDM	GHSC-PSM, MoH/ P&SC, partners including THs	1,575,000.00	98,437.50	*A 25-member TWG constituted to develop SOPs to track healthcare waste in the LMIS *SOP will be incorporated into the existing SOP for Public Health Logistics Management *Softcopies shared with entities at all levels	
				222,000.00	13,875.00	*A 10-member TWG constituted to develop healthcare waste management training content for existing e-learning platforms	
				112,005,000.00	7,000,312.50	*Conduct trainings across all levels by a) leveraging existing training sessions, b) virtual training c)in-person trainings *In-person training (2per facility)	
11.5: MOH to develop a coordi-nation mechanism with the FDA, local government, EPA and other relevant authorities.	Strengthen stakeholder collaboration (MoH, FDA, local government, EPA and other health agencies) to improve disposal of healthcare waste.			470,000.00	29,375.00	A 15-member TWG (MoH, FDA, local government, EPA and other relevent health agencies) constituted to meet twice in a year	
Strategic Objective 3.12 Partnering with the Private Sector							
Total Budget Strategic Objective 3.12 = GHC1,485,000 / USD 92,812.50 @16.00							
12.1: Establish stra-tegic framework for engagement of the private sector.	Analyse the landscape of current private sector partners, identify barriers to further market entry, and design interventions to expand the market accordingly. Develop a private sector engagement strategy.	Chief Director/ Director, P&SCD	Private Sector	347,000.00	21,687.50	A 15-member team to conduct a desk review of existing private sector engagement strategy	GOG and Partners
12.2: Review the standing interac-tive and dialogue platform for public and private sectors for joint health commodity demand planning and imple-mentation.	Update existing interactive and dialogue plat-forms for public and private sectors.			320,000.00	20,000.00	A bi-annual meeting between the MoH, its agencies and the private sector.	

Strategic Interventions	Activity	Lead Implementer	Collaborators	Indicative Budget (GHS)	Indicative Budget (USD) @16.00	Budget Narrative	Source of Funding
12.3: Create a health commodities financing package to enhance the financial capability of the private sector	Develop and implement a framework for sustainable health commodities financing for the private sector.			-	-	*No Budget item *Refer to Strategic Objective 3.4, Activity 4.2	
12.4: Provide appropriate and realistic tariff regimes to sustain private sector participation in health commodity supply in the public health sector	Update existing tariffs regime framework with MOH and NHIA	Chief Director/ Director, P&SCD	GHS/NHIA/Faith-Based organisation/Private Sector	-	-	*No Budget item *Refer to Strategic Objective 3.2, Activity 2.2	
12.5: Improve the integration of the private sector information systems into the public health LMIS to increase visibility, demand planning, and product availability along the health commodities SC	Integrate private sector systems into health commodity LMIS.			818,000.00	51,125.00	*A team made up of MoH and the private sector to build requirements needed for the integration.*	
Total Budget				**GHS 759,053,461.84**	**USD 47,440,841.37**		


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