Guidelines for the supply of malaria Rapid Diagnostic Test Kits (mRDT) and Sulphadoxine Pyrimethamine (SP) to the Private Sector in Ghana

September, 2022
The significant role played by the private sector in healthcare delivery in Ghana cannot be overemphasized. The sector provides health services to a large and diverse group of persons, and in some instances, they remain the first and preferred point of call.

The 2019 Malaria Indicator Survey (MIS) indicated a highly similar proportion of children with fever seeking advice or treatment in the private sector compared to the public sector (34%). Indeed, the country cannot achieve universal health coverage without engagement and collaboration with the private sector. The National Malaria Elimination Programme’s (NMEP) goal of significant reduction in malaria morbidity and mortality i.e. by 50% and 90% respectively by the year 2025 using 2019 as baseline, and achievement of malaria pre-elimination in at least 6 districts as outlined in its National Malaria Strategic Plan 2021-2025 is unlikely to be realized without active participation and commitment of the private sector.

The Ministry of Health and the Ghana Health Service have over the years engaged, collaborated and supported the private sector in diverse ways. These notwithstanding, the sector still encounters challenges, including deficiencies in the supply of quality and affordable malaria products such as malaria rapid diagnostic test kits (mRDT), and sulphadoxine-pyrimethamine (SP). Unlike in the public sector, this situation is worsened by the absence of clear guidelines on supply of these commodities to the private sector, allowing for ad hoc and short-term approaches to solving the supply deficits within the private sector.

This guideline document therefore seeks to streamline and improve the supply, availability and affordability of quality mRDT and SP specifically, and malaria commodities in general to private health service providers.

It is our hope that the recommendations made in this document will be adhered to by all; as that will be the surest way to brighten the path and quicken our steps towards the ultimate goal of malaria elimination in Ghana.

Hon. Kwaku Agyeman-Manu
Minister for Health, Ghana
<table>
<thead>
<tr>
<th>TABLE OF CONTENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FOREWORD</strong></td>
</tr>
<tr>
<td><strong>ACKNOWLEDGEMENT</strong></td>
</tr>
<tr>
<td><strong>ABBREVIATIONS</strong></td>
</tr>
<tr>
<td><strong>INTRODUCTION</strong></td>
</tr>
<tr>
<td><strong>BACKGROUND AND METHODOLOGY</strong></td>
</tr>
<tr>
<td>Private Sector Providers</td>
</tr>
<tr>
<td>Supply Chain Management</td>
</tr>
<tr>
<td>Methodology</td>
</tr>
<tr>
<td><strong>CURRENT CONTEXT AND POLICY ENVIRONMENT</strong></td>
</tr>
<tr>
<td>Collaboration With The Private Health Sector In Health Service Delivery</td>
</tr>
<tr>
<td>Strengthening Of The Supply Chain Management</td>
</tr>
<tr>
<td><strong>RECOMMENDED ACTIONS</strong></td>
</tr>
<tr>
<td>Preamble</td>
</tr>
<tr>
<td>Support For Private Health Sector Contributions</td>
</tr>
<tr>
<td>Service Delivery &amp; Utilization</td>
</tr>
<tr>
<td>Regulatory Policies &amp; Procedures</td>
</tr>
<tr>
<td>Data Management</td>
</tr>
<tr>
<td>Human Resources</td>
</tr>
<tr>
<td>Communication And Coordination</td>
</tr>
<tr>
<td>Procurement</td>
</tr>
<tr>
<td>Quantification (Forecasting &amp; Supply Planning)</td>
</tr>
<tr>
<td>Distribution</td>
</tr>
<tr>
<td>Monitoring And Evaluation</td>
</tr>
<tr>
<td>Management And Oversight Responsibilities</td>
</tr>
<tr>
<td><strong>BIBLIOGRAPHY</strong></td>
</tr>
</tbody>
</table>
ACKNOWLEDGEMENT

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</thead>
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</tr>
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</tr>
</tbody>
</table>
### ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3PL</td>
<td>Third party logistics</td>
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<tr>
<td>3T</td>
<td>Test, Treat and Track</td>
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<td>ACT</td>
<td>Artemisinin-based Combination Therapy</td>
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<td>CHAG</td>
<td>Christian Health Association of Ghana</td>
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<td>CHPS</td>
<td>Community-based Health Planning and Services</td>
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<td>COVID-19</td>
<td>Coronavirus 2019 disease</td>
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<td>CP</td>
<td>Community Pharmacy</td>
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<td>DHD</td>
<td>District Health Directorate</td>
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<td>DHIMS</td>
<td>District Health Information Management System 2</td>
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<td>EDD</td>
<td>Expected Date of Delivery</td>
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<td>EUV</td>
<td>End user verification</td>
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<td>FBO</td>
<td>Faith-based organizations</td>
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<td>FDA</td>
<td>Food and Drugs Authority</td>
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<td>GF</td>
<td>Global Fund</td>
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<td>GhiLMIS</td>
<td>Ghana Logistics Management Information System</td>
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<td>GHS</td>
<td>Ghana Health Service</td>
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<td>GHSC</td>
<td>Global Health Supply Chain Program-Procurement and Supply Management</td>
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<td>GMIS</td>
<td>Ghana Malaria Indicator Survey</td>
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<td>GoG</td>
<td>Government of Ghana</td>
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<td>GTS</td>
<td>Global Technical Strategy for Malaria</td>
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<td>HeFRA</td>
<td>Health Facilities Regulatory Agency</td>
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<td>HF</td>
<td>Health facility</td>
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<td>HRH</td>
<td>Human Resources for Health</td>
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<td>IHS</td>
<td>Imperial Health Services</td>
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<td>HMIS</td>
<td>Health Management Information Systems</td>
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<td>IPTp</td>
<td>Intermittent preventive treatment of malaria in pregnancy</td>
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<td>ITN</td>
<td>Insecticide-Treated Nets</td>
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<td>LMIS</td>
<td>Logistics Management Information System</td>
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<td>LMS</td>
<td>Last Mile Distribution</td>
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<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
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<td>mRDT</td>
<td>Malaria Rapid Diagnostic Test</td>
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<td>MiP</td>
<td>Malaria in pregnancy</td>
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<td>Abbreviation</td>
<td>Description</td>
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<tr>
<td>MIS</td>
<td>Malaria Indicator Survey</td>
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<td>MoH</td>
<td>Ministry of Health, Ghana</td>
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<td>MoU</td>
<td>Memorandum of Understanding</td>
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<td>NHIS</td>
<td>National Health Insurance Scheme</td>
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<td>NMEP</td>
<td>National Malaria Elimination Programme</td>
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<td>NGOs</td>
<td>Non-Governmental Organizations</td>
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<td>NSCA</td>
<td>National Supply Chain Assessment</td>
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<td>OTCMS</td>
<td>Over-the-counter Medicine Sellers/shops</td>
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<tr>
<td>PSE</td>
<td>Private sector engagement</td>
</tr>
<tr>
<td>PSM</td>
<td>Procurement supply chain management</td>
</tr>
<tr>
<td>PSP</td>
<td>Private Sector Providers</td>
</tr>
<tr>
<td>RLO</td>
<td>Regional Logistics Officer</td>
</tr>
<tr>
<td>RMS</td>
<td>Regional Medical Stores</td>
</tr>
<tr>
<td>RRP</td>
<td>Recommended Retail Price</td>
</tr>
<tr>
<td>SDP</td>
<td>Service Delivery Point</td>
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<td>SP</td>
<td>Sulphadoxine Pyrimethamine</td>
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<td>SSDM</td>
<td>Stores, Supplies and Drugs Management (SSDM) division of the Ghana Health Service</td>
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<tr>
<td>TCMS</td>
<td>Temporary Central Medical Stores</td>
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<tr>
<td>TH</td>
<td>Teaching Hospital</td>
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<td>USAID PMI</td>
<td>USAID President’s Malaria Initiative</td>
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<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>
The Ministry of Health (MoH) and the Ghana Health Service (GHS), through the National Malaria Elimination Programme (NMEP) is undertaking and promoting measures to “ensure timely and adequate supply of quality-assured malaria commodities to all service delivery points by 2025” through the efficient management of available resources and collaboration with relevant stakeholders. The MoH, GHS and NMEP are responsible for the management of malaria commodities supply chain and are interested in getting the private sector involved in all key aspects of its work, particularly to improve access to Sulphadoxine Pyrimethamine (SP) and malaria rapid diagnostic test kits (mRDTs) among private sector providers. This document provides guidelines that will ensure access to high quality and affordable SP and mRDT to private health service providers.

This document is set in four main parts as outlined below:

**The background** provides general insight to the global and national malaria situation, introductory knowledge on health care supply chain functions and challenges, and private sector engagement (PSE) and why PSE can be important in the current context of supply chain management. It ends with a brief description on methodology adopted for this work.

**Context and Policy Environment** outlines the current situation with respect to the private sector’s involvement in health care delivery and the state of the health care supply chain as obtained from the documents reviewed and stakeholder interactions.

**Recommended Actions** outlines proposed actions to ensure improved access to high quality and affordable mRDT and SP to clients of private health providers. A careful and deliberate engagement with the private sector is proposed to ensure that the partnership being sought with the private sector remain sustainably strong. A set of actions, based on a Global Fund advice, are proposed to guide the public-private partnership to ensure that all mRDTs and SP procured, supplied, and obtained from the private health sector are of good quality, affordable and widely available to all patients in Ghana.

The fourth part provides a list of sources of information reviewed.
According to the 2021 World Malaria Report, there were an estimated 241 million malaria cases and 627,000 malaria deaths worldwide in 2020. This represents about 14 million more cases in 2020 compared to 2019, and 69,000 more deaths. Approximately two thirds of these additional deaths (47,000) were linked to disruptions in the provision of malaria prevention, diagnosis, and treatment during the COVID-19 pandemic.

The report revealed also that malaria caused more deaths than previously thought, 7.8% of deaths, an increase from the previous 4.8% in 2019. This increase was attributed to the revised number of malaria deaths among children under the age of five years, stalled advances made with malaria control, and the considerable disruption caused by the COVID-19 pandemic.

The report shows that the heaviest burden of malaria is shouldered by Africa; with 95% of all malaria cases (228 million); and 96% of all malaria deaths (602,000). Eighty percent (80%) of all malaria deaths in the Region occurred among children under the age of 5. The Region missed the Global Technical Strategy (GTS) for Malaria 2016–2030 milestones for reductions in case incidence and mortality by 38% and 40% respectively in 2020. The GTS calls for reducing malaria cases and deaths by at least 40% by 2020, at least 75% by 2025, and at least 90% by 2030. Although Ghana is one of few countries that achieved the target of 40% reduction in case incidence in 2020, it remains part of the 11 highest burden countries. Data from DHIMS 2 indicates that there were 12 million cases of suspected uncomplicated malaria, of which 5.7 million tested positive with 275 malaria mortalities in Ghana in the year 2021.

The National Malaria Elimination Programme (NMEP) of the Ghana Health Service (GHS) is focused on consolidating the gains achieved and accelerating malaria control to further reduce the malaria burden and move towards establishing lower-transmission areas and ultimately elimination in Ghana. This will be achieved by adhering to the guiding principles of the “high burden to high impact” response to have packages of malaria interventions including case management and chemoprevention, optimally delivered through appropriate channels, including a strong foundation of primary health care.

Appropriate case management (early diagnosis, with prompt treatment using the recommended antimalarial) provides cure, and prevents progression to severe malaria, and death. The NMEP’s 3T policy (test, treat and track) adopted from WHO, recommends prompt parasitological confirmation by microscopy or malaria rapid diagnostic tests (mRDTs) for all patients with suspected malaria before treatment is started. This is particularly so because clinically, malaria is indistinguishable from the early stages of many other diseases. The increasing availability of quality rapid diagnostic test
kits for malaria should necessitate testing before treatment to avoid the negative consequences of presumptive treatment such as drug resistance. However, as reported in the 2019 Ghana Malaria Indicator Survey (GMIS), it appears presumptive treatment is still rampant; only 34% of children with a fever were tested for malaria before initiation of treatment.

Partnering with private health providers seems an important mechanism to address this situation, and increase access to effective malaria case management for all patients throughout the country. The private sector is a major source of treatment for malaria and is known to have substantially increased global access to effective malaria treatment (and febrile illnesses more generally) in malaria-endemic countries. For example, the proportion of children under age 5 with fever for whom advise, or treatment was sought from the private sector (33.6%) was similar to that of the public sector (34.1%), according to MIS 2019 report.

The private sector also plays a key role in the supply of pharmaceuticals. The supply chain in the private sector consists of a network of importers, wholesalers, sub-wholesalers, Community Pharmacies (CP) and Over-the-counter-medicine sellers (OTCMS). Pharmaceutical importers and wholesalers form the link between pharmaceutical manufacturers (located outside or within the country) and retail pharmacy outlets, clinics, and hospitals. Often, wholesalers are also importers or manufacturers, and own one or more retail pharmacies. Most pharmaceutical businesses follow the backward integration trajectory of starting as a retail pharmacy and then moving into wholesaling, importation and eventually manufacturing. Private wholesalers distribute frequently to retail pharmacies in cities using their own vehicles or using third party transport services. But the wholesalers do not serve the entire market efficiently. Pharmacies or OTCMS located in smaller towns and rural areas either have to travel long distances to pick up their stock from wholesalers or sub-wholesalers on a “cash and carry” basis. The lack of a reliable shared transportation platform makes the costs of serving small pharmacies and OTCMS prohibitively high.
PRIVATE SECTOR PROVIDERS

The private health sector is described by various authors using different typologies. In this report, the private sector refers to non-state actors involved in the supply of health services and products. They include hospitals, clinics, health centres, maternity homes, pharmacies, OTCMS, NGOs, private manufacturers/ suppliers. They are categorised as for-profit and not-for-profit.

Private Sector Providers (PSPs) may be formally trained (pharmacists, doctors, nurses, and midwives) or informally trained (shopkeepers, itinerant vendors); they may work on their own or in institutions, and they may provide health care or other products including medicines and devices. PSP characteristics vary based on their legal status, training, facility base, nature and complexity of product or service provided, and proportion of time spent in private practice (Table 1). Drawing on these dimensions, it is possible to examine the visibility of PSPs, and the ability and ease with which decision-makers can identify PSPs, assess their practices and work with them to improve coverage, quality, and affordable services to users. In most contexts, more is known about the more visible parts of the private sector, such as those providers who are more formally trained and organised. Relatively little is known about the informal sector, even though they are important providers of health care for the poor. It is much harder to monitor and regulate the less visible parts of the private sector.

Table 1: Characteristics of Private Sector Providers (PSP) of Health

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<th>Characteristic</th>
<th>More visible</th>
<th>Less visible</th>
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<tr>
<td>Legal status and training</td>
<td>Formal (trained and operating legitimately); Physicians, nurses, pharmacists</td>
<td>Informal (untrained and illegal); Shopkeepers, itinerant vendors</td>
</tr>
<tr>
<td>Size of facilities</td>
<td>Large hospitals and clinic networks (registered with licensing and regulatory authorities)</td>
<td>Solo PSPs (often large numbers of shopkeepers, medicine vendors)</td>
</tr>
<tr>
<td>Nature of service</td>
<td>Provide comprehensive clinical services</td>
<td>Sell single products such as medicines, ITNs, condoms, contraceptives, etc.</td>
</tr>
<tr>
<td>Public-private practice mix</td>
<td>Full-time private practice; Legal dual practice</td>
<td>Illegal dual practice</td>
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The private sector is important in ensuring access to malaria case management. There are concerns however regarding: the quality of medicines sold in private outlets; poor availability of diagnosis in retail outlets and subsequent overuse of antimalarials for non-malaria fever; poor access to quality-assured artemisinin combination therapies (ACT) for those who do have malaria; continued use of oral artemisinin monotherapies in some settings; lack of referral links with public/private sector facilities; and the fact that data on malaria cases treated in the private sector are usually not available for national Health Management Information System (HMIS) or surveillance.

These challenges notwithstanding, there are good reasons for trying to include private providers in health service delivery. PSPs can leverage existing infrastructure, personnel, and provider-client relationships. At the same time, private sector responsiveness to market forces and employment flexibility has the potential to increase service efficiency through more rapid adaptation to changing demand than could be possible within a government health system.

The private sector’s contribution to health care in developing countries is significant and still growing. In an analysis of data from 26 African countries by the World Bank, nearly half of the sick children from the poorest income quintile were attended by private providers. Out-of-pocket payments from patients have been found to represent 40–70% of the gross domestic product spent on medical care in 20 developing countries. For example, most treatment of malaria takes place outside the public sector, through visits to PSPs or direct over-the-counter purchase of medicines, often from untrained shop staff, for self-treatment. In sub-Saharan Africa, an estimated 35% of febrile children receiving medicines are treated by private providers; this proportion is likely to be higher among older patients. The private sector is also a dominant source of antimalarial medicines. For example, private providers were responsible for between 49% and 92% of all antimalarials sold or dispensed in surveys across seven sub-Saharan countries in 2012.

Governments have a responsibility to guide the health system to deliver quality health care to populations, reduce health inequalities, improve access to health, and ensure adequate safeguards are in place. These duties are directly linked to the core functions of the health products and technologies supply chain. It is acknowledged that engaging and making use of the private health sector is one of the key ingredients to health systems improvements, but relatively little is known about the details of the roles and responsibilities of both the public and private players, and what works and what does not. Barriers or challenges to any of the core functions also negatively affect accessibility to affordable, quality, and effective health service delivery.

Private sector engagement refers to a partnership between the public and private sectors to achieve a specified goal. In recent years, policy analysts and governments have recognized that the private health sector has been neglected and are increasingly looking for ways to better engage with them. There are many reasons for engaging the private sector, but the most common set of public policy objectives is to find ways to increase the coverage and quality of health services, and to reduce the harm caused by unregulated private providers.
In a broader sense, supply chain is any combination of processes, functions, activities, relationships, and pathways along which products, services, information, and financial transactions move in and between enterprises. Supply Chain Management encompasses the planning and management of all activities involved in sourcing, conversion, procurement, storage, distribution, and all other logistics management activities. Importantly, it also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third party service providers, and customers.

Any good health system necessitates supply chains that can guarantee consistent availability of affordable, high-quality medicines and health products at all health service delivery points. Health supply chains are important for the following reasons:

- Supply chains underpin the entire health system and are essential to achieving health programme goals such as ensuring consistent availability of affordable, high-quality diagnostics and medicines in locations that are geographically accessible to the target population.

- Supply chains do not only deliver medicines and health products to the population, but they also return critical information regarding need, demand, and consumption to health system planners and policymakers and handle financial flows so that the system is adequately resourced.

- A broken supply chain can cripple the health system and undermine positive health outcomes.

- Without a strong health system (strong supply chain systems), countries will not have the weapons they need to combat their burden of disease.

There are numerous actors involved in making supply chains work: donors and funders, government policymakers, procurement agents, programme managers, regulators, suppliers, distributors, and dispensing staff from the public, private, and faith-based sectors. Throughout this process, many activities are carried out, including product registration, forecasting, procurement, importation, warehousing, distribution, and retailing. These activities occur at the different stages within the supply chain. While supply chains perform the same basic function of delivering health products from the point of manufacture to the patient, specific characteristics of the health system such as the structure of health financing (source of financing, risk pooling, purchasing), patient treatment-seeking behaviour, and the structure of pharmaceutical regulation may lead to different supply chain structures.
While all attributes of the health system are important to consider when analysing supply chains, health financing, health information systems and regulation are three key attributes which critically affect supply chain design and its operating performance. Synchronized financial flows are crucial to ensure timely procurement and guarantee an uninterrupted flow of products at different tiers in the system. Product quality regulation also affects the design and operation of a supply chain. Strong regulatory oversight of product registration, importation, distribution, and retailing enables the private sector supply chain to play a greater role.

Weak and ineffective health supply chains put health interventions at risk, and thus weakening the overall health system’s ability to deliver quality and equitable healthcare. In many developing countries, health supply chains function poorly, resulting in stockouts and high incidents of fake and/or substandard health commodities. The key enablers for the health supply chains are grouped into four broad categories namely (i) people and processes, (ii) systems and data, (iii) investments, and (iv) policies.

**People and practices:** All health supply chain activities are driven by people, and it is crucial that the attitudes and behaviours of health workers are inclusive, non-stigmatizing, and promote safety and equality. The key enablers related to this component are leadership, collaboration, standard operating practices, capacity development, socio-cultural and demographic influences, knowledge, education, and awareness.

**Systems and data:** A stable supply chain is based on end-to-end visibility of supply and demand data which are used to make informed decisions across the various functions. Most of the supply chains begin with manual reports at the nascent stages and evolve to digital forms to aid in decision making and propel towards supply chain integration. The key enablers in this category include technology, data analytics, reporting and feedback, supply chain network and designs.

**Investments:** Managing an effective health supply chain is a costly endeavour made more complicated by the numerous stakeholders who might participate in funding parts of the system. Costs could include the cost of acquisition of health commodities, the operating costs of storing and transporting, the capital cost of replenishment and replacement, the advisory cost, etc. The key enablers include funding, infrastructure, and innovations.

**Policies:** An enabling environment establishes the rights and assets of all stakeholders and is governed by a set of policies. These will include plans and guidelines for various legislations, private sector participation, governance, healthcare costs, the maturity of the pharmaceutical sector, quality, and monitoring of the activities. Policies act as catalyst for impact and change to create strong health supply chains.
METHODOLOGY

This guideline draws on conclusions reached through two key stakeholders’ meetings, and a desk review of grey and published literature to generate initial recommendations on improving malaria case management in the private sector in general but specifically the supply of mRDTs and SP to private sector providers.

The stakeholders included academics, private and public sector providers, regulatory agency representatives and NMEP officials. The full set of attendees at the stakeholder meetings is listed in the acknowledgement. Apart from the stakeholder meetings, there were several other engagements with NMEP for information to fill in gaps.

Prior to and following the stakeholder meetings, a thorough desk review of relevant documentation (grey and published literature) was conducted. The first in this process, was review of current thinking on private sector engagement and how it is being applied to the control/elimination of malaria.

The documents reviewed included published research reports, development agency reports and policies, databases, workshop summaries, manuals, and other grey literature. Sources of documents were donor and private sector company websites, and information from multilateral agencies (PMI, Global Fund, USAID, etc.), NGOs, advocacy groups, and think tanks. Relevant materials were found through an iterative purposeful tracking, starting from documents on private sector engagement in healthcare provision published by major organizations in the field, and following a search trail based on their content and references. This was supplemented by web research on activities of national malaria programmes of other countries. Key word searches were also carried out within documents to identify relevant points on private sector engagement. Most of the materials used were published in the last 10 years, with a few earlier documents.

The documentary review covered the current environment and discourse on private sector engagement in development and health in general, and supply chain of healthcare products and technology in general and malaria commodities in particular. The data was assessed for relevance to the proposed guideline, quality of evidence, and how well it triangulated with other guidance documents on malaria control/elimination.
Ghana has a three-tier health delivery system; primary, secondary, and tertiary. Primary level care is provided at the Community Health Planning & Services (CHPS) compounds, health centres and the district hospitals. Secondary level care is provided by regional hospitals which receive referrals from the primary level while tertiary care is provided at the teaching hospitals. Both public and private sectors are major players in Ghana's health system. The MOH is responsible for sector-wide policy formulation and monitoring and evaluation of progress in achieving sector targets. The Ghana Health Service, an agency of the Ministry of Health is responsible for health service delivery, management of human resources, infrastructure, systems, and supplies. The Ministry of Health (MOH) and the Ghana Health Service (GHS) work together in the strategic and operational management of the health sector.

Financing of malaria elimination programme is mainly by the Government of Ghana (GoG) and development partners. Funding is needed to support treatment and prevention activities including purchase of medicines and logistics, building capacity in advocacy and Behavioural Change Communication (BCC) and supporting national and regional Health Promotion and advocacy.

The institution of the National Health Insurance Scheme (NHIS) in 2004 was to do away with "cash and carry" mode of financing healthcare in the country. The scheme includes both public and private providers and is far-reaching in coverage, both in percentage of the disease burden addressed by services covered and percentage of the population covered. NHIS financing now accounts for two thirds of internally generated funds at government facilities and over 40 percent of total health expenditure in Ghana. Household and patient data reveal that NHIS has increased utilization of care and reduced financial barriers, although the scheme faces several challenges. The most significant challenge is delayed reimbursement of providers, which negatively affects public and private health care actors all along the supply chain. The cost of service provided to an NHIS member is set by the National Health Insurance Authority (NHIA).

Data obtained from the documentary review of the current environment and discourse on private sector engagement in health provision and supply chain management in Ghana suggests that the Ministry of Health and the Ghana Health Service have over the years adopted measures to strengthen the health system in Ghana. Two of such measures are (1) collaboration with the private health sector in health services delivery and (2) strengthening of the supply chain management. Some improvement in the health system with respect to private health sector involvement and ensuring access to quality and affordable medicines and diagnostics to clients is evident. However, accessibility to some malaria commodities is still a problem and the private sector has not been adequately engaged to promote accessibility.
Collaboration with the private health sector in health service delivery

Ghana’s health care system is heterogeneous; comprising three major delivery systems, namely, public, private, and traditional systems of health delivery.

The private sector providers comprise hospitals, clinics, retail pharmacies, laboratories, and OTCMS. They are also involved in input supplies and comprise wholesale pharmacies, medical equipment suppliers and pharmaceutical manufacturers. The Faith-Based Service providers are represented by the Christian Health Association of Ghana (CHAG) and comprises hospitals and clinics. CHAG functions autonomously but receives significant government support in the form of salaries, equipment, and supplies. Informal providers comprise traditional healers, unlicensed practitioners, traditional birth attendants, herbalists, and spiritual healers.

Health service delivery in both public and private sector are monitored and overseen by the GHS in the regions and districts through the Regional and District Health Directorates respectively. All Faith-based Organizations (FBOs), particularly CHAG, have facilities based primarily in rural and underserved areas of Ghana to facilitate the provision of primary health care. The Health Facilities Regulatory Agency (HeFRA), an agency under the MoH, is mandated to inspect and license facilities intended for the provision of public and private health care services; determine the basic and minimum equipment and personnel required for the type of service to be provided in a practice; regulate and monitor activities in a practice to determine the adequacy and standard of health care provided; maintain professional standards in a practice; regularly assess health facilities for certification and accreditation; achieve continual quality improvement of health care providers among others.

Size and Distribution of the Private Health Sector

Little has been documented concerning the size and configuration of private providers in Ghana. Figure 1 shows the number of health facilities owned by both government and private sector health service providers as of May 2020. According to the Pharmacy Council, an agency of the MOH responsible for the licensing of pharmacists as well as the registration of pharmacies and OTCMS, there are 4,067 pharmacies and 19,985 OTCMS in Ghana as of May 2022. However, the geographic distribution of these facilities cannot be readily verified. The private sector is also a dominant player in the pharmaceutical industry, both in terms of value and total units. There are 40 local pharmaceutical manufacturers registered with the Pharmaceutical Manufacturers Association of Ghana; 60 registered national and international importers; and 150 registered wholesalers.
In recognition of the importance of the private health sector, Ghana has established and enacted relevant laws, regulations, policies, guidelines, and plans that encourage the private sector's contribution to health. This facilitated the creation of the Private Health Sector Unit in the Ministry of Health in 2003. However, both the public health sector and the private health sector have challenges engaging each other. The challenges to private sector engagement include:

- inadequate data on the private health sector
- limited dialogue and convening platform between the private and public sectors which create mistrust and misperceptions
- an uneven playing field for private health service providers
- multiple regulatory and quality policy frameworks that require better coordination and streamlining but otherwise is complicated
- poor market conditions, and limited and ineffective incentives hindering a greater private sector role in health service delivery.
These challenges are further complicated by the fact that the self-financing private sector is fragmented among several different and competing interests. There are also duplication of efforts and inadequate opportunities to leverage on the experiences and expertise of the private sector, including sharing best practices and using resources efficiently. Thus, despite the Private Health Sector Policy, there has been insufficient involvement of the private sector affecting policy formulation, planning and programme implementation.

**Strengthening of the supply chain management**

There is ample evidence that the Ministry of Health and Ghana Health Service are determined to implement supply chain reforms to strengthen the national system for health commodities management with technical and financial support from Ghana’s development partners. The Global Fund and other development partner agencies have come on board to support the Ministry to strengthen the health supply chain management. Some of the efforts have focused on automating the logistics management information systems (LMIS), last-mile distribution (LMD), warehousing and distribution optimization, and framework contracts, which expedite the procurement of essential medicines.

The National Supply Chain has two main central-level warehouses. The Imperial Health Sciences (IHS) located in Tema, a private sector pharma-grade warehouse, holds products donated by the Global Fund (GF) and USAID. The Temporary Central Medical Store (TCMS) located in Accra, stores commodities procured by other donor agencies, the MOH, and GHS. The public TCMS and private IHS in turn serve the regional medical stores (RMSs) and teaching hospitals (THs). Unlike the RMSs, the THs serve patients directly.

Commodities are distributed from the central warehouses (i.e., TCMS and HIS) to RMSs by third-party logistics (3PL) providers contracted by GF and USAID through the USAID Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM). The RMSs also pick up commodities from the central warehouses using their own trucks. The service delivery points (SDPs) in the regions get their commodities directly from the respective RMSs. In addition, the last-mile distribution is used and involves a monthly or bimonthly scheduled delivery of commodities to SDPs, using USAID and/or GF-funded 3PL partners or region-owned trucks.

Procurement responsibilities are distributed throughout the system. Central procurement is largely limited to a few products, including antimalarial medicines. An estimated 80 percent of pharmaceutics dispensed in public health facilities are procured directly from private distributors by the RMSs, teaching hospitals, or downstream facilities. With the enactment of the Public Procurement Act and in line with established framework agreements, the RMSs can procure essential health commodities and medical consumables, while programme commodities continue to be donated or procured at the central level by MOH.
According to the National Supply Chain Assessment of 2020, Ghana has a large private wholesale pharmaceutical market. Imports comprise 70–80 percent of total pharmaceuticals by value, as most domestic manufacturers can produce only low-cost generic medicines. There are also a few autonomous private not-for-profit medicine supply chains operating in Ghana. These include cooperative supply chains operated by Faith-Based Organizations (FBOs) and international or local development and humanitarian non-governmental organizations (NGOs). The Christian Health Association of Ghana for example, operates a central warehouse, sourcing products locally from private distributors or from the TCMS. By contrast, the for-profit market in Ghana is fragmented with about 60 importers and 166 wholesalers supplying to about 700 pharmacies and over 11,000 OTCMS.

The flow of commodities and information through the Ghanaian supply chain as well as the organization and elements within it are shown in figures 2 and 3.
Ministry of Health/ Ghana Health Service/ National Malaria Elimination Programme | 2022
Guidelines for the supply of malaria Rapid Diagnostic Test Kits (mRDT) and Sulphadoxine Pyrimethamine (SP) to the Private Sector in Ghana.

Figure 2: Ghana health supply chain – Map of commodity flow (NSCA, 2020)
Figure 3: Ghana health supply chain – Map of information flow (NSCA, 2020)
The NMEP is mandated to lead all malaria elimination efforts in the country in collaboration with all agencies and partners involved in malaria elimination. It is responsible, together with the Stores, Supplies and Drugs Management (SSDM) division of the GHS, for malaria commodities management. Quantification at the national level and approval of requested quantities by RMS/THs is solely the responsibility of NMEP. The NMEP submits requirements and expected date of delivery (EDD) to the procuring agencies after the national quantification exercise. The NMEP collaborates with the Stores Supplies and Drugs Management (SSDM) Division of the GHS to facilitate supply of commodities to the periphery. SSDM coordinates all activities relating to supply chain management and works together with the NMEP on programme specific commodities. They coordinate requisitioning and transportation of commodities from the central level to RMSs and THs. NMEP is informed of all shipments of commodities and estimated time of delivery and are notified should there be a delay or change in EDD.

Typically, procurement of malaria commodities is done annually where fixed volume procurements are made based on forecasted demand and/or available financing. Procurement is often fragmented among government and multiple health partners. GoG-sponsored commodities are procured by the Procurement and Supply Directorate of the MoH and delivered to the TCMS. USAID/PMI-sponsored commodities are procured by USAID/GHSC-PSM team and are delivered to the IHS warehouse. GF-sponsored commodities are procured by Procurement Services Agency (PSA) based in Switzerland and are delivered at IHS. mRDTs and SPs are procured by Global Fund, USAID/PMI, and Government of Ghana (GoG).

With respect to SP and mRDT, the RMS on behalf of the regions submit requisition to the central level during scheduled distribution of all programme commodities. This is electronically done through the Ghana integrated logistics management (GhiLMIS) platform. The orders are reviewed and approved based on quantities available at the central stores and monthly consumption/stock status of RMS/THs by the various programme schedule officers. Central level distribution use 3PLs and the RMS trucks to move commodities to the various RMSs /THs after their orders have been approved and processed.

Service providers then request for their needed stocks from the various RMSs through scheduled delivery. The RMSs distribute commodities either directly to health facilities in their jurisdiction through last-mile distribution (LMD) as part of scheduled delivery or are sent to nearby facilities when the trucks are unable to go to the designated LMD facility, and the commodities are picked up by the facilities. They also use either service trucks or 3PLs.
contracted by GF to move approved orders to the facilities in their jurisdiction. When necessary, and upon approval from the RMS, facilities are allowed to make emergency requisition outside of the LMD schedule, in which case, the facility arranges for transportation to pick up the commodity. Some private health service providers who are registered with the RMSs, and report into DHIMS 2, access GF commodities either directly from the RMSs or through the DHD. Because most private health service providers are not part of the LMD or enrolled onto the GhiLMIS, some DHDs place orders through GhiLMIS on behalf of some private health facilities within their District.

*Figure 4: Ghana Malaria commodities supply chain.*
Monitoring of commodities is undertaken regularly by the partnering donor agencies and NMEP as follows:

- Global Fund through KPMG or IQVIA carries out quarterly spot checks on malaria commodities and service indicators from randomly selected facilities across the country.

- USAID/PMI through GHSC-PSM team does it through the end-user verification (EUV) studies that tracks commodities issued from the Central level through the RMS and to the facility. The EUV study also checks for stock availability and stock out rate. GHSC-PSM also has assigned regional logistics officers (RLOs) to the various RMSs and THs to monitor and provide support on all programme commodities.

- NMEP through its PSM, M&E and MiP teams do targeted, as well as routine monitoring of malaria commodities and service indicators across the country.

- SSDM monitors general commodity availability within the Ghana Health Service

Data reported by facilities in District Health Information Management System 2 (DHIMS 2) is vital for the requisition and allocation of commodities to RMS/Facilities. So, to ensure data accuracy and completeness, the NMEP reviews service data entered on DHIMS monthly for every district. Where there are inconsistencies in a district’s data, individual entries by all facilities in the district for specific indicators are reviewed and the findings communicated to the district team to follow up. In other cases, the data managers team up with the district team to review source data at the facility concerned. Also, NMEP through the regional malaria focal persons or the RMS managers, provide feedback to the regions either by email or WhatsApp, about availability of commodities and delivery schedules to help encourage requisition of commodities. The NMEP also conducts supportive supervisory visits to health facilities and the RMS. During these visits, stock availability and stock management practices are accessed, and where gaps are identified, efforts are made to address those gaps, such as orientation, education, emergency requisition and supply among others.

Ghana’s health supply chain has been studied extensively and its strengths and major challenges to availability, quality, affordability, and rational use of medicines have been identified. This is evident from (i) a documentary review, (ii) observations from the two workshops held to consider guidelines for the supply SP and mRDTs to the private health sector, and interactions with the NMEP. The following is a summary of the current state of the core functions of the health supply chain which potentially can affect the availability and affordability of quality SP and mRDT within the private sector.
Procurement

- The procurement process is fragmented among government and multiple health partners/donors who supply same commodities to the supply chain with limited data sharing or visibility. Coordination within the supply chain is therefore limited, resulting in high levels of duplication and wastage.

- Inadequate financing and poor quantification affect procurement of needed supplies.

- The delay in clearing commodities from the port is a challenge and sometimes approval processes for waiving off duties takes a long time.

- Apart from the challenges associated with the core supply chain functions, there are many confounding factors, such as inadequate financing for supplies, that impact medicine availability.

Data management

- Some private service providers including pharmacies, OTCMS and hospitals do not have DHIMS 2 account, hence are unable to enter their service data onto the platform. Even for hospitals who have access to DHIMS 2, there is little or no incentives for them to report on their malaria-related data and so do not report. Few of them report but do so infrequently. For example, an analysis of DHIMS 2 2021 data shows that private health facilities were five times less likely to report service data into DHIMS than public health facilities did.

- The country is currently rolling out a new, dedicated LMIS system at higher levels of the health system (GhiLMIS). The GhiLMIS is designed to integrate stock information across all programme areas, reduce reporting burdens, and allow for more up-to-date and transparent access to data across levels of the system. The rollout plan involves training of staff to use GhiLMIS starting with hospitals and later the lower-level facilities (i.e., Health Centers, CHPS).

Quantification (Forecasting & Supply Planning)

- Forecasting carried out to plan procurement is often constrained by poor data management and this makes it hard to estimate needs, leading to limited supply.

- Funding limitations and stock-outs at higher levels of the supply chain have resulted in increasing issues of “certificates of non-availability” that allow nodes down the chain to buy directly from the private sector suppliers.
Distribution

Distribution is limited by the lack of adequate transportation capacity resulting in infrequent delivery of commodities. The distribution modes are ad hoc and partially integrated. Many modes of distribution are found between nodes of the supply chain through government-owned vehicles, third-party logistics partners, and cases where downstream facilities travel to warehouses themselves to collect products. Facilities are normally resupplied infrequently resulting in stockouts.

Storage capacity is limited, and storage conditions are often suboptimum.

Regulatory policies & procedures

National policies and regulations on health commodities supply management including Ghana's Supply Chain Master Plans exist but their enforcement appears to be limited.

There are stringent regulatory authority requirements for quality of malaria commodities but because pharmacovigilance is often limited at the district and levels below, there is significant counterfeiting, product diversion, and quality concerns.

Communication and coordination

No central agency exists to consolidate supply chain oversight, strategic planning, and operations, for ensuring a strategic, comprehensive and effective approach to governing, managing and reforming the public health supply chain.

The roles of MOH and GHS in respect of managing supply chain are not clear

Service delivery & utilization

Adherence to the test, treat and track policy on malaria by private sector providers is poor

Level of knowledge and/or capacity for malaria case management, and logistics management in the private sector is low.

Only a few private health facilities have a DHIMS 2 account, and fewer still report and are supplied SP and mRDT from the public sector.

Human resources

Ghana’s health sector lacks adequate capacity in several key central-level technical areas, including strategic planning and management, policy and governance, financial sustainability, and procurement.

There is shortage of human resources to appropriately staff supply chain functions throughout the health sector.
RECOMMENDED ACTIONS

Preamble

The documentary analysis, and the stakeholder meetings indicate that the Ministry of Health and the Ghana Health Service have a goal to increase access to healthcare throughout Ghana.

A large private health sector exists in Ghana across many service areas including primary care, hospitals, diagnostics, specialist therapeutic and curative services, and pharmaceutical supply chains. The private health service providers are sometimes the only option for health care in rural areas and poor urban slums. They serve all income levels, have broad geographic reach, and are expected to continue to play a key role in ensuring access to quality and affordable medicines and diagnostics to clients throughout the country. Thus, the private sector can help expand access to services for the poorest people and reduce the financial burden on governments. This means the private and public sectors must work together to develop more viable, sustainable, and equitable health care system in Ghana. In this regard, the MOH/GHS/NMEP has collaborated with the private sector in varying degrees in pursuit of its programmatic goals. But a transparent and impact-oriented engagement with the entire spectrum of the private health sector is needed for a greater impact.

An efficient national health supply chain is essential to ensure access to high quality, affordable health commodities to all Ghanaians. Private providers already play a significant role in managing and sustaining an efficient supply chain at all levels in Ghana’s health system. However, accessibility to quality mRDTs and SP is still a problem and the private sector has not been appropriately engaged to promote accessibility.

The MoH, GHS and NMEP’s aim therefore, is to ensure that all mRDTs and SP procured, supplied, and obtained from the private health sector are of good quality, affordable and widely available to all patients in Ghana. This objective is directly linked to the functions of the malaria commodities supply chain. The recommended actions outlined here are designed to guide the NMEP/GHS/MoH to address specific challenges identified with the core functions of the malaria commodities supply chain. They are intended to provide clear practical guidance on procedures involved in managing the malaria commodities supply chain to ensure that all mRDTs and SP obtained from private providers are of good quality, affordable and widely available to all patients.
A. SUPPORT FOR PRIVATE HEALTH SECTOR CONTRIBUTIONS

A transparent and impact-oriented engagement with the entire spectrum of the private health sector is needed to ensure access to quality malaria commodities through the private sector. The following strategies are proposed to guide engagement between the MoH/GHS/NMEP and the private health sector to promote effective and sustainable outcomes.

1. Strengthen dialogue and cooperation between NMEP/GHS/MoH and private sector stakeholders to reach a common vision on provision of malaria commodities and services. This effort should aim to strengthen coordination of public and private resources including infrastructure, equipment, human resources, financial, technical resources to increase access to quality malaria commodities and services.

2. Build NMEP/GHS/MoH capacity to effectively engage the private sector as the government lacks key policies, systems, and institutional arrangement to engage the private sector.

3. Foster favourable market conditions supporting private sector providers active in provision of malaria commodities and services. Private providers face harsh market conditions, ranging from cumbersome regulations to government inability to close down “quacks”, to limited access to capital. So NMEP/GHS/MoH should work to make regulations more conducive to private sector healthcare businesses as well as increasing their access to business skill training, capital and business advisory services to help them grow their services and ensure their long-term sustainability.

4. Harness and direct private sector resources to malaria elimination through public-private coordination, collaboration, and partnerships. The private sector is already active in delivering health services; manufacturing and retailing essential medicines /products; producing key health professionals; and, generating health system innovations and technologies.
B. SERVICE DELIVERY & UTILIZATION

1. Owing to the large size of the private sector, and the high demand for malaria products, based on available stock, the NMEP shall prioritize the supply of donor-supported products to the private sector. OTCMS/CP/Hospitals/Clinics to be supplied will be selected based on the following criteria:

   a. Having a valid license and in good standing with relevant regulators

   b. Having a valid registration/operational license to provide services for NHIS clients. This will improve access, especially to the poor and marginalized

   c. Having registered/qualified personnel who is/are trained (or willing to be trained) in malaria case management and related services

   d. Meeting necessary infrastructure requirements

   e. The personnel must agree to perform all associated medicine dispensing, patient counselling, and documentation tasks

   f. The facility must have adequate space and facilities for privacy to allow confidential counselling

2. The mother associations of the private sector/targeted facilities sign a memorandum of understanding (MOU) with GHS that clearly states the roles and responsibilities of each party.

3. The existing supply chain distribution network will be used to supply SP and mRDT to the private sector through coordination with the NMEP and RMS.

4. Liaise with Health Facilities Regulatory Authority (HeFRA), pharmacy council and other relevant regulatory bodies to ensure infrastructural standards are met

5. If client does not have a valid NHIS card, they would pay for the service received/rendered
6. Agree on recommended retail prices (RRP) for recommended malaria commodities and making these known to providers and patients to ensure that prices are affordable, and that access is equitable, for the targeted patient populations.

7. Consider using special packaging to increase provider and consumer awareness of and recognition of quality-assured malaria commodities.

8. Improve the availability and affordability of quality-assured medicines to cut out poor quality antimalarials from the market.

9. Increase consumer and provider demand for recommended products by social marketing including branded packaging of recommended commodities, logos to designate quality assurance, and providing information and training about recommended quality-assured commodities to private providers and consumers.
C. REGULATORY POLICIES & PROCEDURES

1. Engage with and advocate for regulatory bodies (FDA, Pharmacy Council, Manufacturing companies’ inspectors) to be well resourced and equipped for their role in ensuring good quality and affordable medicines and diagnostic testing from the private providers.

2. Ensure that regulatory authorities, customs inspectors, and manufacturing inspectors (if relevant) have adequate power and resources to identify and remove antimalarials that are not in line with national registries and policies. Improve capacity of national medicine regulatory authorities and their linkages with other countries, and with relevant stakeholders within the country.

3. Liaise with the FDA to implement post-marketing surveillance; and to conduct regular and systematic risk-based quality monitoring and control sampling among medicine distributors and retail outlets.

4. Advocate for regulation and inspection of local manufacturers to ensure they adhere to good manufacturing practice.

5. Advocate for national policies to allow use of mRDTs at pharmacies and OTCMS. Guidelines should clarify where mRDTs may be used (e.g., in higher-level facilities and laboratories, in pharmacies, in OTCMS, etc.). It may be appropriate to make provision of appropriate diagnostics a condition for planned or existing accreditation programs.
D. DATA MANAGEMENT

1. Develop an information network systems approach for improved communication among tiers to help streamline continuous flow of information and increased data from health information systems. It will also help hand-collected data to be integrated into data management systems.

2. Facilitate/assist all PSPs to be trained and enrolled onto GhiLMIS.

3. Train health workers at service delivery points on data collection and data analysis for improved quality of data and information.

4. Assist private service providers to have access to the national health information management system (e.g., DHIMS 2 for health facilities) and establish a system for pharmacy and OTCMS reporting.

5. Engage HeFRA to ensure that health service providers, including private providers, report to the national health information management system, e.g., DHIMS 2.

6. To reduce stockout rates, NMEP should consider adopting the informed push model for SP & mRDT distribution for greater operational efficiencies and the potential for increased quantities of supplies to drive demand and use. This has worked in Senegal and Togo.

7. Train all staff to understand information management requirements and have necessary skills to meet these requirements.
E. HUMAN RESOURCES

1. Train supply chain staff at multiple tiers within the system to help increase knowledge of the supply chain system and understanding of importance of timing.

2. Advocate for increased allocation of human resources for supply chains at all levels and sectors.

3. Train all levels of health care providers about supply chains and logistics to increase their knowledge of the supply chain system and improve practice of prescribers and dispensers as they relate to supply chains.

4. Plan for continuous capacity building.

5. Regularly involve private sector providers in national training programmes.

6. Explore using electronic or web-based learning, which may be more practical for the private health sector since they are often less willing or able to let their staff leave the facilities to attend trainings/workshops.

7. Coordinate with private sector networks, professional bodies, and regulators responsible for continuous professional development as part of accreditation and licensing requirements. Involving these associations/networks in conducting baseline assessment and any subsequent training activities can strengthen their ability to provide quality assurance and future Human Resource for Health (HRH) training.

8. To ensure adherence to best practices and continuous quality improvement, establish a mechanism for regular monitoring (with defined indicators), supportive supervision, and performance review at the very beginning.
F. COMMUNICATION AND COORDINATION

1. Develop reporting tools and promote the use of mobile technology across tiers or facilities.

2. Ensure representation of private sector on the District Health Management Team (DHMT) committees.

3. Advocate for establishment of medicine and therapeutic committees at health institutions (public and private) to facilitate information sharing on needs, stocks, and supply chain logistics along the supply chain. The committees must be recognized as critical for successful supply chain management by MoH/GHS and NMEP.

4. As part of building rapport between the public health and private facility staff, PSP staff should visit the public facility as part of the initial orientation to understand site-level procedures and processes. This will enable better future consultations and communication.
G. PROCUREMENT

1. Ensure procurement standards are guided by rules, regulations, acts, procedures, and manuals clearly explaining the process.

2. Ensure procurement of quality-assured antimalarials/commodities at the point of import (or manufacture) is an important step.

3. Initiate early and frequent consultations with manufacturers.

4. Advocate for improved transparency with all eligible suppliers. NMEP should have ability to determine manufacturers with increased capabilities of supplying high-quality medicines and products efficiently.

5. Increased working capital funds for national medicine supply agencies to improve timeliness of procurement initiation and prepayment.

6. Insist only WHO pre-qualified antimalarials/commodities are procured and on the market.

7. Reduce retail prices through subsidies and bulk procurement by government or donor funds. This will enable local wholesalers and retailers to purchase the commodities at costs below market value.

8. Work with manufacturers to understand use of commodities at service delivery point and need for appropriate packaging to address local needs.

9. Build partnerships to extend favourable pricing on commodities to private sector medicine outlets and distributors.
H. QUANTIFICATION (FORECASTING & SUPPLY PLANNING)

1. Ensure needs are estimated based on reliable data on consumption and morbidity

2. Ensure a comprehensive approach to quantification using a case management model that takes diagnosis with mRDTs and treatment with ACTs into account, number of pregnancies for SP

3. Ensure quantification is based on diagnoses confirmed with microscopy or mRDTs per WHO recommendation

4. Always ensure uninterrupted availability of commodities

5. Quantification of ACTs/mRDT/SP requires estimation is based on each product received last, what has been used (monthly consumption assuming full supply), number of cases managed, what is on-hand, and what is needed
I. DISTRIBUTION

1. Optimize transport and storage conditions (e.g. temperature, humidity) to ensure and maintain quality of the commodities.

2. Private distribution chains and pharmacies may be required to comply with Good Pharmacy Practice and Good Distribution Practice. After medicines are distributed, facilities that sell medicines (clinics, pharmacies, OTCMS) should be inspected regularly to ensure sale of only registered and pre-qualified products.

3. Introduce appropriate simple technologies to track, trace, and authenticate medicines through the supply chain.

4. Conserve medicines and supplies so that the integrity of the packaging is maintained, and items are easily accessible in the storeroom.

5. Optimize inventory management to prevent stock-outs or overstocking, yet maintain enough inventory to sustain good service levels at all the system’s distribution points.

6. Locate storage warehouses to optimize the infrastructure available for storing stock when needed and to facilitate distribution to peripheral health facilities (HFs).
J. MONITORING AND EVALUATION

1. At the programme level, donors and government should routinely collect and analyse relevant data.

2. At the facility level, there is a need for an effective and efficient system for data collection and two-way exchange between the public health facilities and the private sector providers.

3. The data collection tools should be simple with clear guidance about what indicators to record and what mechanism private providers will use to share these data with the public facility.

4. Establish a system for the exchange of data between the public facility and private sector provider. An electronic system that allows for real-time data sharing will be preferable. However, if not available, a paper-based system should be used for non-automated models while effort is made to move towards an electronic system.

5. Develop data collection tools and train private sector providers on their use. The data collection tool to be used should be similar for all the facilities. This will allow for easy transfer of information between the public and private facility.

6. Develop standard operating procedures (SOPs) for filling out data collection tools and share SOPs with the private sector providers.

7. When defining data-sharing pathways for merging data from the private and public sectors, take precautions to avoid duplication (e.g., when patients are transferred back and forth between sectors).

8. Hold regular review meetings between the private sector providers and public health facility providers

9. Conduct regular supportive supervision for the private sector providers by the MoH/GHS/NMEP and/or local technical experts, members of professional associations, and other relevant bodies
K. MANAGEMENT AND OVERSIGHT RESPONSIBILITIES

1. NMEP must ensure that supportive policies and legal/regulatory requirements are in place.
   
   a. MoH must provide government policies and regulations for private sector engagement in malaria case management to all PSPs enrolled and ensure they abide by them.
   
   b. Because there is going to be “sharing” of government commodities with private sector facilities, the policy should also address necessary changes to the supply chain to accommodate moving the commodities from the public sector to the private sector.
   
   c. The sharing of patients’ information between public and private facilities and reporting requirements should ensure there is no double reporting or underreporting.
   
   d. Additionally, policies should define the mechanism/procedures for ensuring quality of services in the private sector.
   
   e. Policy should ensure that PSPs are registered and operating legally and that they have a current license. NMEP should work with regulatory authorities and associations of PSPs to ensure efficient and clear processes for licensing of PSPs.

2. NMEP to engage key stakeholders from the very beginning.
   
   a. Engage MoH at all levels to ensure that necessary supportive policies and guidelines are in place and necessary changes to the supply chain and monitoring/evaluation systems are made.
   
   b. Engage PSPs to address their motivation, incentives, and offer justification for their involvement in the provision of care.
   
   c. Engage with public sector health care providers to ensure they accept and actively participate in the mentoring and supervision of the PSPs in their catchment areas and also to help develop rapport with the PSPs for seamless implementation of the programme. The engagement should address their concerns regarding incentives too.
d. Engagement with suppliers.

e. Hold regular meetings with all stakeholders to sensitize them, solicit their feedback, and provide continuous updates on the implementation/scale-up process.

3. Define criteria for selecting private facilities. The criteria for selection should be based on:

   a. Registration and licensing

   b. Convenience of location and adequate infrastructure

   c. Trained staff (or willing to be trained, in which case training needs should be assessed).

   d. Willingness to sign an MOU with a public health facility/NMEP/donor, which defines the terms of engagement and roles and responsibilities of each party involved in the process

   e. Develop a business case highlighting the following benefits and present to PSPs

      i. Direct revenue from fee-for-service and indirect revenue from ancillary medicine needs

      ii. Increased visibility for the health facility/personnel due to involvement in public health interventions

      iii. Special appreciation/recognition during national conferences of Pharmaceutical Society/ professional association

      iv. Robust capacity building which can be applicable to other disease areas and contributes to professional development

      v. Corporate social responsibility

4. Ensure mRDT and SP availability in private sector through necessary adjustments to the supply chain and/or efficient ways to transfer them from public to private facility.


