USAID GLOBAL HEALTH SUPPLY CHAIN PROGRAM
Procurement and Supply Management

TECHNICAL BRIEF

Assessment of Framework Contract Implementation and Financial Sustainability in Ghana's Public Health Commodity Supply Chain

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Background

Ghana's public health sector operates a decentralized procurement system, where Budget and Management Centres (BMCs) at various levels are responsible for purchasing essential medicines and non-drug consumables. However, the absence of a coordinated procurement mechanism has led to inefficiencies. The Ministry of Health (MOH), with technical assistance from USAID Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM), introduced the Framework Contract (FWC) mechanism in 2018 to leverage economies of scale through pooled procurement of selected priority health commodities to reduce product cost, increase access to safe and effective medicines, and reduce the level of effort expended on procurement functions at Regional Medical Stores (RMSs) and teaching hospitals (THs).

FWC implementation has encountered several challenges that threaten its sustainability. These include delayed payments to suppliers by RMSs and THs, low supplier fill rates, and persistent stockouts of critical commodities. These issues are compounded by financing challenges, including a high level of indebtedness within the health system. RMSs owe significant sums to private vendors, SDPs owe RMSs, and the National Health Insurance Authority (NHIA) has not reimbursed health facilities for months, creating a cycle of debt that disrupts the supply chain and limits access to essential health products.

Objectives

The study aimed to:

- Assess the implementation of the FWC mechanism.
- Assess the financial sustainability of Regional Medical Stores, teaching hospitals, District Health Directorates, and health facilities.
- Review the existing revolving drug fund regulations and their application across all levels of the public health sector.

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Methodology

A mixed-method approach was used to collect both quantitative and qualitative data. Data collection tools targeted supply chain and financial information at all levels (regional, district, and health facilities). Semi-structured interviews were conducted with central-level stakeholders and vendors. The study also examined the level of indebtedness of health facilities to RMSs and the private sector.

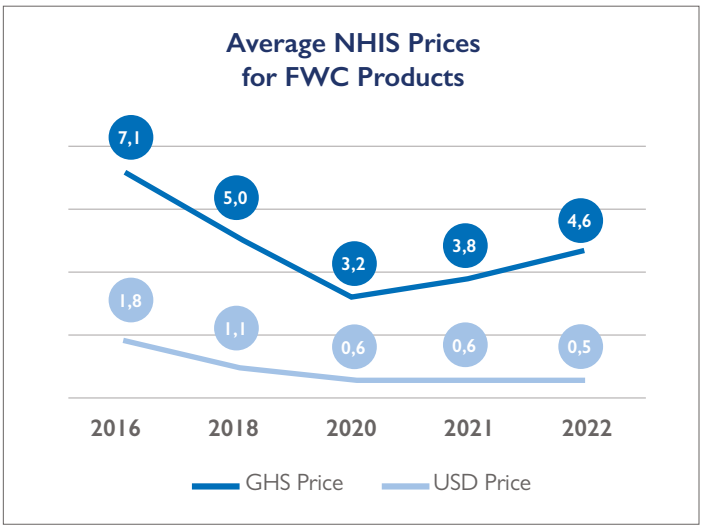
A total of 16 regional health directorates, 10 RMSs, 5 teaching hospitals, 54 district hospitals, 54 health centres, and 54 Community-based Health Planning Services (CHPS) compounds were targeted. The study also engaged suppliers to assess their performance under the FWC system.

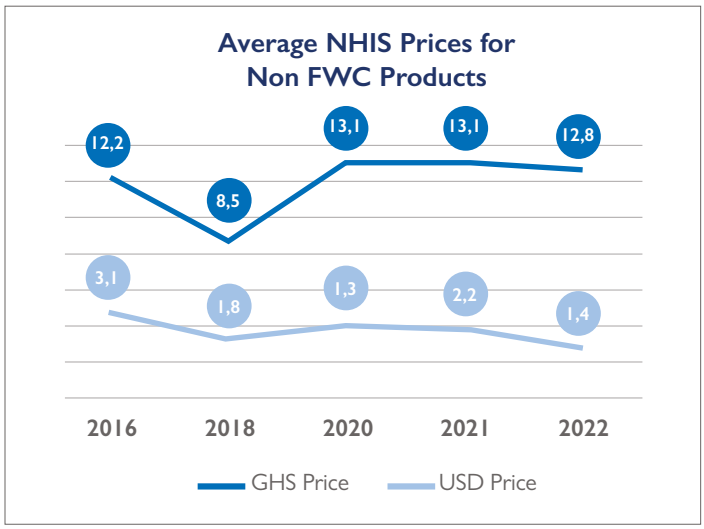
The Kobo Toolbox, a secure and scalable mobile platform, was used to collect data electronically. The assessment examined key parameters like indebtedness, procurement expenditures, and product availability. Microsoft Excel was used to analyze and visualize quantitative data.

Key Findings

1. Framework Contract Impact on Commodity Pricing and Availability

The implementation of FWC significantly impacted medicine pricing under Ghana's National Health Insurance Scheme (NHIS). From 2016 to 2022, the average price of FWC products decreased by 35%. This price reduction was largely driven by the NHIA's benchmarking pricing of commodities on the FWC arrangement on FWC prices. Prices of non-FWC products saw no discernible reduction.





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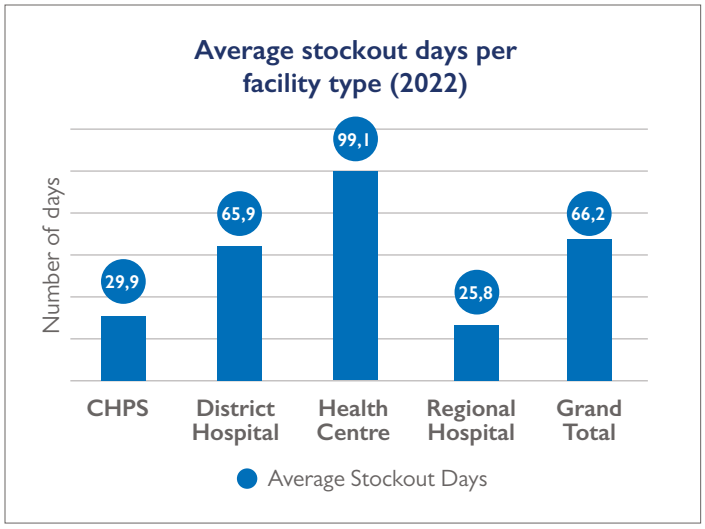
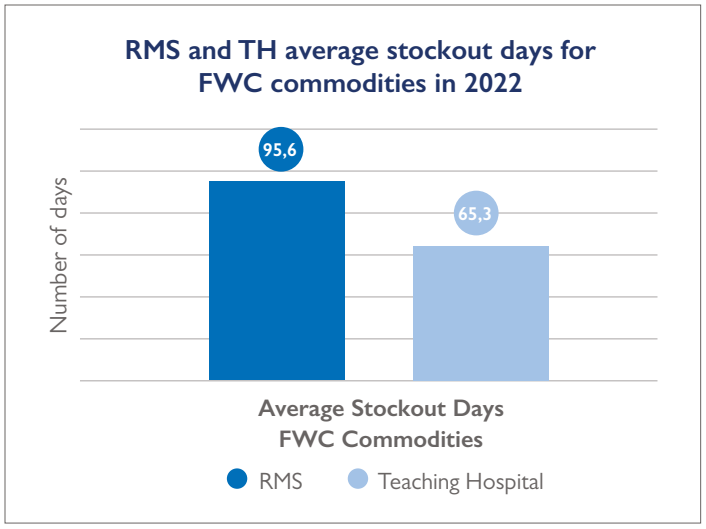
Supplier lead time significantly decreased from 188.4 days in 2018 (FWC round 1) to 80.4 days in 2022 (FWC round 3). Despite the price reductions and improved supplier fill rate, challenges with supplier performance, including low fill rates and stockouts, persisted.

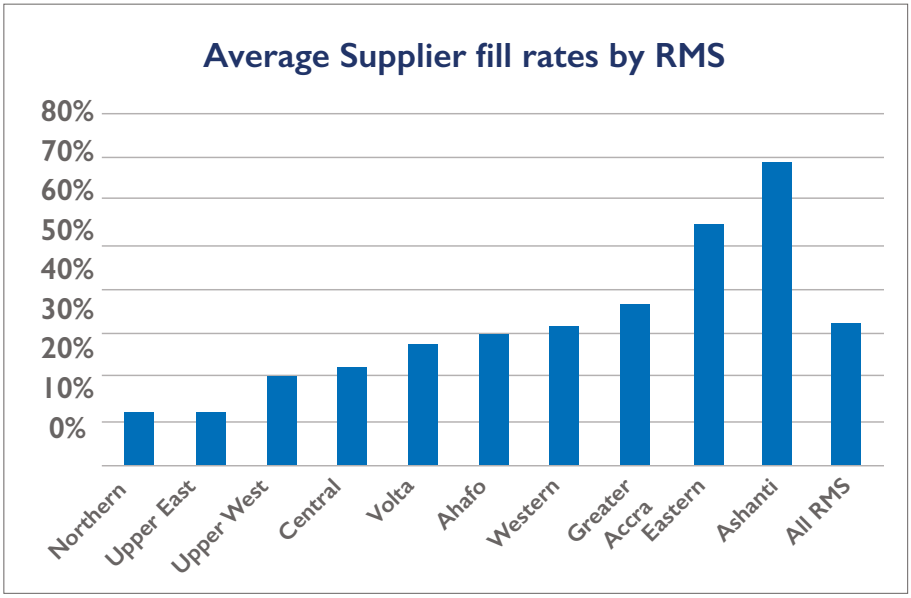
In 2022, stockouts were reported for the FWC products managed across various facility types as follows: 28.6% for CHPS compounds, 37.2% for health centres, 36.8% for district hospitals, and 29.6% for regional hospitals. These stockouts, combined with the prolonged average stockout days for FWC commodities at all levels further exacerbate the situation.

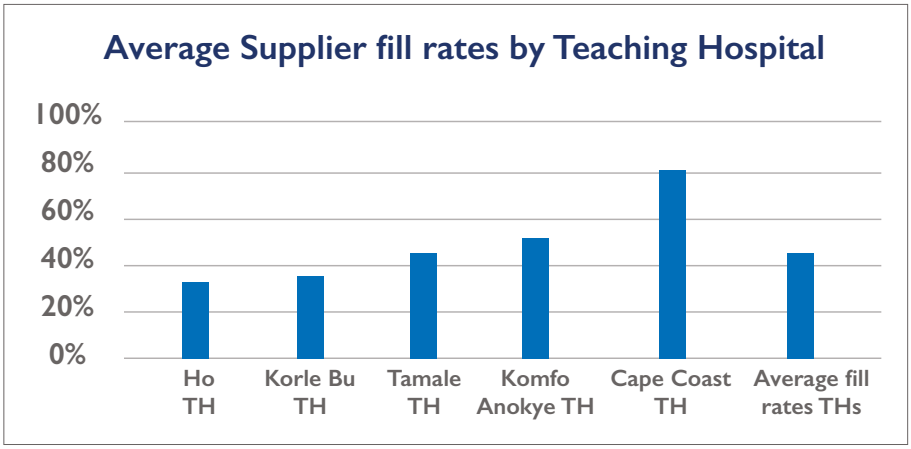




Forecast accuracy was identified as a significant challenge, with 70% of FWC commodities at RMSs and 61% at THs being inaccurately forecasted, each recording a mean absolute percentage error (MAPE) greater than 25%.

Supplier fill rate per product varied significantly, ranging from as low as 6% to 78% for RMSs and 3% to 100% for THs. However, no correlation was found between supplier fill rates and the number of products awarded to vendors. The average supplier fill rate for 80% of assessed RMSs and 80% of assessed THs was below 50%, indicating low supplier performance. Supplier fill rate is a critical measure of supplier reliability in fulfilling orders and its variability directly impacts stock availability, contributing to service disruptions. Contributing factors included financial and macroeconomic challenges, which need to be addressed.

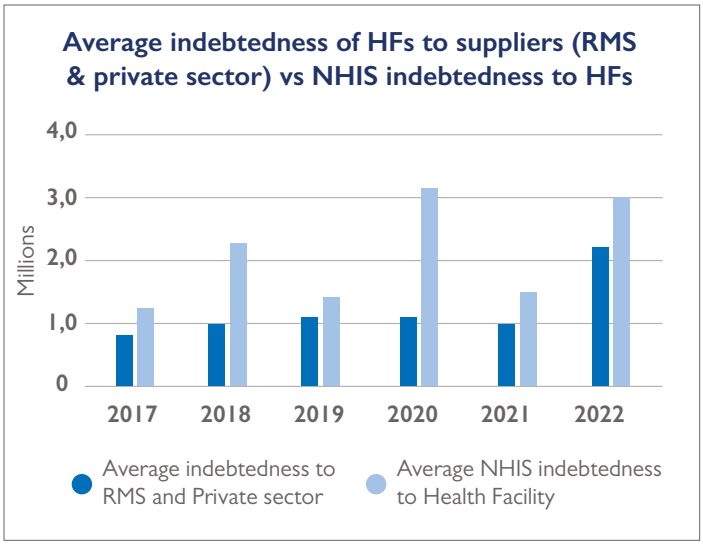


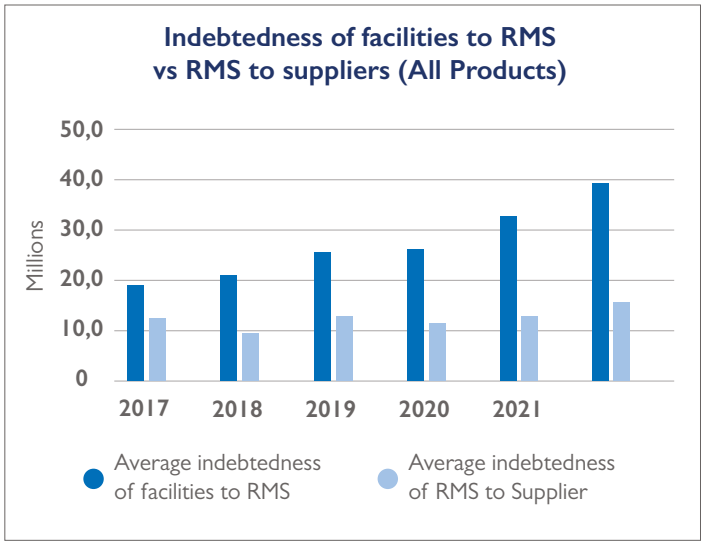


2. Financial sustainability

The assessment revealed fluctuating average NHIS indebtedness to health facilities, ranging from GHS (Ghanaian Cedis) 1.24m in 2017 to GHS 3.22m in 2020, with an average of GHS 3.07m in 2022. Notably, health facilities' indebtedness to suppliers (RMS and private sector) was lower than their NHIS payments outstanding, suggesting that if NHIA settled its debts, the facilities could fully clear their obligations.

The assessment also revealed that RMSs indebtedness to private suppliers can be fully paid if health facilities settle all their indebtedness to them.



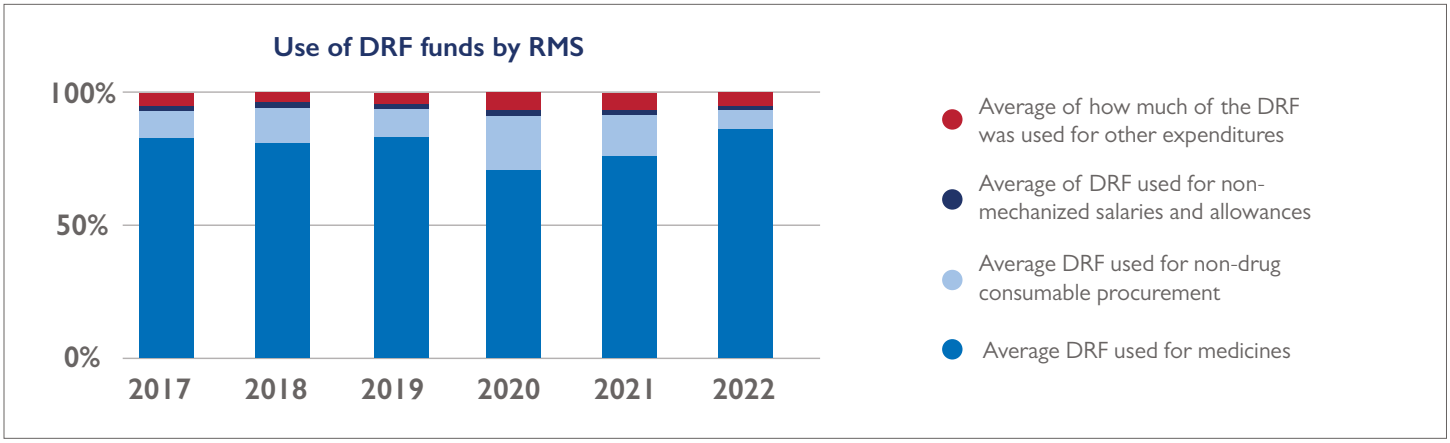


All regions showed positive working capital for facilities under them as of December 31, 2022. All RMSs also showed a positive working capital as of December 31, 2022. However, the high receivables values and average receivable days—270 for health facilities and 376 for RMSs from 2017 to 2022—indicate cash flow constraints and an increased risk of bad debts. This issue requires urgent attention to ensure financial sustainability.

3. Drug Revolving Fund (DRF) Management

79% of health facilities surveyed reported the availability of DRFs, indicating a relatively widespread adoption of DRFs as a financial mechanism for healthcare pharmaceutical management. Furthermore, 96% of those with DRFs, also reported the presence of guidelines for managing the DRF. In contrast, the study found that 21% of health facilities do not employ the DRF approach for managing pharmaceutical supplies.

Medicines procurement dominated DRF application at the health facilities and the RMSs. However, other applications such as for the procurement of non-drug consumables and payment of non-mechanized staff salaries were recorded. The proportion of DRF used for non-medicine expenditure for the RMSs from 2017 to 2022 ranged from 3.6% - 20%. The highest proportion occurred in 2020.





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Conclusion

Despite the cost-saving benefits of the FWC arrangement, it faces numerous challenges that threaten its sustainability.

Effective cost management, revenue optimization, improved supplier and NHIS relations, and strategic planning are crucial for the long-term financial health of the regional warehouses and health facilities. However, the current indebtedness across the health system requires urgent attention. Liquidity issues due to high receivable days and values and fluctuating payable days need closer examination.

While medicines procurement dominates the use of the DRF, a significant portion is also allocated to non-pharmacy-related expenditures.

Recommendations

- The NHIA should prioritize payment of overdue debts, comply with reimbursement guidelines, and advocate for a comprehensive review of its financing mechanisms to reduce indebtedness and ensure full cost recovery for services rendered at facilities.
- The NHIA, MOH and stakeholders to review the current price adjustment formula under the FWC arrangement to cater for economic fluctuations to inform NHIA pricing regime for medicines.
- MOH/Ghana Health Service to thoroughly assess and profile all receivables at RMSs to enable RMSs to develop appropriate payment plans for health facilities.
- MOH/Ghana Health Service to advocate for recapitalization of RMSs to cater for irrecoverable debts.
- MOH to include past vendor performance as a key criterion for evaluating and selecting vendors under the FWC mechanism.
- MOH/Ghana Health Service to improve FASP capabilities across all levels of the supply chain.
- MOH/Ghana Health Service must prioritize the enhancement of financial management and reporting and develop separate guidelines specific to the management of DRFs.