



Driving Performance Transparency and Reinforcing Continuous Improvement: The National Supply Chain Assessment

Ensuring the availability of commodities to support a healthy population requires the support of a wide range of stakeholders, all cooperating seamlessly to enable the delivery of health products to thousands of sites and millions of people without a gap in coverage. Delays that may seem tolerable in theory can be catastrophic for families.

This is why we care about health supply chains – when they fail, even a little, there are repercussions.

Health supply chains are intended to work in a predictable and consistent manner, yet they often operate in incredibly complex and dynamic environments. Identifying strengths, weaknesses, and gaps along these supply chains is challenging in the best of circumstances – hurdles such as bureaucracy, limited procurement budgets, instability, challenging terrains, lack of infrastructure, and conflict make this task impractical for many countries.

The **National Supply Chain Assessment (NSCA)** monitors current conditions against national performance indicator targets to support strategies that keep medicines in stock. Funded by U.S. Agency for International Development (USAID), the USAID Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) project has implemented this comprehensive approach since 2018.

What is the NSCA, and How Does it Work?

The NSCA is a tool that offers countries a **comprehensive, quantitative picture of their supply chain's capability**



There are three ways to conduct the NSCA: snapshot, targeted, and full. A snapshot NSCA includes a focused sample of sites from chosen system levels, a targeted NSCA focuses on a specific part of the public health supply chain system, and the full NSCA evaluates the entire public health supply chain system across all technical areas.



ACTIVITY DETAILS

The NSCA Informs Two Key Processes:

1. Evidence-Based Investment & Planning:

- ➔ Informs and guides supply chain country and donor investments
- ➔ Informs country strategic planning and performance management processes
- ➔ Informs national supply chain policies and decisions

2. Performance Management:

- ➔ Provides a comprehensive picture of national supply chain capability maturity and current performance
- ➔ Monitors the impact of specific supply chain improvement activities and investments
- ➔ Monitors progress over time and against national performance indicator targets

and performance at all levels of the health supply chain. Its objective and repeatable methodology, clear sampling strategy, and formalized and consistent process helps countries evaluate the progress of strategic initiatives. It provides a snapshot of the supply chain's current state and gives stakeholders insight into whether it is meeting performance expectations. The tool helps compile a vast amount of structured and targeted data to gauge progress toward established benchmarks.

By conducting NSCAs at multi-year intervals, a country can **review and compare data points over time** and track progress towards goals established in national supply chain strategic plans. This transparency gives stakeholders clear visibility into what is working and where improvements are needed so that they may make informed decisions regarding resource allocations.

Governments, health supply chain stakeholders, health care providers, non-governmental organisations, and donors have initiated NSCAs to support evidence-based decision making. GHSC-PSM provides technical assistance and expertise in assessment methodology, but **it is always the country government leading the process**, deciding what levels and technical areas of the supply chain to focus on and how to apply the findings to improve their supply chain performance.

To date, GHSC-PSM has conducted NSCAs in collaboration with 11 countries, with 27 countries having completed an NSCA since 2012¹. NSCA findings have played significant roles in strategic planning, evaluation, and investment for supply chain reforms. Through the NSCA, governments have demonstrated a commitment to the people they serve by applying a rigorous, internationally accepted process to measure progress and identify obstacles.

The NSCA at Work: Rwanda

The Government of Rwanda's commitment to continuous improvement of its public health supply chain is evident in its assessment approach. Rwanda is the only country to have completed four NSCAs (2013, 2015, 2017, and 2022). In 2022, GHSC-PSM collaborated with the Ministry of Health (MOH) to evaluate the effectiveness, capacity, and overall performance of supply chain operations within the country's national health supply chain system through the NSCA.

The 2022 NSCA was a comprehensive undertaking incorporating data from 207 facilities spanning central medical stores, all healthcare service delivery types, and

“Findings from the Rwanda 2022 NSCA have highlighted areas where success has been registered in the supply chain. Recommendations from the assessment indicate areas that still need more effort at different levels. The Rwanda Ministry of Health shall use the assessment results to work with all relevant stakeholders and address the gaps within the appropriate timing”

— Zachée Iyakaremye
Permanent Secretary of the Rwanda
Ministry of Health

¹Burundi, Democratic Republic of Congo, Dominican Republic, Ghana, Guatemala, Guinea, Lesotho, Madagascar, Rwanda, Uganda, Zambia



Photo Credit: GHSC-PSM

central-level entities such as the Food and Drug Authority and the National Reference Laboratory. GHSC-PSM analyzed the data and, in cooperation with the MOH, shared findings and recommendations with stakeholders in a workshop in October 2022.

Filling in the Gaps

For the Government of Rwanda, a primary reason for conducting the NSCA was to examine the impact of one of their key supply chain reforms – the establishment of Rwanda Medical Supply, Ltd (RMS). RMS was established in August 2020, transforming from a division of the Rwanda

Biomedical Centre into a commercial parastatal company. **The establishment of RMS as a commercial parastatal organization was a key recommendation from the NSCA in 2017.** The 2017 report found that the central medical stores needed greater governance and organizational flexibility to be successful in the operating context. Therefore, it was proposed to establish a parastatal entity. The MOH and key stakeholders—wholesalers, pharmacies, hospitals, and service delivery points—were interested in understanding how establishing this parastatal impacted the availability of key commodities across the entire supply chain. Additionally, the country had completed the transition to an electronic logistics management information system (eLMIS) at all service delivery points. Stakeholders wanted to understand how the system was performing and how effectively staff were utilizing the system.

This cycle of continuous improvement for Rwanda was cemented in 2013, when the newly established MOH Logistics Management Office (LMO) was tasked to implement the first Rwandan National Supply Chain Assessment. The LMO used the results of that assessment to create the first-ever supply chain strategic plan, which elaborated strategic development goals in procurement, quantification, performance management, and quality assurance. Rwanda’s steady improvement in supply chain maturity has been highlighted by the evidence and insights generated by the NSCA process through its multiple implementations.

“If we compare the 2017 and 2022 NSCA findings, there is a lot of progress made, but more is needed to reach where the country wants to be in the future in terms of the supply chain of health commodities. The 2022 assessment recommendations will be implemented by an urgent implementation plan, elaborated, and approved by all stakeholders. The plan will assign responsibilities to each player in the supply chain and ensure there is a clear coordination mechanism of its implementation as well as setting an annual review on how far we will be in implementing and using data of the NSCA report.”

— Dr. Corneille Ntihabose
Head of the Department of Clinical and Public Health Services at the Rwanda Ministry of Health



The NSCA is designed from the bottom up to inform strategy and action, not to simply “check boxes.”

Ultimately, data-use is a choice that requires users to trust the data. The MOH recognized that a report that was transparent, collaborative, and publicly accessible would have the greatest impact.

NSCA findings confirmed that the impact of this reform was mostly positive; RMS performed consistently in stock availability and last-mile delivery with an average on time delivery rate of 70 percent to hospitals and health centers in the six months preceding the assessment. Additionally, over a period of 182 days, health centres experienced a stockout of assessment tracer commodities for an average of 13 days, meaning that tracer commodity availability remained high at health centers during the period. RMS demonstrated success in securing competitive pricing for key health commodities, i.e. at or below the international reference price. Averaging across 15 different commodities, RMS was found to pay on average 90 percent of the international reference price, meaning their procurements are less expensive than the international standard. At the same time, RMS continued to have challenges in maintaining adequate stock on hand and managing functional storage capacity in its branch location warehouses with 17 percent of stock observations for tracer commodities within appropriate inventory min/max levels. The NSCA findings recommended that RMS Ltd. review inventory control and ordering processes to ensure stock availability and optimal storage. Additionally, data quality reviews in the NSCA revealed that eLMIS data quality still had significant room for improvement with less than half of service delivery points having stock on hand matching last registered balance in the eLMIS for assessment tracer commodities.

Following the dissemination of the NSCA findings in 2022, the MOH recommended that supply chain stakeholders work collectively to revisit and refine strategic priorities intended to improve waste management and pharmacovigilance capability across all last mile facilities, improve the quality and accuracy of eLMIS data by ensuring adequate human resources for the function both centrally



Photo Credit: GHSC-PSM

and at service delivery points, and uniformly implement policies and standard operating procedures at both regional and central levels.

Supply chain stakeholders assembled and reviewed the NSCA findings and created an action plan that addressed existing gaps and challenges. They went on to designate focal points, define expected outcomes, and establish timelines for mitigation activities.

GHSC-PSM consolidated the group's initiatives into an action plan and continued to support the MOH by coordinating the proposed follow-up activities. **The strategy arising from this action plan served as a catalyst in the development of Rwanda's National Pharmaceutical Sector Strategic Plan (NPSSP) (2024-2030) and Central Medical Store's strategic plans (such as the Rwanda Medical Supply Chain Strategic Plan Review 2021-2026)**, just as the findings of the 2017 NSCA fostered the development of Rwanda first NPSSP in 2018.

Improving the capabilities of the supply chain in areas identified by the NSCA contributes to raising the performance of the supply chain system in Rwanda, leading to improved health through enhanced access to quality, safe and effective medicines.

Are you interested in conducting an NSCA in your country?

You can find the NSCA toolkit here in [English](#), [French](#), and [Russian](#). Reach out to nsca@ghsc-psm.org or nsca@usaid.gov for more information.

