



Supervision visit conducted by Faratiana Michelle in Atsimo Andrefana region
Photo credit: Samy Rakotoniaina/MSH

SUPERVISION, PERFORMANCE ASSESSMENT, AND RECOGNITION STRATEGY (SPARS) APPROACH LEADS TO IMPROVED PERFORMANCE IN MALAGASY DISTRICT PHARMACEUTICAL WAREHOUSES

BACKGROUND


Madagascar's health commodity supply chain has faced several challenges. One such challenge is that the staff of *pharmacies de gros du district* (Pha-G-Dis), or district pharmaceutical warehouses, don't receive appropriate training and, as a result, do not adhere to the Madagascar Central Medical Store's (SALAMA) cyclical ordering and quarterly transportation schedule and do not accurately estimate the commodities needed. This is further complicated by late and incomplete reporting of stock status data due to human resource and logistics challenges and limited ability of the MOPH to oversee and evaluate the performance of Pha-G-Dis. These challenges impair the ability of the health system and the public sector supply chain to quantify supply needs for all districts (and for each district's health facilities), procure appropriate quantities of health commodities for the entire population, and coordinate commodity dispatches across the country, contributing to stock-outs of essential pharmaceuticals, impeding sustainable availability of health commodities, and ultimately affecting the quality of health care services.



MSH is an organization member of the consortium implementing the USAID IMPACT program led by PSI. MSH leads the public-sector interventions, working with the Government of Madagascar, to strengthen the public-sector supply chain's capacity to sustainably provide quality health products to the Malagasy people. MSH works closely with the directorates of the MOPH engaged in management of pharmaceuticals, such as the directorate of pharmacy (DPMLT), the regulatory authority (DAMM), and SALAMA.



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TECHNICAL

Strategic approach



SPARS is an indicator-based, multi-pronged intervention strategy that combines supervision, on-the-job training, and provision of tools and guidelines with structured performance reviews to identify and prioritize issues and encourage progress by rewarding performance improvements.

To address Madagascar's public sector supply chain challenges to improve pharmaceutical management practices, IMPACT adapted the MSH Supervision, Performance Assessment, and Recognition Strategy (SPARS) approach to the Madagascar context and implemented it in 78 Pha-G-Dis in the 14 USAID-supported regions. SPARS is an indicator-based, multi-pronged intervention strategy that combines supervision, on-the-job training, and provision of tools and guidelines with structured performance reviews to identify and prioritize issues and encourage progress by rewarding performance improvements. The best practices approach integrates different interventions to increase the likelihood of positive change.

SPARS was previously used in Uganda in 2010, where health facilities' scores improved on average by **22.3%** per visit, and **70%** during the first year¹. SPARS was found to be effective for building capacity and improving health commodity management in Uganda.

The SPARS approach not only develops the knowledge, skills, and practices of Pha-G-Dis staff, but also is important for using data for decision-making at all levels, which is essential for improved performance of the supply chain system. SPARS also aims to sustainably strengthen supply chain management by facilitating and enhancing a culture of high quality and high performance among Pha-G-Dis staff.

Implementation

Between March and July 2020, IMPACT adapted, tested, and finalized the SPARS evaluation tool. IMPACT and the MOPH compared the SPARS tool with the existing supervision checklist developed by the Directorate of Pharmacy (DPLMT) in 2017 and the project environmental monitoring and mitigation tools to reduce duplication and consolidate the tools, with the aim of avoiding confusion and streamlining the supervision and assessment process for supervisors. IMPACT trained supervisors from the regional and district health management teams to use the SPARS tool between July and October 2020 in 75 of the 78 district pharmacies (96%) throughout the 14 regions of IMPACT intervention. Data collected with the SPARS tool served as baseline assessments to plan future supervision visits and for the district pharmacy staff to develop improvement plans.

SPARS visits are carried out by regional or district health management teams with technical and logistical support from IMPACT staff. The supervisors apply the SPARS methodology and questionnaire during supportive supervision visits to the Pha-G-Dis.

The supervisor assesses the warehouse according to six categories: 1) inventory control system; 2) stock management and availability; 3) store management practices; 4) governance; 5) orders, distribution, and reporting; and 6) human resources. Pha-G-Dis are assigned a performance category based on their composite score on the SPARS scoring matrix: "performing" if they score 90% or higher, "average" if they score 76%-89%, and "weak" if they score 75% or less. The scoring grid completed by the supervisors is reviewed in the Pha-G-Dis with



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-

¹ Trap et al. Journal of Pharmaceutical Policy and Practice (2018) 11:15

the pharmacy staff, who then use the data to develop an action plan to strengthen the areas that were found to be weak. IMPACT aims to support the districts to reach 90% or higher of the composite score or to improve their composite SPARS scores by at least five points over the score obtained during the last supervision visit.

At this early stage of intervention of the SPARS approach, recognition for performance has focused on individual feedback and praise, as well as announcements in regional meetings comparing district results, highlighting and congratulating the high-performing districts, and disseminating lessons learned and best practices. In the coming year, the MOPH and IMPACT will award Best Service Provider certificates to the highest performing Pha-G-Districts for the previous year's performance; additional prizes such as printers, white coats, and other work-related articles will also be provided.

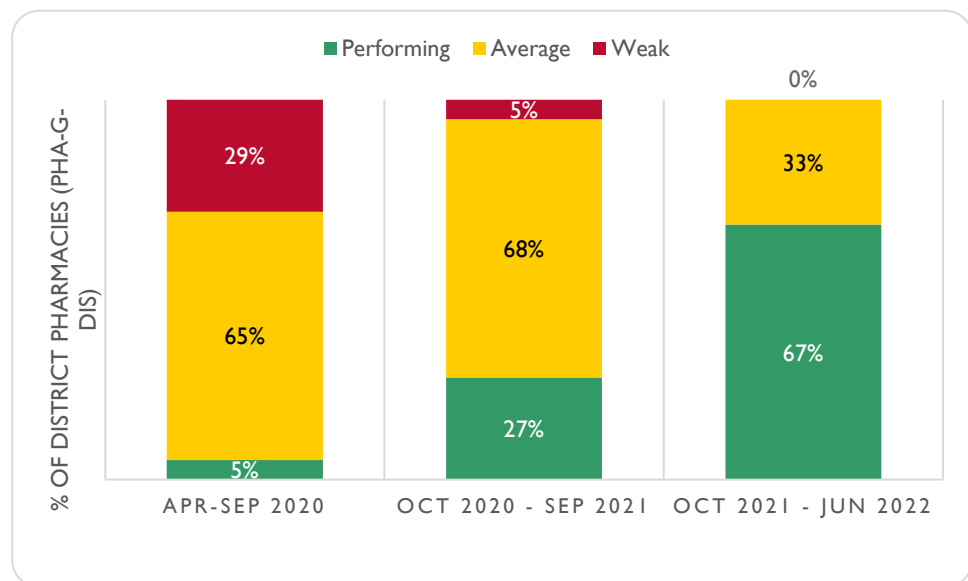


The proportion of Pha-G-Districts classified as performing increased from 5% (4 Pha-G-Districts) in April-September 2020 to 27% (21 Pha-G-Districts) in October 2020-September 2021 to 67% (51 Pha-G-Districts) in October 2021-June 2022, while the proportion of Pha-G-Districts classified as weak decreased from 29% (23 Pha-G-Districts) to 5% (4 Pha-G-Districts) to 0%.

Performance data

All 78 IMPACT-supported Pha-G-Districts received a SPARS baseline assessment in April-September 2020 and at least one follow-up assessment between October 2020 and September 2021; 76 of the 78 received at least one second follow-up assessment between October 2021 and June 2022. The proportion of Pha-G-Districts classified as performing increased from 5% (4 Pha-G-Districts) in April-September 2020 to 27% (21 Pha-G-Districts) in October 2020-September 2021 to 67% (51 Pha-G-Districts) in October 2021-June 2022, while the proportion of Pha-G-Districts classified as weak decreased from 29% (23 Pha-G-Districts) to 5% (4 Pha-G-Districts) to 0% (Figure 1). Forty-seven of the 78 Pha-G-Districts (60%) achieved a 5% or greater improvement in their SPARS composite score between the baseline assessment and the first follow up.

Figure 1. Pha-G-District performance (measured via SPARS score) improvement over time.



APPLICATION

In addition to reviewing the performance and building the capacity of Pha-G-Dis staff, IMPACT is also using the SPARS results to improve supply chain management at the district and regional levels. Between January and June 2022, all 14 regions and all 78 districts used SPARS data in higher-level planning and coordination. All 78 district procurement and stock management committees incorporated discussions on the implementation status of plans agreed upon during the SPARS assessments into their meetings. Supervisors have identified marked improvements in stock and inventory management during SPARS assessments, including that, as of March 2022, all 78 Pha-G-Dis systematically send physical inventory counts at the end of each month to the district- and regional-level committees responsible for managing and procuring commodities. At the regional level, the *Unités Techniques de Gestion Logistique*, or Technical Logistics Management Units, shared SPARS results to highlight progress and inform future action plans to improve stock availability at the district level.

Lessons Learned

Quarterly routine supervisions using the SPARS tool are ongoing as of September 2022. Over the course of implementing the SPARS approach, IMPACT has made some adaptations—for example, increasing the cutoff for the performing category from 80% to 90% so that the districts are stretched to attain their best levels of performance. In addition, specific medicine supervisors (which were used in Uganda for the SPARS approach) did not exist in Madagascar and IMPACT chose to implement the SPARS approach through the existing supervisory mechanism in Madagascar. The integration of a continuous quality improvement approach using the data generated by the SPARS tool to orient corrective actions made the supervision more effective and more motivating for both the supervisors and the supervisees.

During the COVID-19 pandemic, IMPACT altered the frequency of supervision visits to minimize travel. Initially, IMPACT planned to supervise each Pha-G-Dis four times per year, but this plan had to be changed to comply with COVID-19 prevention measures in the country. To ensure sustainability of the SPARS approach, IMPACT introduced virtual coaching and reduced in-person supervision visits based on Pha-G-Dis performance in previous SPARS assessments: “performing” Pha-G-Dis currently receive one visit per year, “average” Pha-G-Dis receive two visits per year, and “weak” pharmacies receive four visits per year. Thus, the Pha-G-Dis most in need of support still received regular SPARS visits, while those performing well were given the opportunity to become more independent.

Bringing the Pha-G-Dis teams together to share their best practices, see the results of other districts, and receive awards is a good way to reinforce recognition and encourage healthy competition. This will be implemented in the final year of the IMPACT project to further motivate the district teams to strive for excellence.

Over the two years of implementation of the SPARS approach in Madagascar, IMPACT’s focus has been on building supply chain management capacity across all levels of the health system. However, a Pha-G-Dis’ performance is a reflection of more than just its staff’s capacity. The SPARS score also reflects adherence to best practice storage conditions and standards in the Pha-G-Dis and strong performance requires equipment, materials, and tools such as shelves for the pharmacy, refrigerators and freezers to store cold chain products, and thermometers for monitoring temperature. As of June 2022, 55 of the 78 IMPACT-supported

Pha-G-Dis did not have sufficient shelving, 35 were in need of refrigerators, and 5 needed to replace their thermometers. IMPACT will use the recognition awards for high-performing Pha-G-Dis to improve some of these equipment gaps and also will advocate to other partners and donors supporting the health system to fulfill some of the larger needs such as refrigerators. IMPACT did not assess the Pha-G-Dis' equipment needs before implementing SPARS as the gaps in practices and knowledge were more pressing. In future applications or adaptations of the SPARS approach, IMPACT would recommend including a material needs assessment early in implementation and engaging stakeholders to mobilize resources and supply pharmacies with the necessary equipment to improve their storage conditions.

Sustainability

To ensure that the SPARS approach leads to long-term improvements in Pha-G-Dis performance, IMPACT will continue providing feedback to Pha-G-Dis staff and supporting them to develop and implement improvement plans based on the results of their SPARS assessments. At the regional level, IMPACT will continue disseminating SPARS results, best practices, and lessons learned to encourage ongoing learning and adapting of the approach. Finally, IMPACT has trained central- and regional-level health management teams to conduct SPARS assessments using the evaluation tool and to analyze and report SPARS results, creating a pool of trained supervisors who can continue implementing SPARS and coaching district- and facility-level staff after IMPACT's close.

Before the end of the project, IMPACT will also support the institutionalization of the SPARS approach in Madagascar. IMPACT is developing a toolkit on SPARS with the methodology description; a Microsoft Excel checklist; a web-based and mobile application version of the tool to quickly collect, report, and visualize SPARS assessment data within the District Health Information Software (DHIS2); and templates for the action plans and reports. These tools will facilitate data collection, entry, analysis, and reporting and ease scale-up of the SPARS approach. Additionally, in early 2022, IMPACT supported the MOPH to revise Madagascar's manual for stock management, integrating SPARS into the manual. The manual was validated and signed by the Minister of Health in March 2022 and its institutionalization is underway.

Recommendations & way forward

The SPARS methodology and tool are a useful way to measure Pha-G-Dis performance, track progress over time, and plan actions to improve performance. The approach can be used to effectively improve supply chain management at the district level, as demonstrated by the improvements over time in Pha-G-Dis SPARS scores. IMPACT will support the MOPH to document and roll out the approach nationwide.

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