

END-TO-END STOCK DATA VISIBILITY: A CRITICAL TOOL IN THE PREVENTION OF HIV/AIDS COMMODITY STOCKOUTS

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END-TO-END SUPPLY CHAIN DATA VISIBILITY, ANALYTICS AND USE.

These are crucial elements to inform in-country distribution and access to lifesaving HIV commodities. These data help avert shortages in treatment and testing at all levels of service delivery, and ultimately benefits patient care. GHSC-PSM regularly compiles central- and site-level stock data on HIV/AIDS commodities through the Procurement Planning and Monitoring Report for HIV (PPMR-HIV) tool. Availability of first- and second-line antiretrovirals (ARVs), rapid test kits (RTKs) and TB Preventive Treatment (TPT) products are visualized in the online dashboard called Warehouse ADVISER (AIDS Data Visibility, Evaluation and Reporting), helping to monitor and avert stockouts at all levels of the supply chain.

Thanks to this extensive repository of HIV/AIDS commodity data, program managers can rationalize the number of products procured and ensure patients are on optimal regimens.

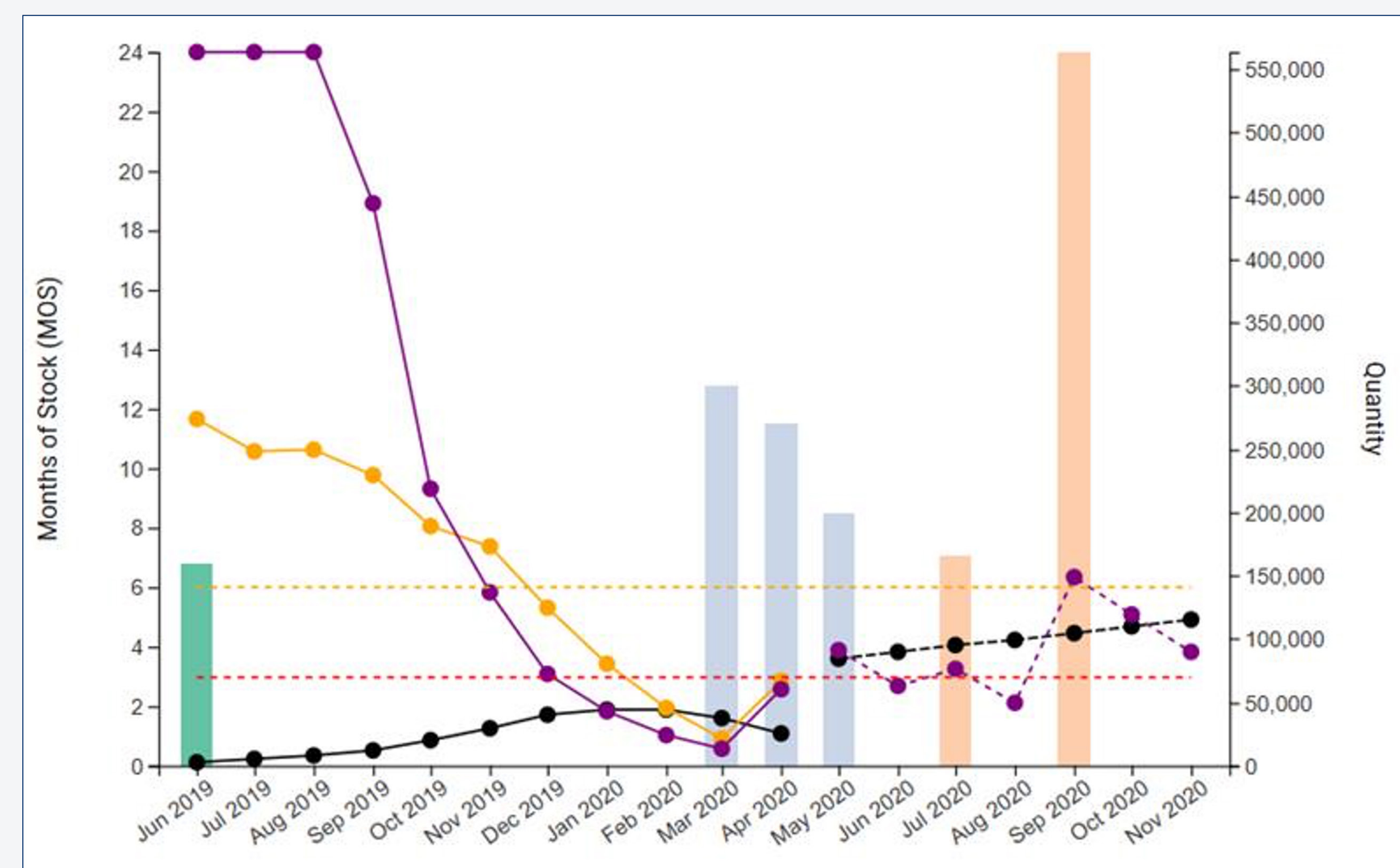
CRITICAL INSIGHTS INFORM THE SUPPLY CHAIN.

From December 2018 to January 2020, GHSC-PSM identified 115 instances of stockout risks in 18 countries through PPMR-HIV including:

- Funding gaps
- Informed drawdown of legacy commodities
- Expiries
- Late order or delivery by a donor
- Increased consumption due to rapid shift to multi-month dispensing (MMD)
- Absence of supply plan

Using GHSC-PSM's analysis, PEPFAR successfully avoided program interruption and commodity shortages. For example, in September 2019, Zimbabwe identified a shortage of Lamivudine/Zidovudine 150/300 mg. Using PPMR-HIV, GHSC-PSM pinpointed extra stock in Haiti, and transferred these medicines to Zimbabwe. In turn, Zimbabwe shortened its procurement timeline by 11 weeks and saved \$147,600 for 30,000 bottles and Haiti averted product expiry.

EXAMPLE OF PPMR-HIV DATA IN WAREHOUSE ADVISER DASHBOARD



Screenshot of Warehouse ADVISER Online Dashboard. It provides a visual overview of HIV/AIDS commodities for different countries to alert GHSC-PSM and donors about available stock-on-hand and expected delivery dates. Months-of-stock (purple dotted line) and stock-on-hand (yellow dotted line) decrease as the commodity is used but rise in April when new stock arrives. The blue and orange bars depict projected orders of the commodity from different donors, while the black dotted line shows average monthly consumption. The consumption trend, in turn, informs supply chain managers and clinical partners how much to order.

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Warehouse employee in Zimbabwe arranging HIV/AIDS commodities. Photo: GHSC-PSM/Tafadwa Ufumeli

DATA VISIBILITY LEADS TO SUPPLY CHAIN RESILIENCY. Better data led to increased resiliency and adaptability of country supply chains. Thanks to collaboration among Ministries of Health, donors and supply chain and clinical partners, all are better able to work together from a common dataset to:

- Ensure new regimens (e.g., tenofovir/lamivudine/ dolutegravir) and approaches (e.g., MMD scale up) are incorporated into countries' treatment guidelines and supply chain plans
- Track stockout risks or stockouts
- Make informed decisions and identify solutions to manage stockouts and expedite emergency shipments, and as such avoid treatment interruption.

CLINICAL IMPLICATIONS

- Regular and timely data sharing and analysis informs supply planning and prompt fixes to issues that arise.
- Streamlined data entry systems across each country combined with increased data sharing and communication among donors result in better stock management.
- Stronger data availability and quality from Service Delivery Points result in more accurate stock data all the way to the site level.