

Getting Medicines to Palestinian Refugees: A Simple Tool Links Data to Monitor Stock Levels for Pharmaceuticals

The United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) developed an easy-to-use Excel-based tool to integrate data systems and help monitor pharmaceutical stock levels across health centers.

BACKGROUND

The United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) has been the main comprehensive primary health care provider for Palestine refugees for some 70 years. With 144 health centers and more than 3,300 staff, the agency delivers over 8.5 million primary health care consultations per year. Ayoub Mousa, Medical Supply Chain Coordinator for UNRWA, monitors stock levels in health centers across the medical supply chain, serving 5.5 million Palestine refugees in Jordan, Syria, West Bank, Gaza, and Lebanon.

The humanitarian situation faced by UNRWA is unprecedented. Political destabilization in the region has led to a dense refugee presence, which has a strong impact on the health supply chain. Syria is in a protracted crisis with a weak infrastructure, which impacts local availability, importation, delivery, storage, and distribution of pharmaceuticals. While UNRWA can reach the last mile, shortages in electrical power to maintain an optimal cold chain remains a challenge, even for UN organizations. These conditions constrain the decentralized storage and, in many remote areas, stockouts of essential pharmaceuticals are inevitable. In Lebanon, for example, political turmoil has impacted the availability of pharmaceuticals locally to the extent that the commercial sector is running out of basic health products. In such situations, the pressure on the supply chain is enormous.

PRACTICE

The main challenge for UNRWA's supply chain is the limited availability of pharmaceuticals in local markets due to the COVID-19 pandemic, which has restricted international trade. With fewer local products, UNRWA is more likely to be faced with supply chains bottlenecks such as long lead times, lengthy import procedures, and local FDA approvals and other compliance issues. Procurement plans are often made eight months ahead of placing orders, to account for the lengthy lead times.



Ayoub Mousa, Medical Supply Chain Coordinator, UNRWA.

Location: Jordan, Syria, West Bank, Gaza, and Lebanon

Organization: UNRWA

Setting: Refugee services

Supply chain management practice area: LMIS

HR cadres using the tool:
Supply chain managers, field pharmacist officers, deputy field officer, head of pharmaceutical services

Overseeing UNRWA's decentralized pharmacies at 140 health centers, Mr. Mousa tracks the stock levels using electronic medical records (EMR) but the stock data needed to be linked and synced with the central warehouse, where stocks are monitored through an enterprise resource planning (ERP) tool. As an interim solution, Mr. Mousa created a simple Excel-based tool that acts as a data bridge to link health care information and health facilities while a comprehensive logistics management system is being developed as part of a full-scale digital transformation process that began in 2021.

The tool was created as an ad hoc solution to integrate data and create supply chain visibility. The Excel sheet includes information on stock levels extracted from EMR and ERP reports and entered into the Excel sheet. With the data entered into the sheet, a formula calculates the existing stock life. The Excel sheet also links the pipeline to the existing stock level, using the expected date of delivery and quantities ordered. This provides the total stock life, including stock on hand and the pipeline. The tool allows the agency to avoid wastage and better plan for the next procurement cycle.

The tool was developed with ease of use in mind. Using a three-color scheme, it gives supply chain managers an easy overview of stock levels for all products. The tool displays plans for a year at a time, with overview rows and columns that describe the percentage of time at risk of being out of stock, and how often pharmaceuticals were running low. Built over four tabs, the sheet is simple to navigate and does not require much computing power or bandwidth. Each pharmaceutical product is identifiable through the ERP code and product description listing the name, dosage, and form of delivery.

While the tool was designed for UNRWA's specific supply chain processes, a similar approach might be useful for other implementing partners looking for simple solutions to manage supply chain data.

Learn more about UNRWA's use of the Excel-based tool in this video



PRACTICE AREA ESSENTIALS

Logistics Management Information Systems

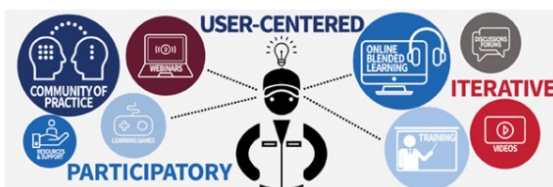
Effective supply chains depend on end-to-end visibility of the right data of the right quality at the right time, in the hands of the right people in the right place, to make the right decision and take the right action.

The supply chain manager needs to know:

- The essential data needed to manage a supply chain
- The use of LMIS data
- The tools and processes that enable end-to-end visibility of data
- Considerations for applying technology to improve LMIS

[Learn more about LMIS](#)
[Access the full version of the Supply Chain Manager's Handbook](#)

Building Capacity to Improve Pharmaceutical and Medical Commodity Management in Humanitarian and Disaster Settings Project



The Building Capacity to Improve Pharmaceutical and Medical Commodity Management in Humanitarian and Disaster Settings Project improves the capacity of people who manage health supply chains in humanitarian settings. It helps staff from international organizations and local NGOs to manage pharmaceutical and medical commodities by equipping them with training, guidance, resources, and follow-up support. JSI Research & Training Institute, Inc. manages the project, which is funded by USAID's Bureau for Humanitarian Assistance.