Deployment of a traceability system leveraging GS1 Standards: Dromayor-Pfizer Case.

The Method:
GS1 Standards enable online traceability systems that can be used to manage and verify serial numbers.

Dromayor uses CABASnet, GS1 Colombia’s GDSN-certified data pool, to synchronize product data, and integrate its enterprise resource planning (ERP) system with GS1 Colombia’s traceability system, Traceability System Online, to manage serial numbers.

The pilot involved Pfizer’s distribution center for consumer products, Dromayor’s distribution center, and a Dromayor pharmacy in Bogotá. It focused on nine over-the-counter pharmaceutical products with high rotation.

During the pilot, those nine products were marked with a GS1 DataMatrix including the GTIN, lot number, expiration date and serial number at Dromayor’s distribution center. Product information was synchronized through CABASnet. The serial number for each package is linked to the GTIN, lot number and other product data in its ERP system and the CABASnet Online Traceability System.

When shipping the products to Dromayor, Pfizer uploaded the Dispatch Advice. When Dromayor received the shipments, the labels with the DataMatrix barcodes and the right information were printed and put on the package.

Dromayor reported back to the CABASnet Online Traceability System to confirm receipt and to print the receipt document. During the picking process, the GS1 DataMatrix barcode was automatically read and the CABASnet Online Traceability System updated.

Finally, the drug store also scanned the GS1 DataMatrix barcode and confirmed receipt to the CABASnet Online Traceability System.

The CABASnet Online Traceability System provides visibility throughout the whole process. This is of particular importance for the technical receipt document, which is a regulatory requirement.

This report shows information about order numbers, invoice and shipment dates, including products shipped, their lots and expiration dates.

Currently, the process to track pharmaceutical products in Colombia is completely manual. Items are shipped with a Global Trade Item Number (GTIN)-13, a GS1 Standard, encoded in a barcode. Additional information on the manufacturing date, batch and serial numbers are printed on the package, often in small font size. Once the product is shipped to other nodes in the supply chain, it is the only information available to validate its authenticity and retrieve the additional information.

There is no database to validate the information. This makes inspection and traceability very difficult, or even impossible.

In October 2011, Pfizer and Dromayor, a Columbian pharmaceutical wholesaler, started to work together to set up a pilot project to validate the impact of a traceability system based on GS1 Standards, including: the Global Trade Item Number (GTIN), GS1 DataMatrix, and GS1 Global Data Synchronisation Network (GDSN). A few years ago, Colombia passed a law to require drug traceability throughout the supply chain. Since this law, supply chain stakeholders, have succeeded in reaching consensus on how to implement this traceability system.

Several stakeholders, in conjunction with the Health and Social Security Working Group from GS1 Colombia, have identified products, processes, automatic data capture, and the use of electronic commerce to generate traceability processes.

CONCLUSIONS:

1. Serialization helps to verify authenticity of pharmaceutical products. GS1 Standards enable online traceability systems that can be used to manage and verify serial numbers, so that implementing serialization does not require major developments for a wholesaler’s ERP.

2. This online system allows to effectively manage technical receipt documents required in Colombia and provides easy access to historical records through a cloud computing system.

3. Basic infrastructure is required to achieve traceability, including internet access and 2D barcode scanners.

4. Ideally, serial numbers are encoded in the barcode by the pharmaceutical supplier at the point of production using global, industry-wide standards. This reduces the risk of errors later in the supply chain and allows for efficient receiving and shipping processes.

5. If the wholesaler has to label the package afterwards with the serial numbers, this adds cost and risk. Furthermore, the wholesaler needs to have an area in the warehouse where they can label the packages.

"It is very important to identify and mark the product from the source, under GS1 global standards"

JORGE ENRIQUE GONZÁLEZ
National Director of IT and Logistics at Dromayor

THE RESULTS:
A traceability system through a standard identification and communication system involves

- Unique identification for the medication.
- A means to represent this identification that ensures security and data integrity, authenticity of products, and the possibility to have agile processes through automatic data capture.
- An online information system to register every time an event occurs regarding products and supplies: what was sent, received or sold, dispensed or administered, in what quantities, where the event occurred, what was the player responsible and the related transport information.
- The appropriate technology to capture the event information automatically making it available online and with the required quality when it goes to bulk operations.

The CABASnet Online Traceability System provides visibility throughout the whole process. This is of particular importance for the technical receipt document, which is a regulatory requirement.

Visibility throughout the whole process, and actors.

Labeling time per item: nine seconds

Label cost per item: US$0.05

Technical receipt documents

Technical Receipt Document

MORE INFO
(Scand the QR Code)