

Jordan

Implementing GS1 standards to fulfill future national traceability program requirements

Challenge

The absence of a common healthcare electronic database system which enables information to be shared across supply chains, and of a national traceability programme, means efficiency and safety is sometimes affected in the Jordanian healthcare sector.

Approach

Since 2013, the Jordan Food and Drug Administration (JFDA) has been working to develop guidance on traceability and information sharing aligned to the global framework and the use of GS1 standards. By distributing this to all those involved in the local pharmaceutical supply chain, the hope is to increase compliance with established best practice and ultimately create a national traceability programme.



Introduction

GS1 Jordan provides services to more than 3,000 Jordanian companies. Healthcare is one of the most important sectors served, incorporating pharmaceutical companies and factories; drug stores; and organisations manufacturing medical equipment, devices and supplies.

The Jordan Food and Drug Administration (JFDA) is working with local healthcare stakeholders on the definition and on the implementation of a traceability programme.

At the local level, the programme aims to protect society by tracking medicines from manufacture to consumer, increasing the ability to recall faulty products and ensuring safety.

TQ Pharma is a relatively new pharmaceutical company, with a primary plant in Jordan. It has 65 products in its portfolio covering most therapeutic groups.

Forging relationships

As part of the development of the national tracking programme, GS1 Jordan has worked with partners to encourage the adoption of the GS1 two-dimensional barcode DataMatrix in the pharmaceutical sector. Instructions on this were agreed by a working group including the Jordan Food and Drug Authority, the Food and Drug General Authority, GS1 Jordan and many other bodies such as the Pharmacists Syndicate, the Federation of Pharmaceutical Manufacturers and Warehouses in Jordan, the General Supplies Department, and representatives of factories and companies in the pharmaceutical sector.

One of the companies working to meet the guidance is TQ Pharma. By this firm and others in Jordan using GS1 barcodes, it is hoped that all those in the supply chain will easily be able to review information on drugs – including patients.

TQ now uses GS1 standards for identifying and barcoding pharmaceutical products and continues to work to comply with legislative requirements. It uses GS1 identification keys to identify products and locations by GTIN and GLN. It also uses GS1 DataMatrix barcodes to capture data connected to all of its produced pharmaceutical products. All its production lines are equipped with 2D barcode printers.

It took around 18-24 months to introduce full compliance with standards across a packing line. There were a few separate challenges:

- Ensuring cross-site coordination for serial generation for similar product line.
- Integrating with enterprise systems.
- Optimising of existing technologies/machineries.
- Dealing with the impact of the coronavirus pandemic, including employee absences due to sickness or childcare; clients not paying their bills; reduced logistics services; reduced certification services; reduced investment.

Forging relationships

The impact of mandating the use of the GS1 DataMatrix barcode across the Jordanian pharmaceutical sector has been assessed to better understand how a national pharmaceutical traceability programme might be implemented. This has included:

- Meetings and workshops with the sector and representatives of pharmaceutical companies, factories and drug stores
- Surveys circulated through e-mail, text messages and direct communication with customers and workers in pharmaceutical companies and factories
- Direct training



The aim is to:

- Develop the national programme to track all registered human medicines manufactured inside the Hashemite Kingdom of Jordan or imported from abroad.
- Require pharmacies and hospitals to have access to computers, the internet, and an approved two-dimensional barcode reader. Link the pharmacy or hospital with the legislative and regulatory authorities supervising the tracking programme at the national level.
- Develop and update the systems used in the government procurement sector in line with what is being recommended to the pharmaceutical and healthcare sector
- Involve the private sector in establishing and implementing the national tracking programme

The companies in the sector have unanimously agreed that GS1 barcodes should be used on manufactured, registered and sold medicines in the local Jordanian market. It is taking some time to implement fully, but all are committed to doing so. The obstacles along the way for the industry may include:

- The local commercial market is not ready to read the barcode according to the instructions issued
- Changing work mechanisms in factories and across production lines
- Investment in purchasing equipment, printing mechanisms, databases for this type of barcode, and devices for validating barcode printing and checking its quality
- Integration with local systems
- Optimum use of the technologies and/or mechanisms invested in





- Challenges related to selling medicines to the government procurement department, which is not yet ready to receive products bearing two-dimensional barcodes. This has meant that, for now, there either have to be two barcodes on such products or dispensation to use a one-dimensional barcode.

Conclusion

Ultimately it is for JFDA to determine exactly how the traceability programme should be implemented and will work. But however it ultimately does, the programme will help develop the healthcare sector in Jordan and ensure it is safe and efficient.



About the author



Dr Farouq Murad
General Director, TQ Pharma

Farouq Murad is a doctor specialised in paediatric surgery. His specialisation has generated a passion for establishing and managing a pharmaceutical company that selects from drug groups the necessary items in the local and foreign pharmaceutical market. He is the chairman of the board of directors, general manager and the main founding partner of TQ Pharma Industries which was launched in 2006.

Local coordination



Areej Rawashdeh
Industry Engagement Supervisor, GS1 Jordan

Areej is a consulting professional with a BSc in the engineering/industrial management field and a demonstrated history of working in the information technology and services industry. For the past four years she has been a GS1 healthcare leadership team member, representing the Middle East, Mediterranean, Africa (MEMA) region but working with colleagues across the globe. She is GS1 advisor in the fields of healthcare, traceability and other applied GS1 engagement projects. She offers technical support and consultations on traceability application in different sectors, and specialised technical support and consultations in health care sector.



Mai Ali
Registration and Customer Service Senior Supervisor/Technical Department, GS1 Jordan

Mai holds a BSc in information technology & computing and provides technical support and consulting services to help companies comply with legislative requirements on exporting to foreign markets. Mai provides technical support to the healthcare sector, running workshops for pharmacies, drug stores and medical device manufacturers. She helped prepare the study for the implementation of the traceability project with the JFDA.

About the organisation



TQ Pharma is looking to create value in all dimensions of healthcare to serve patients, medical professionals and the communities in which it operates. Providing optimal affordable medication covering patients' needs and requirements, and setting up new levels of quality in products, services and relationships with all stakeholders. TQ Pharma is located in the newly established industrial city in Mowaqqar (20 km south of Amman). This area is expected to attract investment, including through private sector implementation of huge industrial projects in the region.

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