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MINISTRY OF PUBLIC HEALTH

Track & Trace Solution for Pharmaceuticals using 2D barcode

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11 December 2017

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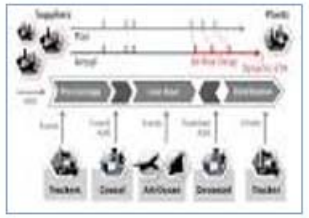
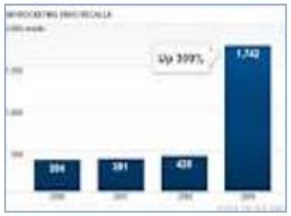
Drivers for Traceability



Supply Chain Visibility

Product Protection



Recall Improvement

Returns, Shipment accuracy and efficiency

Reimbursement

- ✓ Traceability across the supply chain
- ✓ Visibility and Protection from the point of manufacture to sale to the consumer.
- ✓ Patient Safety
- ✓ Reducing counterfeited and illegal drugs
- ✓ Fast recalls from the market
- ✓ Fast Reimbursement and fraud control at the third party payers

Functionalities of the System

- ✓ Product unique identification: GS1 2D Data Matrix barcode
- ✓ Product verification to ensure quality and reduce errors
- ✓ Track forward the movement of a product through specified stage(s) of the supply chain and trace backward its history
- ✓ Capture data at each point in the pharmaceutical supply chain and updating in real time the MoPH Database.
- ✓ Fast recall of a batch of pharmaceuticals from the Lebanese market and notifying all the concerned parties

Why GS1?

1 million over 1 million companies worldwide use GS1 standards

6 billion Barcodes scanned more than 6 billion times per day globally

A GS1 DataMatrix Bar Code symbol is a two-dimensional (2D) matrix barcode, consisting of black and white "cells" or modules, that can be arranged in a square or rectangular matrix.

- ✓ GS1 DataMatrix is the preferred 2D matrix bar code symbology that efficiently meets all of the needs of the pharmaceutical industry

Exemple:

GTIN: (01) 0625123456001 1
Expiry: (17)010115
Batch/Lot: (10) ABC234

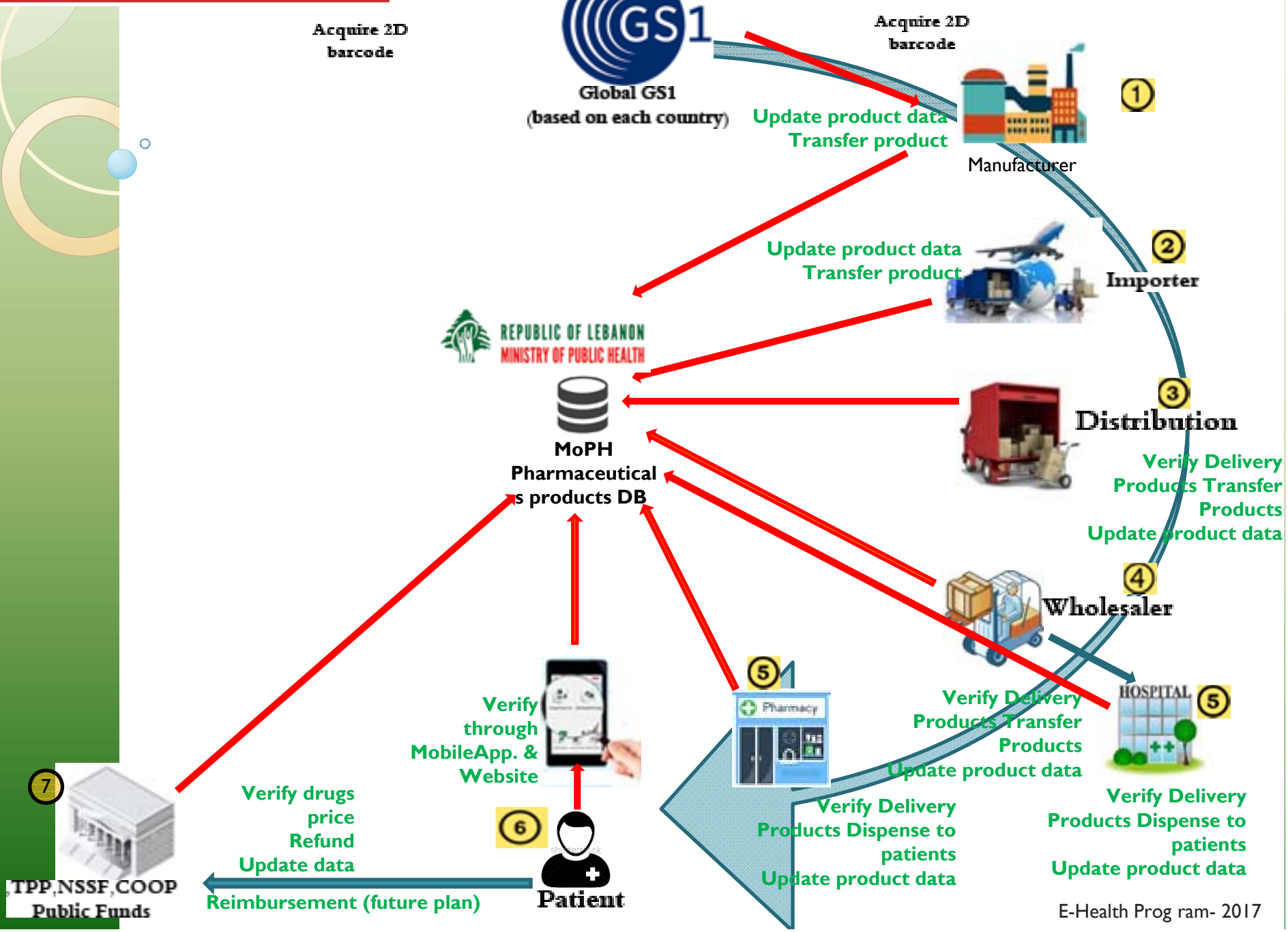
- ✓ 2-D Data Matrix can hold more data and is smaller in size than linear barcodes
- ✓ It is a highly secured type used by Manufacturers to protect their brands internationally

Barcode Structure

AI Description	GS1 Index AI (# Digits)	# Digits	Total # Digits
GTIN (from the country of origin)	1	2	14	16
Batch or Lot #	10	2	12	14
Expiry Date	17	2	6 (YYMMDD)	8
Total		6	32	**38**

GTIN: Global Trade Item Number
AI: Application Identifier

Solution workflow



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System requirements

1. *Web enabled application (real-time):*
   - Personal computer
   - Internet connection
   - 2D Barcode reader

2. *Possibility* of Synchronization (file upload)

3. *Possibility of Integration Thru APIs*

✓High level Security
✓Privacy and Protection of data

New Regulations available on the Website

www.moph.gov.lb

- Barcode implementation decision
- Barcode Implementation Timeline decision
- GTIN request
- Drugs Registration and Variations Forms update.
- Guidelines for implementing 2D barcode

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متطلبات المشروع

- ابتداءً من ٢٠١٩/١/١ يطلب من جميع المؤسسات الصيدلانية ومصانع الأدوية التي تنوي **تصنيع** او **استيراد** أدوية التأكد من اعتماد الباركود الثنائي الأبعاد (2D Matrix Barcode) وفقا لمعايير منظمة الترميز العالمية GS1

- يطبع المصنّع على العبوة الخارجية للدواء الباركود الثنائي الأبعاد 2D Matrix Barcode

- يستثنى من ذلك العيّنات المجانية والأمصال والحقن التي ليس لديها عبوة خارجية واللقاحات والأدوية المطلوبة للإستعمال الشخصي والأدوية المشمولة بالقانون رقم ٢٧٤ الصادر بتاريخ ٢٠١٤/٤/١٥ لا سيما الفقرة الثانية منه.

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Pilot Phase

- Starting January 2018 till end of 2018
  - Training for local manufacturers, importers, distributors, wholesalers and pharmacies (community & Hospitals)
  - System implementation

- Pilot members:
  - Manufacturers
  - Importers
  - Wholesalers/Distributers
  - Pharmacies (website announcement)
  - Hospitals

- Starting 2019 all pharmaceutical companies should be connected to the system

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Pilot Members

Type	Name
Importer	Droguerie de l'union
Importer	R.G.Abou Adal & Co
Importer	Mersaco
Importer	Omnipharma
Importer	Pharmamed (Hanan Akram Saab & Co) SAL
Importer	Sadco – Sami Dandan & Co S.A.R.L
Foreign manufacturer	Roche
Foreign manufacturer	Eli Lilly
Foreign manufacturer	Abbvie
Foreign manufacturer	MSD
Foreign manufacturer	NovoNordisk
Local manufacturer	Algorithm
Pharmacy	Sili (Jdeideh)
Pharmacy	La Marina (Dbayeh)
Pharmacy	Layal (Aley)
Pharmacy	Anipharm (Damit, Chouf)
Pharmacy	Raja (Chiah)
Pharmacy	Meridien (Baouchrieh)
Pharmacy	Waked (Zouk Mosbeh)
Pharmacy	Ratco (Al Ayroun)
Pharmacy	Diab(Haret hreik)
Pharmacy	Jamal (Nakkache)
Hospital	Haroun Hospital
Hospital	Mount Lebanon Hospital

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2D Products in the Pilot Phase

- Roche
- Abbvie
- Merck
- NovoNordisk
- Braun Pharma
- APL Swift Services (Malta) Limited
- Therabel Industries SAS
- Leurquin Mediolanum

- Aguettant, France
- Hospira (Acquired by Pfizer)
- SM Farmaceutici SRL, Italy
- PSI, KSA
- Algorithm

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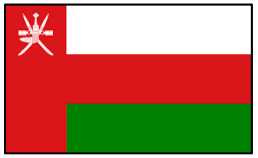
Situation in the MENA region

Lebanon
barcoding: Jan 2019
(Pilot in 2018)

Jordan
1D to 2D: end June 2018
barcoding: July 2018
serialisation: 2020



Oman
purchasing requirements
barcoding: end of 2017
serialisation: end of 2018
reporting: Apr. 2017

Qatar
purchasing requirements
barcoding: Jan. 2018

Saudi-Arabia
barcoding: March 2015
serialisation: March 2017
reporting: on-going

UAE - DHA
purchasing requirements
barcoding: Jan. 2017
reporting: Jan. 2017

Bahrain
under dev.
serialisation: end March 2019 (tbc)
reporting: end April 2018 (tbc)

Egypt
serialisation: June 2018
reporting: under dev.

For more info:

www.moph.gov.lb

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