



Mr. Sotiris Tsiafos – Tsiaras, Military Pharmacist, OR Traceability Project Manager at 401 Athens General Army Hospital, Greek Army

October 18, 2018



Welcome and thank you for attending!



- Welcome to our GS1 Healthcare October 2018 webinar.
Thank you to our guest speaker **Mr Sotiris Tsiafos-Tsiaras, Military Pharmacist, OR Traceability Project Manager at 401 Athens General Army Hospital, Greek Army**
- Some housekeeping for today:
 - All attendees will be on mute
 - If you have questions during the presentation, please type them into the questions area and these will be monitored then answered at the end of the call
- After the webinar:
 - Within a week, the recording will be posted to: http://www.gs1.org/healthcare/hpac_webinars
 - All previous webinars are also posted to this location, so please feel free to use this resource and share the link

GS1 Healthcare Global and the Healthcare Webinars



Focus is on thought leaders and adopters of GS1 Healthcare Standards from the global clinical provider environment. Their final goal is to improve patient safety, cost efficiency and staff productivity through implementation of GS1 standards.

A forum for sharing and discussion

Identification of projects and case studies

A source of expertise and advice

- About the practical realities of implementation of GS1 Standards in the care giving environment in regards to the impact on clinical care and patient interaction
- That support the adoption of GS1 Standards in healthcare providers and retail pharmacies
- For publication, presentation and sharing
- To those involved in GS1 standards development, the wider Healthcare stakeholder community and senior executives/decision-makers to gain their buy-in and support for implementation of GS1 Standards

Some specific GS1 Healthcare Activities



Webinars

- Monthly webinars open to all stakeholders interested in learning about GS1 standards implementation in the care giving environment.
- http://www.gs1.org/healthcare/hpac_webinars

Awards

- Twice per year
- Provider Best Case Study Award
- Provider Recognition Award
- The prize is travel / accommodation to attend the next GS1 Healthcare conference
- <http://www.gs1.org/healthcare/hpac>

GS1 Healthcare also holds two global conferences per year. The next conference will be in Bangkok, Thailand from October 30 – November 1st, 2018.

We expect significant Healthcare Provider participation on the agenda.

Presenting today



Sotiris Tsiafos-Tsiaras

Military Pharmacist,
Pharm. BSc, Logistics MSc

OR Traceability Project Manager



401 Athens General
Military Hospital

401 Athens General Military Hospital



Our Hospital: Facts & Data



- Largest Military Hospital in Greece
- NATO Role 4 Hospital
- 540 beds, up to 1075
- 11 Operating Rooms
- Cardiac Catheterization & Vascular Embolism Laboratory
- Cardiac surgery dept.
- In 2017:
 - ~ 15.700 inpatients, 220.000 outpatients
 - More than 4.000 surg. operations
 - ~ 7.000.000 € annual spend on medical devices



Decision to use GS1 Standards



- Need to:
 - Improve Operating Room supply chain operations
 - Enhance patient safety in the OR

Greek Army's Medical Supplies Centre is using GS1 standards in warehouse operations since 2015 with very good results !



Decision to use GS1 Standards



"How GS1 standards will improve hospital's operations ?"

Proof of Concept: **A pilot**

Where ? **Operating Room**

What ? **Expensive items – stock management**
High-risk medical devices, implants

How ? Using **AIDC technologies** and **manufacturer's barcodes**

A Great Challenge !



- Nurses/Staff knew nothing about barcodes
- Suppliers' limited knowledge of GS1 standards
- Barcode scanning not implemented in hospital's clinical software
- Resistance to change (?)



Initial Assessment - Findings



- Proprietary hospital-only items coding scheme.
- **No GTINs** stored in the system
- **Manual** registering of items (Excel item Catalogues)
- **No LOT/BATCH** or **Serial** tracking (**patient safety!**)
- No detailed stock visibility – **losses due to expiration**



Error-prone, time-consuming processes !

Valuable time lost

Traceability ???



Inaccurate stock data

Expired items - losses

Initial Assessment - Findings



Medical Devices used in the OR:

>90% barcoded

85% GS1 (**GS1-128, GS1 Datamatrix**)

5% HIBCC

2% other

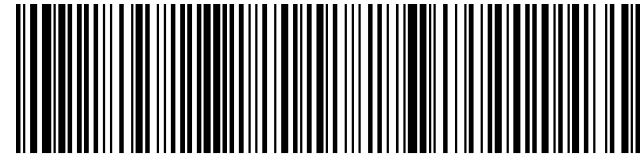
Application Identifiers:

(01) GTIN

(17) EXP

(10) LOT

(21) SERIAL



(01) 0 9501101 53000 3 (17) 140704 (10) AB-123



(01)07350053850286(17)150508(10)5487265



Early Stages

DEFINE SCOPE - TARGET

- Which items?
- How many ORs?
- Desired outcomes

INFORM STAKEHOLDERS

- Form a project workgroup
- Explain objectives
- Contact suppliers

EDUCATE PEOPLE

- GS1 Basics
- Barcode benefits
- Hands-on training

BUILD A DEMO (optional)

- “Quick & dirty”
- Show benefits
- Get feedback
- Gain support

Implementation Strategy



Implementation

DECIDE & DESIGN CHANGES

- Systems
- Procedures
- KPIs

APPLY CHANGES

- Continuous monitoring
- Feedback
- Training
- Support

EVALUATE RESULTS

- Measure KPIs
- Operational efficiency
- Patient safety

Planning for the future

FORM A CULTURE

- Everyday job
- Clear benefits
- User friendliness

NEXT STEPS

- More ORs
- Other Depts
- OR Safe Labeling System



SELECTED ITEMS

- **Cost & Volume**
 - High cost medical devices
 - High turnover items (e.g. surg. Sutures)
- **Risk & patient safety**
 - Implants
 - Intra-Ocular Lens

SELECTED BARCODES

- GS1 barcodes:
 - **EAN, GS1-128, Datamatrix**
- No HIBCC
- No other barcodes

Scanning at the "Point Of Sale"



WHERE TO START?

- Start **small**
- Be **simple**
 - One operating room
 - Few items
 - Basic training

A “quick” **Demo** first:

- **Cataract surgeries**
 - Few items used per patient
 - “Fast” procedure (20-25 min.)
 - Need for speed
 - Need for tracking IOL serials

Implementation



NEXT STAGE

- ✓ 3 more ORs (General and neuro- surgery)
- ✓ Anesthesia & Recovery Dept.
- ✓ Cardiac Catheterization Lab.
- ✓ Interventional Radiology Dept.



Implementation



Main types of barcodes used:

GS1-128 and GS1 Datamatrix®



GTIN

Expiry Date

Lot Number

Serial Number



GTIN

(01)07612345678900(17)100503

Expiry Date

(10)AC3453G3

Lot Number

ALWAYS SCAN

capturing crucial
item data:

- **GTIN**
- **LOT/BATCH**
- **(SERIAL)**
- **EXP DATE**

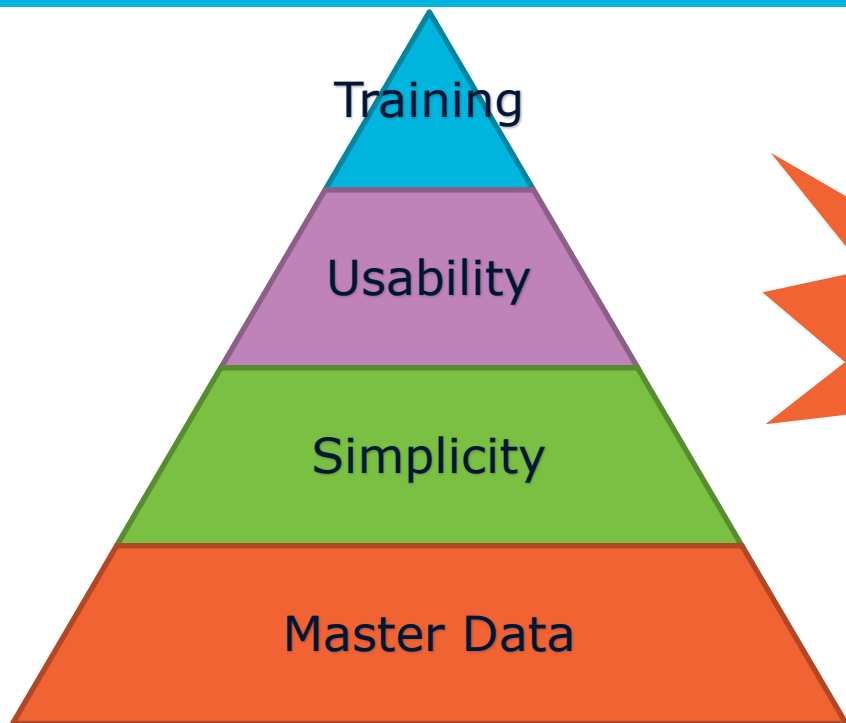
Implementation



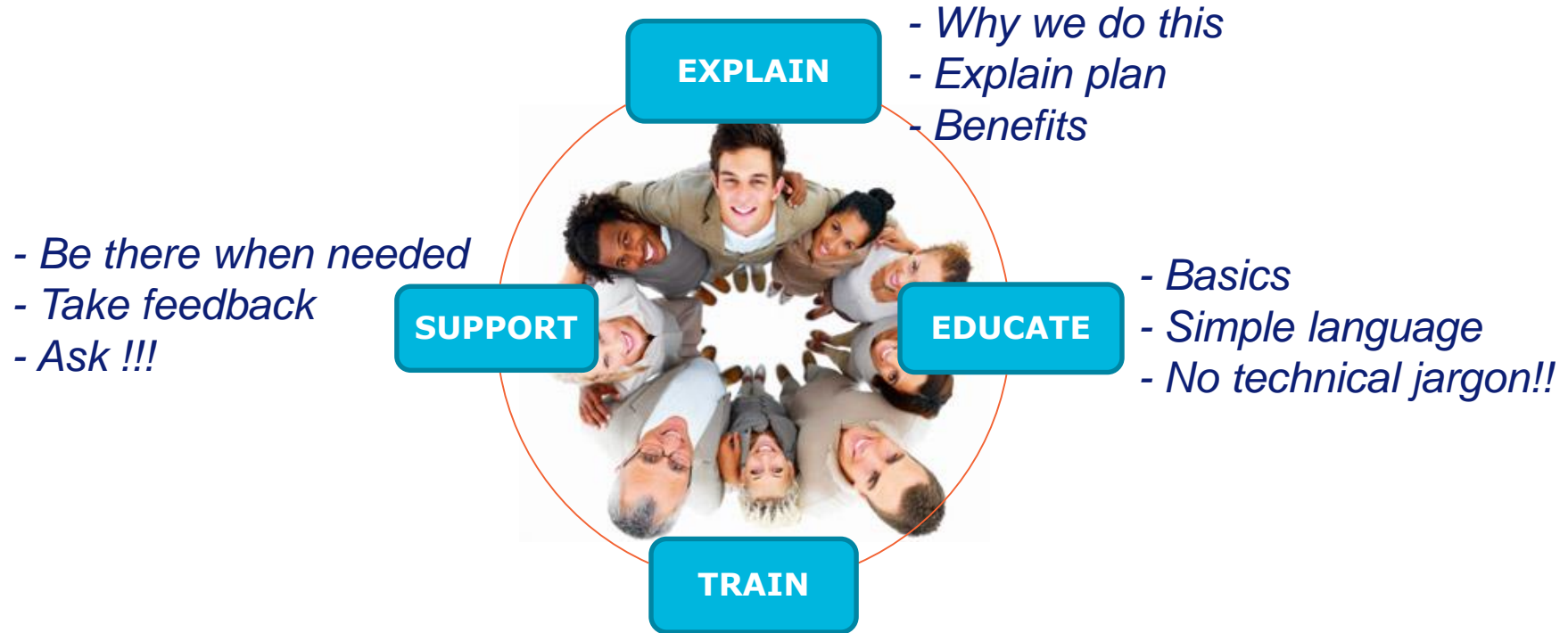
Which barcode should I scan?



Key Elements



Personnel Engagement



Procurement – Suppliers engagement



- Suppliers engaged **at the very beginning**
 - Explained project plan and target
 - Asked for item catalogues
 - Shared info and case studies – benefits!
 - Directed to local GS1 MO





Procurement is our “Right Hand”

- New tender/contract terms (coding - labeling)
- Advice on National & European legislation
- Contact suppliers
- Update e-procurement platform





ISSUES

- No GS1 AI decoding
- No uniform barcodes – various AIs
- “Item of supply” vs “Item of trade”



SOLUTIONS

- Own software, in-house development
 - GS1 only barcodes
 - **At least** GTIN (01) LOT/BATCH (10) SERIAL (21) EXP DATE (17) decoding capabilities **(BUT NOT ENOUGH !)**
- GS1 General Specifications as a guide
- “One-to-many” relationship between hospital’s codes - GTINs



&

Design Principles





focus on the user

Engagement of the IT department is crucial, but...
don't let them have the last word.

Outcomes - Benefits



- **Accurate data**

Patient safety !

- What was used on which patient

- Exp dates !

- Implants tracking

- Stock accuracy – visibility

Efficiency !

- Better forecasting

- Fewer losses

ΑΝΑΦΟΡΑ ΚΙΝΗΣΗΣ (ΑΝΑ LOT/SERIAL)

Παρασκευή, 12 Οκτωβρίου 2018

ΕΙΔΟΣ ΚΙΝΗΣΗΣ: ΑΝΑΛΩΣΗ ΣΕ ΑΣΘΕΝΗ

ΕΠΩΝΥΜΙΑ:

ΑΡΙΘΜΟΣ ΠΡΟ-ΠΑΡΑΓΕΛΙΑΣ:

ΠΡΟΕΛΕΥΣΗ:

ΣΥΜΒΑΣΗ:

ΕΙΔΟΣ ΠΑΡΑΣΤΑΤΙΚΟΥ: ΔΕΛΤΙΟ ΔΙΑΘΕΣΗΣ ΣΕ ΑΣΘΕΝΗ

ΑΡΙΘΜΟΣ ΠΑΡΑΣΤΑΤΙΚΟΥ: 569

ΗΜΕΡ/ΝΙΑ ΠΑΡΑΣΤΑΤΙΚΟΥ: 3/10/2018

☐ ΠΑΡΑΚΑΤΑΘΗΚΗ

| GTIN | ΠΕΡΙΓΡΑΦΗ ΕΙΔΟΥΣ | ΜΜ | ΠΑΡΤΙΔΑ | SERIAL No | ΛΗΞΗ | ΤΕΜ |
|----------------|--|-----|------------|------------|------------|-----|
| 00613994945631 | ΗΛΕΚΤΡΟΔΙΟ ΕΝΕΡΓ/ΚΗΣ ΠΡΟΣ ΧΑΜ. ΟΔΟΥ ΒΙΔΩΤΟ Ref No: 407652 | TEM | | BBL110081G | 12/10/2018 | -1 |
| 00643169708327 | ΗΛΕΚΤΡΟΔΙΟ ΕΝΕΡΓΗΤΙΚΗΣ ΠΡΟΣΦΥΣΗΣ Ref No: 407658 | TEM | | BBL125675G | 7/3/2019 | -1 |
| 00643169723986 | ENSURA DR MRI SURESCAN EN1DR01 Ref No: EN1DR01 | TEM | PZW057542G | | | -1 |
| 00681490143011 | ΥΠΟΚΛΕΙΔΙΟΣ ΕΙΣΑΓΩΓΕΑΣ Ref No: 6207-S1 | TEM | W4084730 | | 20/12/2019 | -1 |
| 00681490143349 | ΥΠΟΚΛΕΙΔΙΟΣ ΕΙΣΑΓΩΓΕΑΣ Ref No: 6209-S1 | TEM | W3983733 | | 23/10/2019 | -1 |
| 05414734028295 | ΟΔΗΓΟ ΣΥΡΜΑ ΣΤΕΦΑΝΙΟΓΡΑΦΙΑΣ, ΥΔΡΟΦΙΛΟ, 150/035 ' Ref No: 408005 | TEM | 9915797 | | 31/3/2021 | -1 |
| 8680081311817 | ΠΕΔΙΟ ΒΗΜΑΤΟΔΟΤΗ 200 X 360CM 3PLY Ref No: FST82003T | TEM | | | | -1 |
| 8680081316676 | ΔΙΑΦΑΝΕΣ ΚΑΛΥΜΜΑ ΟΡΓΑΝΩΝ 80CM ΚΥΛΙΝΔΡΙΚΟ Ref No: FST9511 | TEM | | | | -2 |

ΣΥΝΟΛΟ ΤΕΜΑΧΙΩΝ: -9



- **Speed**

- Fast & correct registration of items in the OR →
 - **More time with the patient**
 - **Less paperwork afterwards**
- Fast & correct stock counting →
 - **Less time spend in administrative tasks**
- Significant time gains at the invoicing procedure !



- **Speed**

- >**80% less time** needed for stock counting

- >**85% less time** needed for registering anesthesia sets to patient records

- (almost 19 hours/month !)**

Procurements Officer:

"Is like having one more person in the office!"



- **Safety**
 - For our **patients**
 - For our **nurses**



Cardiac Catheterization Lab Head Nurse:

"I feel safe knowing I have full control over my stock"



Change of Culture!





Our Vascular Embolism Lab Team

Happier people !

- Barcodes are great, but our **people is the key**
- GS1 standards made **their life easier**
- Happier staff means **better care** for our patients !

One last word



ST. JAMES'S
HOSPITAL



Don't hesitate, just do it !





Thank you !

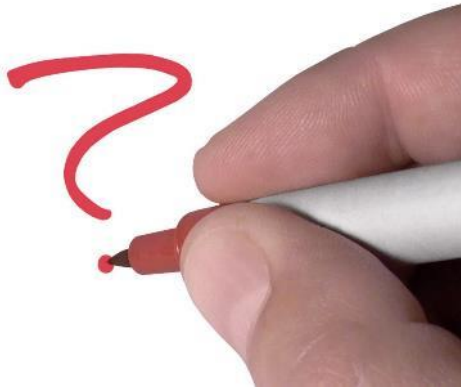
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GS1 Healthcare webinar:

Questions and contact details



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