

The Global Language of Business

Scanning barcodes in the Operating Room: Safer procedures, more satisfied personnel. The Greek Army's General Military Hospital

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: <u>http://www.gs1.org/healthcare/hpac_webinars</u>
 - All previous webinars are also posted to this location, so please feel free to use this resource and share the link





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.
- <u>http://www.gs1.org/healthcare/hpac_w</u>
 <u>ebinars</u>

Awards

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

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 !







"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



The Global Language of Business

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 (?)







- 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





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



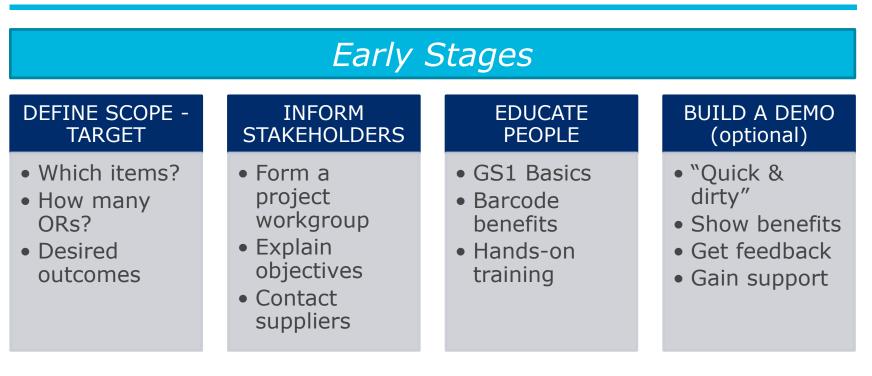


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Implementation Strategy







Implementation Strategy



Implementation			Planning for the future			
DECIDE & DESIGN CHANGES	APPLY CHANGES	EVALUATE RESULTS	FORM A CULTURE	NEXT STEPS		
SystemsProceduresKPIs	 Continuous monitoring Feedback Training Support 	 Measure KPIs Operational efficiency Patient safety 	 Everyday job Clear benefits User friendliness 	 More ORs Other Depts OR Safe Labeling System 		



Implementation



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"



Implementation



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







NEXT STAGE

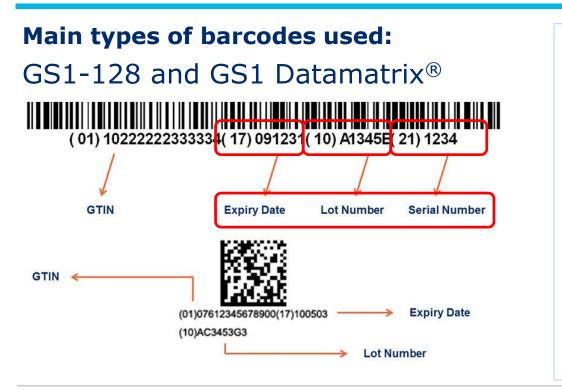
- ✓ 3 more ORs (General and neuro- surgery)
 ✓ Anesthesia & Recovery Dept.
- Cardiac Catheterization Lab.
- ✓ Interventional Radiology Dept.





Implementation





ALWAYS SCAN

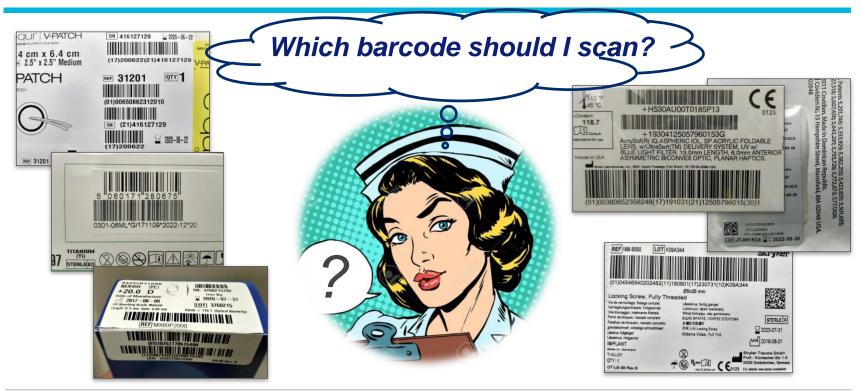
capturing crucial item data:

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



Implementation

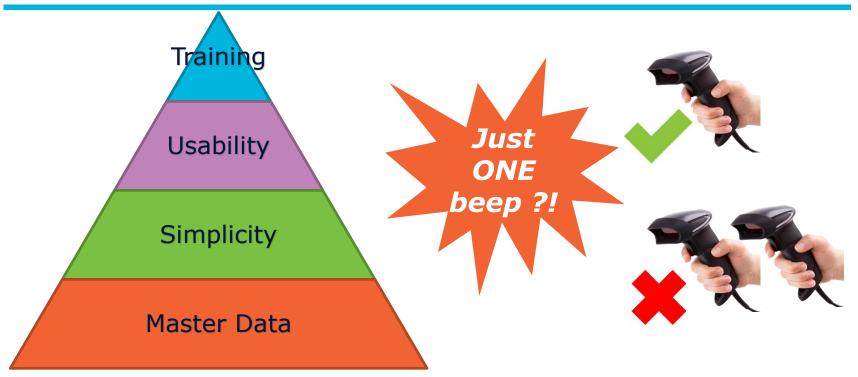








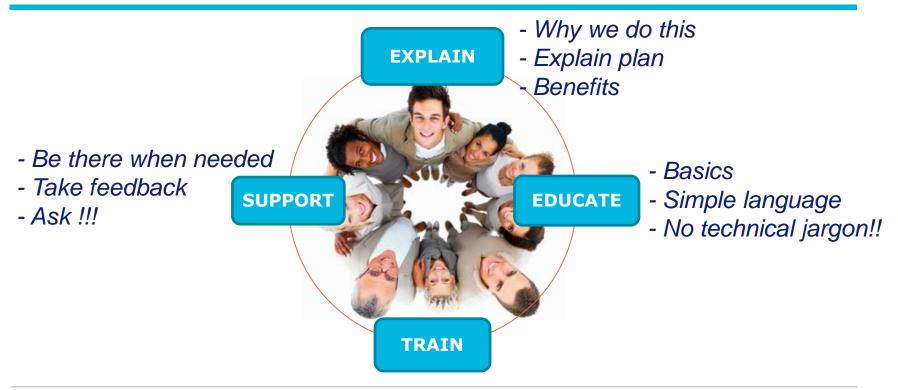






Personnel Engagement







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





IT Systems & Software



- No GS1 AI decoding
 - No uniform barcodes various AIs
- "Item of supply" vs "Item of trade"

- 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

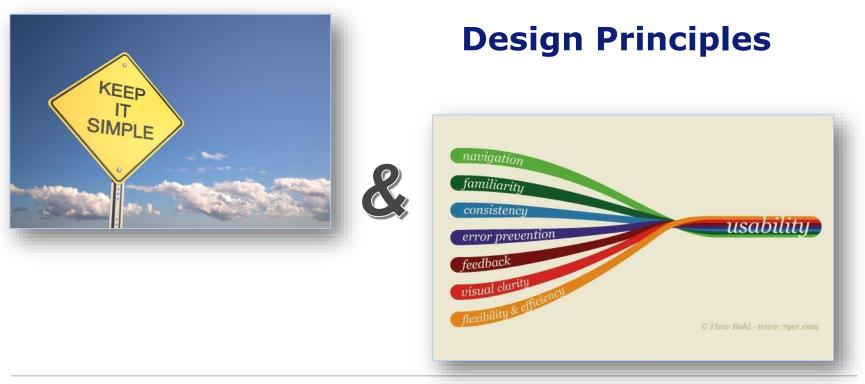


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SSUES

IT Systems & Software











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 What was used on safety ! which patient
 - Exp dates !
 - Implants tracking
 - Stock accuracy visibility Efficien Better forecasting - Fewer losses

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00613994945631	ΑΕΚΤΡΟΔΙΟ ΕΝΕΡΓ/ΚΗΣ ΠΡΟΣ ΧΑΜ. ΟΔΟΥ δΙΔΩΤΟ Ref No: 407652	TEM		BBL110081G	12/10/2018	-1	
00643169708327	ΗΛΕΚΤΡΟΔΙΟ ΕΝΕΡΓΗΤΙΚΗΣ ΠΡΟΣΦΥΣΗΣ Ref No: 407658	ТЕМ		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	
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05414734028295	ΟΔΗΓΟ ΣΥΡΜΑ ΣΤΕΦΑΝΙΟΓΡΑΦΙΑΣ, ΥΔΡΟΦΙΛΟ, 150/035 ' Ref No: 408005	TEM	9915797		31/3/2021	-1	
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8680081316676	ΔΙΑΦΑΝΕΣ ΚΑΛΥΜΜΑ ΟΡΓΑΝΩΝ 80CM ΚΥΛΙΝΔΡΙΚΟ Ref No: FST9511	TEM				-2	
				ΣΥΝΟΛΟ ΤΕΜ	AXIΩN:	-9	



Outcomes - Benefits



Speed

- Fast & correct registration of items in the OR \rightarrow
 - More time with the patient
 - Less paperwork afterwards
- Fast & correct stock counting \rightarrow
 - 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!"



Outcomes - Benefits





- 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!





Outcomes - Benefits





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











Don't hesitate, just do it ! 751233 10570 3







Thank you !

Sotiris Tsiafos-Tsiaras, OR Traceability Project Manager

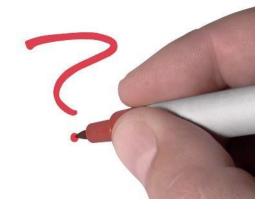
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GS1 Healthcare webinar: Questions and contact details





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