GS1 Healthcare Provider Advisory Council Webinar

How GS1 bar codes improve logistics quality and patient safety

Viggo Nielsen, Supply Chain Manager, Hospital Pharmacy of the Capital Region in Denmark
September 2016
Welcome and thank you for attending!

- Welcome to our September 2016 webinar. Thank you to our guest speaker – Viggo Nielsen, Supply Chain Manager, Hospital Pharmacy of the Capital Region in Denmark
- 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
The GS1 Healthcare Provider Advisory Council (HPAC)

Thought leaders and early 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
**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](http://www.gs1.org/healthcare/hpac_webinars)

**Awards**

- Twice per annum
- 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](http://www.gs1.org/healthcare/hpac)

**GS1 Healthcare also holds two global conferences per annum.**
**Next conference in Beijing from 25-27 October 2016.** There will be significant Healthcare Provider participation on the agenda.
How GS1 BarCodes improve logistics quality and patient safety

Capital Region of Denmark
Hospital Pharmacy
My play ground

- 1.7 mio. people
- Annual budget of 5,3 bn €.
APOTEK is the Danish word for Pharmacy. It originates from the Greek word: *apothéke*, which means “warehouse” or “storage.”
The hospital pharmacy in the Capital Region of Denmark is one of the largest hospital pharmacies in the northern part of Europe.

**Staff 2015**
- Logistics: 71
- Production: 112
- Clinical Pharmacy: 293
- Quality: 31
- Adm. / operations: 33
- **Total:** 540

**Turnover in 2015** of 440 mio. € equal to 5 mio. packages of medicine.
• Deliveries to 11 hospitals
• 3-6 hours leadtime
Mission: research, education and treatment within the area of public healthcare.

Vision: integrated healthcare system on a high international level.

But not a single word about BarCodes.
Main processes in the Capital Region Pharmacy

Production:
- Raw materials
- Packaging
- Assembly/manufacture
- Quality control
- Transfer to logistics

Logistics:
- Call off
- Receiving
- Put-away
- Storing
- Picking
- Packing
- Transport

Clinical Pharm. Service:
- Replenishment of medicine on wards
- Adjustment of assortments
- Advice on the use of medication
- Preparation of ready-to-use medicine
It’s quite simple………

How barcodes support the mission of the logistics department:

- 24/7 availability of medicine
- Delivery of right products
- Fast and responsive set up
- Cost efficient operation

Data-structure  +  Data-capture  +  Data-processing
In-bound Logistics:
- Call off
- Reception
- Put away

Storage

Out-bound Logistics:
- Orders
- Picking
- Packing
- Transport

Hospital medicine room

Goods in

Goods out:
Benefits from using barcodes

**Actions:**
- Verification of right item in put-away process

**Benefits:**
- Securing right items on right warehouse-location
- Quality control of barcode readability
- Quality control of masterdata in barcode
- Alternative process is visual ID done by two employees
Benefits from use of barcodes

**Actions:**
- Go to right location
- Pick by visual ID
- Verify by scanning
- Confirm quantities

**Benefits:**
- Visual ID provides limited validation
- Visual ID needs a second opinion
- Less than 1% of package surface carries the most important information
- Scanning ensures that right items are picked
- Scanning is faster and more reliable than tapping in figures
- An operation without scanning will require more staff and provide lower quality
Why barcodes?
- Great design
- Super branding
- Very little focus on critical information
- High risk of errors using visual ID
- When using blister packs - extreme risk of errors

Most common challenges:
- Codes exceed quiet zone
- Codes are "stretched"
- No stringent logic to code - too many zeros
- Wrong use of 2D codes
Challenges from everyday life

Reported errors 2013 in hospitals
National Danish Patient Safety DataBase
(Source: DPSD Annual Report 2013)

- Medication
- Clinical Processes
- Other
- Communication and documentation
- Administrative Processes

0% 5% 10% 15% 20% 25% 30%
The value stream of medicine

Product development

Manufacturing

Supply Chain

Prescription

Dispensing

Administration

Once a barcode is born, it creates value in several steps

Value created
The benefits of standardization

- Barcodes are **cross functional**
- The same codes used for **various purposes**
- The same data used in **different systems**
- The **GS1** system offers:

**Data structure:**
- Unique ID of all trading parties
- Unique item numbering on all packaging levels and shipping units
- Unique ID on expiry date, lot no. etc.

**Concepts for barcodes:**
- Linear
- Datamatrix
- Application identifiers
Use of standards:
• It *is* quite simple
• No one should be in doubt about right or wrong
• The decision is strategic – we want it!!
• Benefits for all parts of the valuestream
Continuously focus on:

- Stating: There is an approved standard
- Tenders and contracts: Mandatory use of GS1
- Correction of errors in codes – format and content
- Guide and help suppliers
It's getting better and better

Next step: Serilization

- Pharmacy role
- Producers role
Thank you, for your attention.