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	• 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
Identification of projects and case studies	• That support the adoption of GS1 Standards in healthcare providers and retail pharmacies • For publication, presentation and sharing
A source of expertise and advice	• 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

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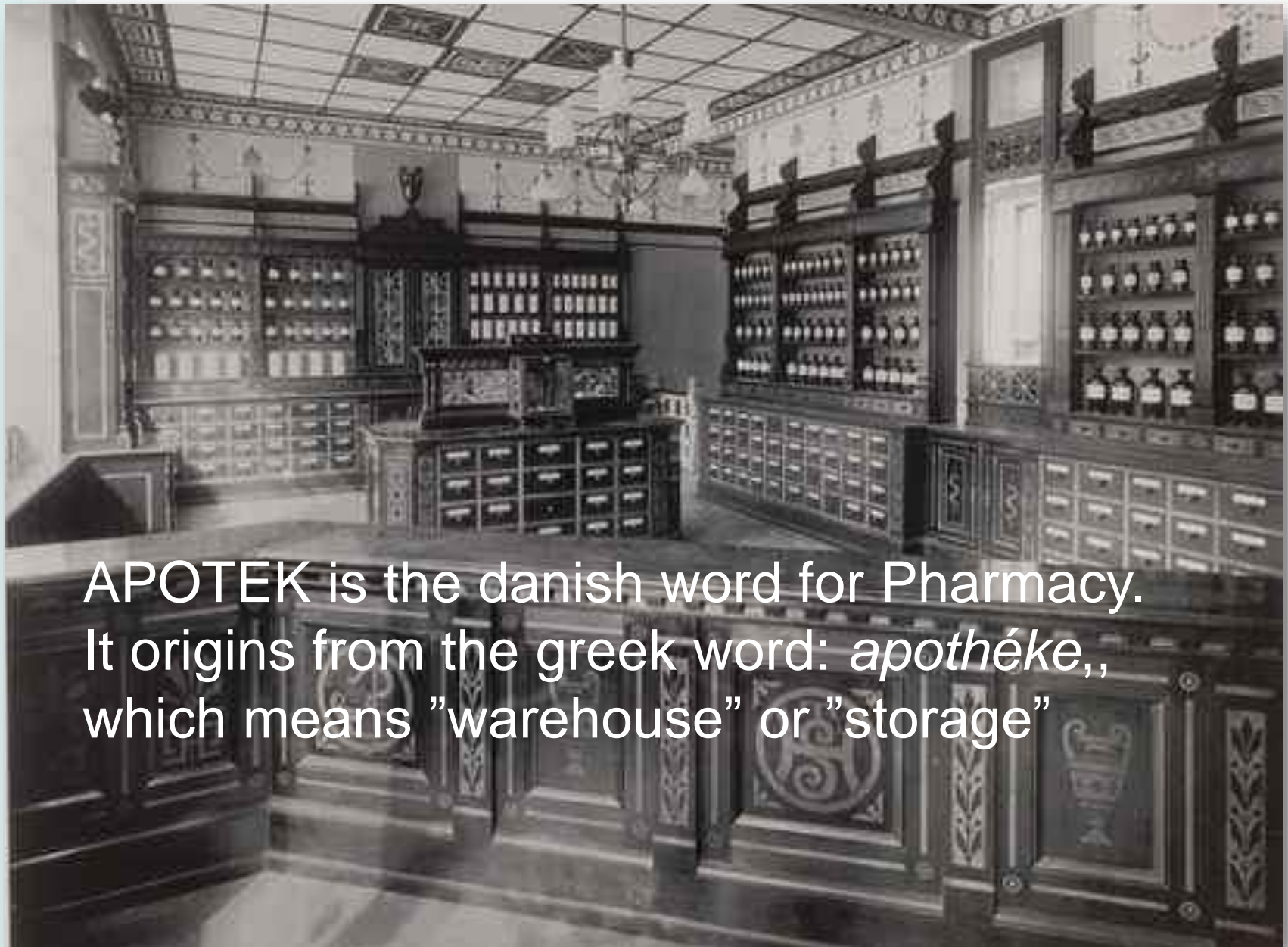- http://www.gs1.org/healthcare/hpac

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.

Apoteket

How GS1 BarCodes improve logistics quality and patient safety

Capital Region of Denmark

Hospital Pharmacy

REGION

My play ground

Nordjylland

Midtjylland

Syddanmark

Hovedstaden

Sjælland

- **1.7 mio. people**
- **Annual budget of 5,3 bn €.**

APOTEK is the danish word for Pharmacy. It origins 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
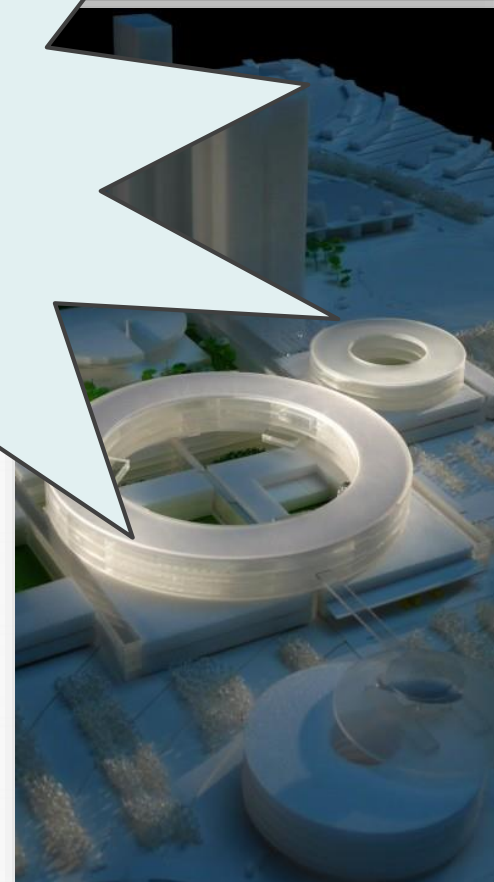
Staff 2015

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

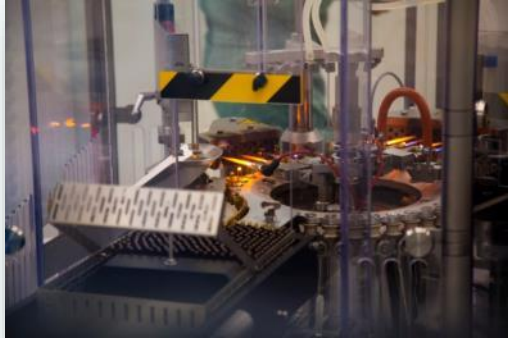**Mission:**
..........research, education and treatment within the area of public healthcare...............

Vision:
..........integrated healthcare system on a high international level...............

But not a single word about BarCodes………..

Main processes in the Capital Region Pharmacy

Production:

- Rawmaterials
- Packaging
- Assembly/manu-facture
- Quality control
- Tarnsfer to logistics

Logistics:

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

Clinical Pharm. Service:

- Replenishment of medicine on wards
- Adjustment of assort-ments
- 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

GS1 in Logistik

Producer/wholesaler

In-bound Logistics:

- Call off
- Reception
- Put away

Storage

Out-bound Logistics:

- Orders
- Picking
- Packing
- Trans-port

Hospital medicine room

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Goods in

Goods out:

Goods in

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-2

Goods out:

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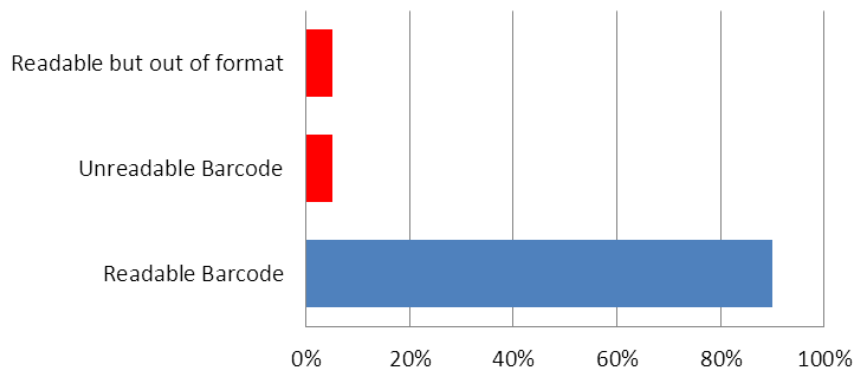- Verify by scanning
- Confirm quantities

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 cirtical information
- High risk of errors using visual ID
- When using blister packs - extreme risk of errors

Top 400 items (packages) Quality survey - sales unit

Readable but out of format	
Unreadable Barcode	
Readable Barcode	

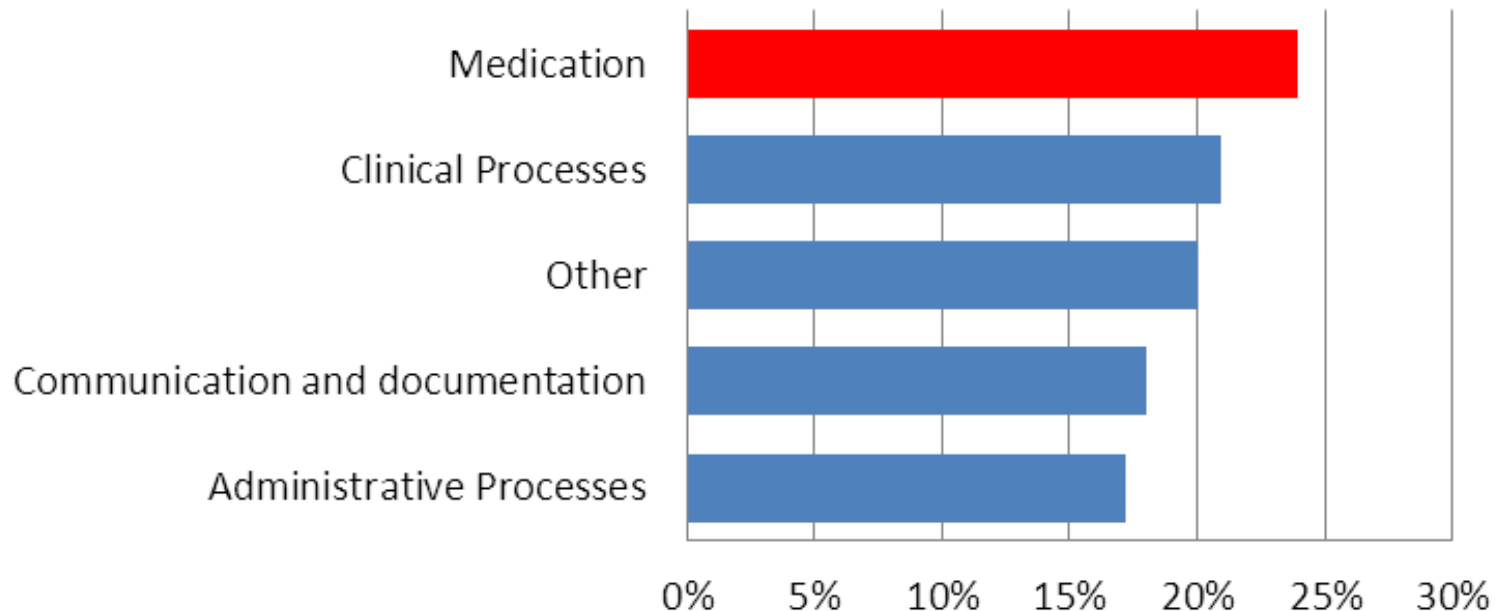0%   20%   40%   60%   80%   100%

Most common challenges:

- Codes exceed quiet zone
- Codes are "stretched"
- No stringent logic to code -   too many zeros
- Wrong use of 2D codes

Reported errors 2013 in hospitals

National Danish Patient Safety DataBase
(Source: DPSD Annual Report 2013)

The value stream of medicine

Product developement

Manufacturing

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

Supply Chain

Prescription

Dispensing

Administration

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

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Use of standards:

- It *is* quite simpel
- No one should be in doubt about right or wrong
- The decesion is strategic – we want it !!
- Benefits for all parts of the valuestream

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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

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Next step: Serilization

- Pharmacy role
- Producers role

Thank you,
for your
attention