GS1 Healthcare Conference Vienna

„Patient safety and process optimization at EK UNICO“

Thomas Klein
Purchasing manager
at University Hospital Düsseldorf

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I. University Hospital Düsseldorf
- Basic data 2008
- Function
- Orientation Plan and Building Project

II. Introduction of UNICO
- Who we are?
- Members and Historie
- Goals and strategy

III. Electronic Product catalogues
- Supplier information
- Collective data basis
- Catalog standardization

IV. Scanning within the hospital
- Scanning advantages
- Hospital Supply Chain
- Practical example UK Dresden
- Barcode standardization

V. Consequence and Decision
Basic Data 2008

- Hospital with maximum medical care
- Public Law Institution: 2001
- Hospitals: 31
- Institutes: 34
- Number of beds: 1,397
- Inpatients (incl. new born): 41,794
- Outpatients: 305,581
- Total turnover in Mio. €: 400
- Total number of employees: 4,676
Orientation Plan

Universitätsklinikum Düsseldorf

Pediatric incl. surgery

Internal medicine and neurology; radiology radiotherapy Laboratory medicine

Operational Center I general surgery Vascular surgery Cardio surgery Trauma surgery

Transfusion medicine

Anesthesiology

West-German Dental clinic

Orthopedic

Pathology

Otolaryngology

Gynecology

Urology

Ophthalmic clinic

Neurosurgery

Dermatology

ZOM II
Operational Center II

- 18,000 sqm. effective area
- 288 Beds
- 7 Operating rooms
- Intensive care
- Central emergency hospitalization
- Radiology
- Heliport
- Completion 2009
- Interoperate clinics:
  - Ophthalmic clinic, Dermatology, Otolaryngology
  - Neurosurgery and
  - Dental clinic and clinic for plastic, facial surgery
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V. Consequence and Decision
Who we are?

- ... is a buying group based on a voluntary fusion of 13 university hospitals in Germany

- …acts on behalf of 300 special clinics and more than 240 institutes within the GPO

- … the joint purchasing volume is bigger than 1 Bn.€

- … products purchase are from the medical and the pharmaceutical sector as well as laboratory and diagnostically products and services, food and investment goods.

We want to decrease costs through a joint purchasing and optimized processes within our purchasing departments …
Members

Universitätsklinikum Düsseldorf
Increase our clinic's internal efficiency at a high level of quality.

“To act intelligently together”

- decrease costs
- joint market analysis
- demand bundling
- education
- cooperation with suppliers
- benchmarks
- process optimization
- standardization
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V. Consequence and Decision
Each supplier has its own marketing method to announce his products and prices to a hospital

- printed catalogs
- Quotes
- PDF-Data
- Excel-Tables
- Text data
- Links to company websites
  - sorted by category / commodity group / indication
  - sorted by supplier part number
  - sorted by manufacturer
  - sorted by price bracket

→ high effort, mix-ups, queries... depression
Collective Database UNICO

- 1,508 Mrd. € / year
- 1,7 Mio. order positions / year
- 68,595 warehouse material

- Project data
- Project controlling
- Key data

Need for consistent article master data!!
GHX Data Base

1. Step
- Order's
- Order update

2. Step
- Common
  Electronic cataloge

UNICO/GHX unique catalog with eCl@ss 6.0

Download of basic data

GHX Platform classified at ecl@ss 6.0
Analysis according to eCl@ss by project leader
The electronic catalog is the core of eBusiness!

- **Definite part number** (e.g., GTIN/EAN; PZN)
- **Product description**
- **Additional multimedia based data** (e.g., pictures, security data sheet, operator descriptions etc.)
- **Customer specific pricing** (e.g., UNICO-prices)
- **Classification according to ecl@ss 6.0**
- **Order information** (e.g., Order quantity, minimum order quantity, packaging and pricing units)
- **Barcodes** (e.g., GS1 EAN; HIBC)
- **Customer specific material numbers** (e.g., UKD SAP-Nr.)
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V. Consequence and Decision
Usage of machine readable labeling when handling consumables in a hospital

The advantages are obvious:

- **secure logistics → high patient security**
- **fast logistics → high availability**
- **minimum effort logistics → cost efficiency**
Barcode usage within the whole hospital supply chain

Central warehouse

Internal transport

Ward warehouse / surgery / Institute

Patient / activity
How should Barcodes be used area-wide within a big hospital with daily up to 5.300 goods movements?

A) The hospital labels all items in the central warehouse entry?

The warehouse personnel would have to differentiate more than 28.000 different items and label them accurate!

→ Relocation of medical responsibilities to non-medical personnel.

B) The hospital uses supplier barcodes placed on the product packaging?

A minimum of 80% -90% of all items would have to be labeled according to a general standard with unique barcodes!
Are there no labeling standards?

There are too many!
Analysis of the supplier barcodes at the University Hospital Dresden

Product labels based on the total amount of items
... and nurse Lara Croft pulls the right scanner at the right time and unerring hits the right barcode?
Usage of supplier barcodes on original packaging

Master Data Base

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- Patient data systems
- ERP-Systems
- Laboratory systems
- Radiology systems
- Special systems:
  - Dental
  - Blood
  - Pharmacy
  .... etc.
There is only one way out of this dilemma:

**Standardization**

of basic item data exchange

→ GS1-XML

Project „GS1-professional group “basic data“

**Standardization**

of barcode-item labeling

→ GS1 Barcode-Family

Project „Barcode handling with implants“
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V. Consequence and Decision
Hospitals will more and more incorporate the aspect of „standard barcodes“ and „electronic product catalogs“ within their tenders.

e.g. collective letter of all 13 University Hospital members of the buying syndicate EK UNICO dated February 2009.

Policy document of the workgroup “Standards in eBusiness” from BvMed consisting of supplier and hospital representatives.
UNICO purchasing focuses on the following standards in eBusiness from now on:

- Classification system: ecl@ss 6.0
- Product identification: GTIN ; PZN
- Barcode type for item labeling: EAN13; GS1 128 (EAN128); GS1 Data Matrix (EAN Data Matrix)
- Exchange format for item data: GS1-XML
Thank you for your attention

Kontakt: Thomas Klein
Tel.: +49211-8118665
Fax.: +49211-8226042
Mail: thomas.klein@med.uni-duesseldor.de