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Patient Safety and Barcode Scanning in the Operating Theatre
Background

- University Medical Centre (one of 8 in NL: 60 years young)
- Focus areas: Cure-Education-Research (international level)
- OR-procedures > 29,000 (excl. interventional treatments)
- Turnover > $ 1,000,000,000 p.a.
- Largest employer in the area
- 9,000 employees
- 3,000 students
- 1,000 beds
Challenge: back office activities

- Easy to find?
- Intensive?
- Complex!
- Always safe!

Against all costs?
Observations interventional dept.’s and OR

- Value internal stock unknown
- Traceability problems (expiry date - lot numbers - recall)
- Abundance of barcodes and applications
- No integration between push and pull
- Depending on knowledge local staff members
- Manual procedures (administration - preparation - expiry date - lot numbers)

We cannot continue!

What are the next steps?
1. Improve patient safety (quality = soft)
   - Available when needed
   - Always in control

2. Realise cost benefits (quantity = hard)
   - Optimising stock levels
   - Reducing waste
   - Effective order size

3. Stepping stone principals:
   - Step 1: Structure internal organisation
   - Step 2: Renewal techniques and procedures (lean)
   - Step 3: Apply innovative techniques and integration
Include GAP-analysis

G = goods: logistics dept.
A = automation: IT dept.
P = processes: business

The business case is never complete!
Clear vision about the way forward!
The current state

- Automated integrated T&T system (one dimensional barcoding)
- GS1-standard or GS1 internal compliant standard
- Barcoding for identification and restocking
- One-time scanning must be enough

Next step and future plans:
- Integrated OR supply chain
- Introduction of RFID technology

Introduce GS1 Standard

Harmonize and simplify:
1. Internal logistical processes
2. External supply chain connections
Target 2012

- Introduce Q-system (ISO9001: 2008)
- Integrated T&T-system
- One off: improve balance sheet (est. $13-$15Mio)
- Reduce stock level with at least 25% (2012)
- Eliminate waste and loss by 80% (2012)
- Increased patient safety (available when needed)

Results YTD (30sep11):

- 375,000 articles available
- 4,594 articles registered (80/20)
- 22,998 unique items identified
- Total value assets $9,500,000
- AVG price per item $410
- Departments involved: 21