Traceability – Ask the expert

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- Stephan Roos – Manager Operations at Synthes (supplier of instruments, implants and biomaterial)
- Tom Pereboom – Project manager at University Medical Center of Utrecht
- Esther Peelen, Hans Lunenborg – GS1 Netherlands
Introduction

Justin Bitter MSc.

• Head of logistics OR department (16 employees, 24/7)

• Business Unit OR (around 300 employees)
• Responsible for supply chain stock 27 OR’s
• OR-procedures appr. 29.000 per annum
• 1.700 instrument boxes; 4.850 sterile items
• Sterile stock value appr. € 5.000.000
Radboud case (organization < 2011)

- No visibility of goods available (mostly high value)
- Dependency local knowledge (OR-assistants)
- No integration and standardization (GS1)
- Increasing waste and loss (appr. € 400k pa)
- Inadequate traceability capabilities
- High inventory costs
A great opportunity but also a great challenge

A new hospital building with 25 operation rooms (dec11)

Challenge: stock traceability and policy making
The new organisation (dec11)
Our goals

• Inventory optimization by registration and standardization
• Effective stock level (best services against lowest costs)
• Never miss implants and sterile materials (forecasting)
• Continuous traceability of OR-materials
• Automatic control: improving quality of work and care
• Less door movements in OR area

In summary: OR logistics is a profession
Always in control of all OR-material movements
Traceability is mandatory
Our challenges

- Problem allocating stock locations and materials
- Manual control (expiry date and lot numbers)
- Differentiated landscape of barcodes
- No harmonized traceability approach

Recommendation:
Global introduction
GS1 Traceability Standard
How it works (> 2010)

- Register article and add batch number + expiration date
- Print unique GS1-compliant label
- OR logistics is responsible for the entire process
- OR staff can find sterile materials in a T&T-system
- OR staff can check if everything is on time for OR event: patient safety
- Sterility control and recall with an fully automated touch
- Each unique sterile product is kept in a unique stock location
The current state (pilot fase)

- Automated integrated T&T system (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
Our targets

- Introduce Q-system (ISO9001: 2008)
- Integrated T&T-system (OR + interventional departments)
- Stock represents value (between € 8-€ 10Mio)
- Reduce stock level with 25% (2012)
- Eliminate waste and loss by 80% (2012)
- Increased patient safety (focus on complex matters)
Business Case GS1 Traceability of Medical Devices in OR

Some Figures:

• In the Netherlands: around 100 hospitals (8 University hospitals)

• Total Stock Value – only medical devices – estimated: 200 Million euro

• Yearly Turnover: 1.5 Billion euro
Efficiency benefits

<table>
<thead>
<tr>
<th>Potential improvements</th>
<th>Conservative Scenario</th>
<th>Optimistic Scenario</th>
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</thead>
<tbody>
<tr>
<td>Stock Decrease</td>
<td>20%</td>
<td>30%</td>
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<tr>
<td>Waste</td>
<td>5%</td>
<td>8%</td>
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<tr>
<td>Reduction of Waste</td>
<td>80%</td>
<td>80%</td>
</tr>
<tr>
<td>Stock Handling Costs</td>
<td>25%</td>
<td>25%</td>
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Leading to Savings

<table>
<thead>
<tr>
<th>Savings</th>
<th>Conservative Scenario</th>
<th>Optimistic Scenario</th>
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</thead>
<tbody>
<tr>
<td>Reduction of Stock Value</td>
<td>-40 Million euro</td>
<td>-60 Million euro</td>
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<tr>
<td>Reduction of Waste</td>
<td>-54 Million euro</td>
<td>-96 Million euro</td>
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<tr>
<td>Lower Stock Handling Costs</td>
<td>-10 Million euro</td>
<td>-15 Million euro</td>
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Patient Safety Benefits

- No more canceling of operations due to lack of material
- Clear insight in item/patient registration
- Higher quality in realisation of recall procedures
Conclusion and recommendation

• Win-win situation for hospitals financially and for the patient

• Why wait? Start implementing GS1 Global Traceability Standard for Healthcare!
Thank you for your attention!