St. James’s Hospital - leading global innovation in healthcare - a hospital wide approach to adopting GS1 standards

Mr Simon Moores, Director of Finance, St. James’s hospital, Dublin, Ireland
Mr John Cotter, Programme Director Activity Based Funding St. James’s Hospital, Dublin, Ireland

Tuesday April 17th, 2018
Welcome and thank you for attending!

• Welcome to our April 2018 webinar.
  Thank you to our guest speakers Simon Moores, Director of Finance and John Cotter, Programme Director Activity Based Funding of St James’s Hospital, Dublin, Ireland

• 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)

Focus is on thought leaders and 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
- 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

A source of expertise and advice
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](http://www.gs1.org/healthcare/hpac_webinars)

Awards

• Twice per year
• 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 year. The next conference will be in Bangkok from October 31st – November 1st, 2018. We expect significant Healthcare Provider participation on the agenda.
Traceability at St. James’s Hospital

Simon Moores
Director of Finance, St James’s Hospital

John Cotter
Programme Director, Activity Based Funding, St James’s Hospital
St James’s Hospital

Key Data
• 60 Acre Campus
• €440m
• 1,000 beds
• 25,000 IP Discharges
• 48,000 Day Cases
• 280,000 OPD
• Largest Academic Teaching Hospital in Ireland
• Focus on innovative projects
Evolution of a Medical Campus, “Shared Vision”

MISA
Mercers Institute for Research on Ageing

NCH
National Children's Hospital
**Business Process Innovation: Implementing GS1 Standards**

- **1995**
  - Master Data Management and Structured coding

- **2003/4**
  - Haemophilia Track and Trace project commenced GS1 Datamatrix
  - SAP Installed (EPR & GUI)

- **2008**
  - Wireless Kanban for Ward stock management

- **2011**
  - First hospital to pilot the Surgical Instrument track and trace programme using GS1 Standards

- **2012**
  - eProcurement project (Standardised coding, data and messaging)
    - GTIN
    - GLN
    - GS1 XML 3.0
  - 1st Sep 2014 First Supplier to GoLive - Cruinn
  - Communications and meetings with Top 50 Suppliers

- **2014**
  - Scan for Surgery Go Live
  - RFID tracking of Precious samples (Live)

- **Today**
  - Next Projects:
    - Rollout of Scan for Surgery, RFID tracking of patients, staff, assets
    - Full Traceability to EHR (roll out of scan for surgery)
    - Working towards implementation of eProcurement with all Suppliers
    - Target to be first hospital fully compliant to GS1 Standards

- **FUTURE**
  - GO!
  - Wireless Kanban for Ward stock management
  - First hospital to pilot the Surgical Instrument track and trace programme using GS1 Standards
  - eProcurement project (Standardised coding, data and messaging)
  - GTIN
  - GLN
  - GS1 XML 3.0
  - 1st Sep 2014 First Supplier to GoLive - Cruinn
  - Communications and meetings with Top 50 Suppliers
  - Scan for Surgery Go Live
  - RFID tracking of Precious samples (Live)
  - Next Projects:
    - Rollout of Scan for Surgery, RFID tracking of patients, staff, assets
  - Full Traceability to EHR (roll out of scan for surgery)
  - Working towards implementation of eProcurement with all Suppliers
  - Target to be first hospital fully compliant to GS1 Standards

---

**Scanned for Surgery Go Live**

**RFID tracking of Precious samples (Live)**

**Next Projects:**

- Rollout of Scan for Surgery, RFID tracking of patients, staff, assets
- Full Traceability to EHR (roll out of scan for surgery)
- Working towards implementation of eProcurement with all Suppliers
- Target to be first hospital fully compliant to GS1 Standards
SJH Whitepapers, Case studies, posters, in the news
SJH - hosting visits both locally and internationally
Traceability at St James’s Hospital enabled by GS1 Standards

Track and Trace in the Hospital
Real time visibility of what happened
Right product, right place, right person

…..Linked to the right procedure, Real-time, accurate data from the point of care!
On-going Projects

- Implementing GS1 standards across the hospital campus
  - Supported by Regulation for medical devices and pharma

- Instrument T&T
- Scan4Surgery
- Automatic tracking (RFID)
- Haemophilia T&T
- eProcurement
- SJH Healthcare Campus
- Others...
Scan For Surgery
Scan for Surgery

**Operational Efficiency**
- Automation of product supply chain processes for nursing
- Make additional time available for patient-centric activities
- Managed minimum inventory levels

**Patient Safety**
- Product Traceability to individual patients
- Product Expiry Identification

**Patient Level Cost Analytics**
- Increased visibility of real-time patient and procedure level costs
- Improved data analytics for decision making
Key Enablers

• Multi-Disciplinary
• Continuous Engagement
• Communication
• Coordinated Effort and Feedback
• Robust Integration
• Master Data, Master Data, Master Data!

Project Success Factors

• Measurable reduction in Nurse time spent on inventory processes
• Measurable Reduction in time to trace recalled products
• Clear reporting of procedure level costs -vs- funding to ensure adequate hospital funding
• Measurable improvement in reduction of expired product / product aging
• Measureable reduction in inventory volume
Robust Data Integration
Operational Efficiency

**Before**
- 20 hours per week to check and reorder stock (and other stock activities)
- Over-qualified role doing non-value added activities
- ? Time for patient care

**After**
- 2 hours per week on supply chain activities
- More time for patient care !!
**Operational Efficiency**

- **Patient Scan**
- **Automated Message to SAP**
  - Scanning system sends automated message to SAP based on Stock Requirements
- **Automated Message to Supplier**
  - SAP sends automated / manual PO to Supplier
- **Supplier Fulfils Order**
  - Supplier Fulfils order
  - Replacement products are delivered to Theatre

---

**Nursing Time Taken to Order T1/2 (Hours)**

- **Theatre 1**
  - Manual: 3
  - Automated: 2
- **Theatre 2**
  - Manual: 3
  - Automated: 1
- **Overall Est.**
  - Manual: 10
  - Automated: 3
Cost Analytics

Patient Information 2015

- 96% No Patient Information
- 4% Patient Level Information

Patient Information Scan for Surgery 2017

- 89% No Patient Information
- 11% Patient Level Information
Cost Analytics

Theatre Cost Analysis

- Total Product Cost
- Total Pay Cost

Complexity: 4.34
Patient Activity: 122
Average LOS: 10.83
Median LOS: 8

Patient Information 2015
- Patient level Information
- No Patient Information

Patient Information Scan for Surgery 2017
- Patient level Information
- No Patient Information
Patient Safety

DEVICE RECALL

3,516 Irish had recalled hip device fitted

THE IRISH TIMES
'I trusted that I would be fitted with a safe implant. That's not what I got'

PATIENT IDENTIFICATION PROCESS

Traditional

Scan for Surgery

Qlik® Sense
### Product Listing

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Item Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>BWK01267</td>
<td>GOWN; THEATRE; SURGONS: L4; (L): 80-003-01</td>
<td>924</td>
</tr>
<tr>
<td>BWK01268</td>
<td>GOWN; THEATRE; SURGONS: L4; (XL): 80-004-01</td>
<td>849</td>
</tr>
<tr>
<td>BQU657P</td>
<td>GLOVE; SURG; LATEX STERILE PF 7.5 REG BIO</td>
<td>709</td>
</tr>
<tr>
<td>FVQ1128P</td>
<td>SUTURE; PROLENE: 1.5FGX900MM; 25MM:...</td>
<td>688</td>
</tr>
<tr>
<td>FFL0145P</td>
<td>CLIP; LIGATION; HEMOClip Weck; 121504</td>
<td>606</td>
</tr>
<tr>
<td>FVQ0439P</td>
<td>SUTURE; ETHILON: 3.5GX1M; 40MM; W737</td>
<td>598</td>
</tr>
<tr>
<td>ELW0163P</td>
<td>DRESSING: OPSITE; VISIBLE DRAIN; 18CMX9CM</td>
<td>555</td>
</tr>
<tr>
<td>BQU0656P</td>
<td>GLOVE; SURG; LATEX STERILE PF 7 REG BIO</td>
<td>550</td>
</tr>
<tr>
<td>FVQ3312P</td>
<td>SUTURE; VICRYL +; 5GX78CM; VCP9378H</td>
<td>495</td>
</tr>
<tr>
<td>FVQ0182P</td>
<td>SUTURE; VICRYL +; 2GX78CM; VCP320H</td>
<td>491</td>
</tr>
<tr>
<td>FFL0539P</td>
<td>CLIP; LIGATION; HEMOClip 523835</td>
<td>464</td>
</tr>
</tbody>
</table>

### Patient List

<table>
<thead>
<tr>
<th>Patient ID</th>
<th>Theatre</th>
<th>PowerGate</th>
<th>Consultation Date</th>
<th>Item Code</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1064970</td>
<td>Theatre 1 &amp; 2</td>
<td>21/09/2017</td>
<td>021-RYAR</td>
<td>FVQ0675P</td>
<td>65</td>
</tr>
<tr>
<td>1321557</td>
<td>Theatre 1 &amp; 2</td>
<td>14/06/2017</td>
<td>021-TOLA</td>
<td>FVQ1109P</td>
<td>27</td>
</tr>
<tr>
<td>1411641</td>
<td>Theatre 1 &amp; 2</td>
<td>18/08/2017</td>
<td>021-EARS</td>
<td>ELS0117P</td>
<td>22</td>
</tr>
<tr>
<td>1415401</td>
<td>Theatre 1 &amp; 2</td>
<td>25/07/2017</td>
<td>021-YOURG</td>
<td>FVQ1128P</td>
<td>22</td>
</tr>
<tr>
<td>1411641</td>
<td>Theatre 1 &amp; 2</td>
<td>18/08/2017</td>
<td>021-EARS</td>
<td>ELW052P</td>
<td>21</td>
</tr>
<tr>
<td>1596178</td>
<td>Theatre 1 &amp; 2</td>
<td>26/09/2017</td>
<td>021-YOURG</td>
<td>FVQ1128P</td>
<td>18</td>
</tr>
<tr>
<td>1399017</td>
<td>Theatre 1 &amp; 2</td>
<td>19/04/2017</td>
<td>021-TOLA</td>
<td>FVQ11642P</td>
<td>18</td>
</tr>
<tr>
<td>1491463</td>
<td>Theatre 1 &amp; 2</td>
<td>18/05/2017</td>
<td>021-TOLA</td>
<td>FVQ1128P</td>
<td>18</td>
</tr>
<tr>
<td>1411641</td>
<td>Theatre 1 &amp; 2</td>
<td>18/08/2017</td>
<td>021-EARS</td>
<td>FVQ1126P</td>
<td>18</td>
</tr>
<tr>
<td>1413995</td>
<td>Theatre 1 &amp; 2</td>
<td>24/07/2017</td>
<td>021-EARS</td>
<td>FVQ1126P</td>
<td>18</td>
</tr>
<tr>
<td>277320</td>
<td>Theatre 1 &amp; 2</td>
<td>29/09/2017</td>
<td>021-EARS</td>
<td>FVQ1126P</td>
<td>14</td>
</tr>
<tr>
<td>321899</td>
<td>Theatre 1 &amp; 2</td>
<td>13/09/2017</td>
<td>021-TOLA</td>
<td>FVQ1126P</td>
<td>14</td>
</tr>
<tr>
<td>1399429</td>
<td>Theatre 1 &amp; 2</td>
<td>18/09/2017</td>
<td>021-YOURG</td>
<td>FVQ1126P</td>
<td>14</td>
</tr>
</tbody>
</table>
Current Challenges
Current Problems: Data Sharing from Suppliers

- No single repository for product data at unit of use level
- Single product -v- Pack of 20
- Manual GTIN Capture Process Carried Out
- Dedicated resources required to deliver
- Need to receive data direct from suppliers
Retail - Vs - Healthcare

1984

MINUTES OF THE THIRD ANNUAL GENERAL MEETING OF THE ARTICLE NUMBER ASSOCIATION
OF IRELAND HELD AT THE BURLINGTON HOTEL, DUBLIN 2, AT 11.00 A.M. ON MONDAY, 6

Mr. Andrews recommended that to be truly efficient

- Products would need to be 100% bar-coded and all bar-codes correctly applied.
- Manufacturers must put the bar-code in the correct place.
- Suppliers must notify traders of the bar-codes on their products and changes where they take place. To date this has been the greatest single problem and causes endless waste of time.

Mr. Andrews reiterated that with the experience so far gained he is more than ever convinced that the scanning system is a good investment and will be developed further in the years ahead on areas such as back-door scanning on outer cases and on trading communications. He offered to share the benefits of his experience with other traders and suppliers to the trade.

Today
How can Suppliers help?

1. Barcode on case
2. Barcode on inner
3. Sharing Product Data

WIFM (Hospital & Supplier):
- Reduced Inventory Holding Costs
- Meaningful Consumption Data
- Product Research & Development Data
- Improved Healthcare Cost Analytics
- Better Product Traceability
- More Time for Patient Care
Cost Benefit

*Data taken from Theatre 1&2 post go-live*
Next Steps

- Refining and sustaining the operational model
- Rolling out solution to other high cost areas
- Improve data sharing across entire supply chain
- Sharing product information with Medical Record
Questions?
HPAC Questions and contact details

Els van der Wilden
Director Healthcare Providers
GS1

Tel  +31615545868
eMail els.vanderwilden@gs1.org

www.gs1.org