GS1 Ireland Healthcare User Group (HUG) Information Day

Update on the National Distribution Centre and the importance of UDI for the HSE

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Update on the National Distribution Centre and the importance of UDI for the HSE
HBS Logistics

HBS Logistics provides purchasing storage and distribution services to select customers to the value of €400m p.a.

Three main supply channels:

1. Stock Channel
2. Cross-Dock Channel
3. Direct Channel

Significant operation involving c. 500 staff
Strategic Direction

Moving away from fragmented infrastructure, multiple systems and varying standards

• National Contracting
• National System for Stock (SAP)
• National Distribution Centre (NDC)
• National solution for POU Stock Management (SCANPOINT)
• National Integrated Financial Management System (IFMS)

Eliminate Variation -> Standardisation
National Contracting

Significant HBS Sourcing & Contracts Unit supported by OGP

ITT Compulsory Product Information includes UDI requirement (where available)

• Fairness in Tender Evaluation and Bid Transparency
• Improve Contract Mapping & Compliance
• Recognition of Emerging Medical Device Regulations
National System for Stock - Strategic Context

Accounting systems inherited by HSE are no longer fit for purpose

“The capacity of existing systems... severely limited”

“The absence of a single integrated national system is a fundamental constraint to the achievement of a cost-effective inventory and logistics management service”

Programme 7 – Calls for the development of an integrated financial system

“Issues to secure a national financial system for the HSE... should continue with support at the highest levels.”

“There is an IT deficit in the Health Sector and significant investment is overdue”

Recommended the implementation of a national financial system

Identified the development of a single ERP solution for Finance and Procurement as a Corporate Priority

Highlighted the need for national integrated systems and Financial and Procurement Shared Services

Deloitte VFM Report 2001

Commission on Financial Mgt and Control Systems in the Irish Health Sector (Brennan Report) 2003

Review of Treasury Mgt & Banking of the HSE by the NTMA 2006

HSE Corporate Plan 2008-2011

HSE Logistics and Inventory Review (HSE & PWC) 2010

A Study of Certain Accounting Issues Related to the HSE (Considine Report) 2008

Teamwork Mgt Services Appraisal of Current Funding 2008

Review of Finance Controls in the HSE (Torpey Report) 2008

2001  2002  2003  2004  2005  2006  2007  2008  2009  2010
Lack of Integrated Planning

Finance and Procurement Landscape

- 8+ Finance Systems
- 12+ Procurement Systems
- Lack of Timely Relevant Mgt Information
- Duplicate and Disparate Processes
- Lack of Consolidated View
- Lack of Integrated Vote and Budget Management
- Difficult Control Environment
- Multiple System Support Teams
- Diluted and Limited Systems Expertise
- Hard to Adapt and Develop
- Multiple Vendors and Material Masters
- Extensive Manual Order Processing
- Batch Processing and Interfacing
- Multiple complex interfaces to feed financial systems
Implemented NDC SAP 2014
(SINGLE MATERIAL MASTER)

To-Date
5 Material Masters -> One
15,000 SKU’s -> 3,000

Visibility – Control - Compliance
NDC GS1 Analysis (March 2016)

- 79% of all the products in the NDC have a GS1 GTIN/Barcode (as at 6/3/17 =71%)
- 43% of GS1 GTIN (barcode) products have expiry information within the barcode
- 44% have batch reference
- The presence of serial numbers is very low at the moment.

GTIN now maintained on NDC Material Master Record
Developed GS1 Scanning App to aid data capture and mapping

NDC GTIN uses:
- Onboarding new areas, future track & trace requirements
- Other applications: Asset Tracking & Proof of Delivery
### NDC Roll-Out Plan

**Notes:**
1. Sequence and timing is subject to change depending on factors such as resource availability, satisfactory completion of onboarding risk assessment and other criteria. Any change must be assessed and approved by project sponsor and board.
2. Priority to onboard major storage locations in each legacy area. Minor storage locations and new customers e.g. not serviced by logistics currently / not on current legacy systems will be onboarded as resources permit.
3. Due to the lack of standardised processes in existing sites. The estimates above will change based on the level of product/customer variation and capacity in each area.

**Assumptions:**
1. NDC onboarding project team will expand to include additional customer service reps who will enable concurrent roll-out in the later onboarding sites.
2. As the NDC onboards the later sites the need for new product set ups will reduce due to the fact that many of the products should be in the NDC following on from previous onboarding project.
3. Revenue and capital funding is available.
4. Project team resouces are retained and available for duration of the project.
5. ICT funding is available for local Point of Use sites as required.
Overview of POU Process with Scanning

POU Storage Unit → 2 Bin Storage System → Sample Label Front Side

**Back**
(ward staff use stock from this bin first)

**Front**

Sample Label Reverse Side

When the front bin is empty the user or L&M operative turns the label which indicates replenishment is required and then begins to use stock from back bin

Stock put away into Kanban and barcode label turned to front → Stock picked and shipped → File uploaded and validated on Procurement system → Formatted file created for upload into Procurement system.

Depending on wireless availability. This may require return to docking station after scanning a number of locations.

On a scheduled basis a POU operative will scan the location for cards which have been turned to indicate replenishment required. Each card requiring replen will be scanned and returned to front.

Images are for illustration only
### Fragmented POU Barcode Scanning Infrastructure Pre 2015

<table>
<thead>
<tr>
<th>No of Scanners</th>
<th>Western Health Area (Note1&amp;2)</th>
<th>North Western Health Area</th>
<th>Southern Health Area (KGH) (Note3)</th>
<th>Dublin Mid Leinster Midlands &amp; NDC</th>
<th>Dublin Mid-Leinster North East (Note 4)</th>
<th>Dublin Mid-Leinster ERHA (Note 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>10</td>
<td>19</td>
<td>14</td>
</tr>
</tbody>
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| System         | Stocktrax                     | Stocktrax                 | Stocktrax                         | HQSCAN & HSE scanning application (latest version 2014) | VS HSE                                  | VS HSE                           |

| File Transfer  | MCL                           | MCL                       | MCL                               | MS ActiveSync                          | MS ActiveSync                           | MS ActiveSync & HRF software     |

| Supplier       | Zetes                         | Zetes                     | Zetes                             | HQ Software                            | Heavey RF                               | ??                              |

| Handheld Device| Symbol                        | Motorola MC3190           | Honeywell Dolphin6500             | Motorola MC55A                         | PSION Workabout PRO                     | PSION Workabout PRO             |

| Printer        | Zebra                         | Zebra 430i                | Zebra 430i                         | Zebra 430i                            | Zebra 430i                              | Zebra 430i                       |

| Card software  | Bartender                     | Bartender & Card S Vision | Bartender                          | Card S & Card studio                   | Card 5 v 7.7                            | Card 5                           |

| Stock and Non-stock | N                             | N                         | N                                 | Y                                   | Y                                     | Y                               |

| Multi location in single files | N | Y | N | Y | N | Y |


<table>
<thead>
<tr>
<th>Info on Card</th>
<th>Product</th>
<th>Product</th>
<th>Location</th>
<th>Product QTY</th>
<th>Product QTY</th>
<th>Product</th>
</tr>
</thead>
</table>

**Note:**
Label used not card. Replenishment qty keyed in each time by operative after physical check of each bin.

**Notes:**
There is an additional scanning solution in MGH which is used to scan but which prints out a picklist which is keyed into ARAN. The handheld devices are DOS based but replacements have been sourced recently. In UHG the replenishment quantity is keyed in by the operative after a physical check of the stock level in a bin.

KGH Load the data into aran, then print the picklist from aran. Amendments are made to a file produce by stocktrax removing stockouts or low stocks. This excel picklist is then sorted in receiving location shelves/bay order, the stock is picked to shelf for ease of put away.

In the DML DNE & DML-ERHA the delivery locations are set up as storage locations on the SAP system. The product replenishment quantity is stored in MRP2 master data therefore replenishment quantity data is not required on the label. It should be noted however this will not be available in NDC as stocks are treated as consumed all issues are by of direct charge to cost centre not stock transfer to storage location.
In 2015 HSE sought a single solution which must be able to take basic information from a KANBAN card i.e. warehouse/plant, customer ref, material code, replenishment quantity and add fixed information which will vary by region to produce output files. While the information on the POU card will be standard from a scanning viewpoint the output file content and format will vary by region.

**Functional Scope**

- **Handheld** scanning devices
- Scanning & integration **software**
- Communication **docking cradles**/ports or wireless comms capability
- **Charging equipment**
- Installation and training
- Hardware **maintenance** / licencing (3yrs)
- Software **licencing** (3yrs)
- Ongoing **support** (3yrs)
- Barcode card **printers** and related consumables
HSE POU Barcode Scanning Features

Barcode Properties
2d Data Matrix
ECC 200 Symbology

HSE POU Barcode Information
1. Product NDC SAP Code
2. Product NDC SAP Description
3. Replenishment Quantity
4. Max Quantity
5. Bin
6. Cost Centre
7. Location

Hardware – Datalogic Handhelds (c. 32)

Software – SCANPOINT by Heavey RF
HBS Logistics POU Barcode Labels

Customer: A Surgical Ward 3rd Floor
Cust/Loc Ref.: MHM859
Plant/WH: SW06
Product Code: 12DG999
Replenishment Qty: 20

Product Description:
XXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXX

FRONT

Replenishment Required

Customer: A Surgical Ward 3rd Floor
Material Code: 12DG999
Replenishment Qty: 20

Product Description:
XXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXX

BACK
Benefits

POU Replenishment without Scanning

• The user must find the product on a pre-printed form then write down the quantity required (there can be 10-20 pages of product to search in some locations).

• When the form is completed the user posts the form to Procurement. Procurement take form and open up a reservation for the particular cost centre.

• Each product requisition must be entered into the stock management system (duplicate data entry). The can be up to 200 products to be input per cost centre.

• Fragmented processes, difficult to measure, manage or improve.
Benefits

Scanning over Manual Replenishment

- Less manual intervention means **fewer POU staff** are required to manage a set number of locations.

- **Elimination** of the need for **pre-printed stock listing** and the related effort required to maintain them.

- Reduced **lead times** and **stock holding**.

- Improved customer service by enabling **faster rollouts** & faster **realisation of savings**.

- **Reduced** requisitioning **errors** and subsequent cost of correction.

- Increased **customer confidence**.

- Improved **supply chain integration**, better information, **CRM** & **KPIs**
Benefits

Estimated Financial Benefit of Scanning

- It is conservatively estimated that approx. **0.6 WTE’s saved per €10m** of stock throughput when barcode scanning is used at POU.

- The logistics strategy has targeted an additional €40m of stock throughput to be covered by POU using barcode scanning.

- If fully rolled out the benefit of scanning at POU would give rise to a direct benefit of approx. €72k per annum (direct WTE benefit).

- The total cost is estimated at €122k which equates to a return on investment of approx. 175% over 3 years and a payback period of approx. 20mths.
IFMS

- Part of Finance Reform Programme
- DG’s No. 1 Non-Clinical Priority
- Includes Stabilisation Project(s)
- Operations Excellence

Standardisation – Single Master Data - Unique Identifiers
% of MM Spend Routed Through GL - ALL Cost Centres

Visibility – Control - Compliance
GS1 Barcoding & HSE Procurement

<table>
<thead>
<tr>
<th>Bin Location Identification</th>
<th>Product Identification</th>
</tr>
</thead>
<tbody>
<tr>
<td>• POU</td>
<td>• Unique Code (Brand Owner)</td>
</tr>
<tr>
<td>• AIDC</td>
<td>• Increased Transparency</td>
</tr>
<tr>
<td>• 30% Reduction in Stock</td>
<td>• Reduced SKU’s (100,000)</td>
</tr>
<tr>
<td>• 7% Reduction in demand</td>
<td>• NDC On-boarding</td>
</tr>
<tr>
<td>• &gt;10% Clinical Time Saving</td>
<td>• Track &amp; Trace (Regulations 2020)</td>
</tr>
<tr>
<td></td>
<td>• ERP Master Records</td>
</tr>
<tr>
<td></td>
<td>• ITT - Compulsory Product Information GTIN</td>
</tr>
</tbody>
</table>
Call to Action for Suppliers

• **Standardisation is key**
  ✓ One voice for health
  ✓ One unique identifier
  ✓ One product file/master data

One standard

• **UDI Regulation is coming in 2020**
  ✓ The time to act is now!
  ✓ UDI barcode required on product packaging
  ✓ Product data to be published to EU database

• **HSE needs support of Suppliers to be UDI/GS1 compliant**
  ✓ UDI/GTIN and associated data requested in tenders
  ✓ UDI barcode on product packaging (each and box)
Thank You