EDI for accuracy and efficiency between partners in the Healthcare supply chain

Scott Mooney, Vice President Distribution Operations
McKesson Corporation
GS1 Global Healthcare Conference
Noordwijk-Amsterdam
March 2019
Today’s speakers

• Holger Clobes, Internal Senior Consultant eCommerces, B.Braun Group, Germany

• Dennis Black, Global Regulatory Operations, BD, US

• Greg Magrane, eCommerce Project Manager, St. James’s hospital, Dublin, Ireland
Our agenda

• 5 min intro – Scott
• 15 min presentation – Holger
• 15 min presentation – Dennis
• 15 min presentation – Greg
• 20 min Q & A from the audience – Facilitated by Scott
• 5 min close – Scott
An important EDI Announcement

- This morning, **GS1** and **OpenPEPPOL** signed a memorandum of understanding in which they:
  - **Acknowledged the important roles played** by their respective organisations in supporting electronic business.
  - **Committed to developing a closer working relationship** as they both recognise the value of cooperation in the field of supply chain standards and technologies directly or indirectly related to their relative scopes of work.
  - **Agreed to work towards positive endorsements** of each other’s core technologies, standards and certifications and will promote their mutual recognition to third parties.

OpenPEPPOL enables businesses to easily trade electronically with public sector organisations in pre-award and post-award procurement processes.
For questions from the audience we will use Slido

You can post questions at any time throughout the session!

1. Go to slido.com
2. Enter #GS1HCNoordwijk
3. Select the session you are in
4. Go to “Questions”
5. Make sure you enter your full name so that if the questions you’ve raised are not selected, the GS1 team can revert to you
6. Post your questions!
PANEL III - EDI FOR ACCURACY AND EFFICIENCY BETWEEN PARTNERS IN THE HEALTHCARE SUPPLY CHAIN

EDI @ B.BRAUN
Holger Clobes
Amsterdam NL / GS1 Healthcare Conference 2019, 12 February 2019
## Agenda

1. B.Braun Company
2. EDI Process
3. Benefits and Obstacles
4. Upcoming Requirements
5. Hybrid EDI
6. Future of EDI
7. Additional Information
B. Braun Melsungen AG

**SALES**
6,788.9

**EMPLOYEES**
61,583

**INVESTMENTS**
969.2 EUR million

**COUNTRIES**
64

**CORPORATE SOCIAL RESPONSIBILITY PROJECTS**
239

**RESEARCH AND DEVELOPMENT ACTIVITIES**
352.0 EUR million
We have subsidiaries in 64 countries.
Worldwide EDI rate B. Braun
(Basis Orders, Standardized EDI)
Orders rates in Europe and Asia (Basis: 2018)
A lot of the EDI traffic is done by solution provider. But starting with new technology, hybrid EDI and specially for invoice (B2B/B2G) direct communication increases. Also more and more legal requirements are coming up.
Benefits of EDI

- Cost saving
  - More time for employees to do other important tasks
- More process quality
  - Less errors are also related to the other topics
- More speed in process
- Reduce effort for routine tasks
- More transparency in the process
Obstacles of EDI

- Master data challenges
  - Incorrect, not accurate, not up to date or not the same master data on both sides
- No use of identification standards
  - such as GLN or GTIN
- Benefits are not clear for decision makers
- Too many message based standards
  - (EANCOM, GS1_XML, CEFACT_XML, UBL, ….)
- Most standards and solutions are sector related
- Dependency from solution providers
- Unclear of future of EDI
  - New technologies (web Services, API, Block chain, …)
Upcoming requirements

- Increase master data quality (exchange)
- Increase use of order to cash process
- New “costumer to contract process” with EDI → (eTendering, Peppol: pre award process)
- Exchange of price data
- Interoperability between different standards
- Use new technology in parallel
- Standardize content of different standards
- One organization for different standards
- Legal requirements will be driver
Hybrid EDI – Example ZUGFeRD

- Hybrid EDI includes a structured file (Standards like: CEFACT_XML, EDIFACT, UBL_XML , . . . ) in a PDF document
- Company’s who are able to work with the EDI file can do it, the others can work with the PDF document
- For very complicated processes (e.g. checking of invoices in detail) it is not necessary to it with EDI for you can use the PDF in addition

⇒ More information: https://www.gs1-germany.de/gs1-solutions/edi-praxis/zugferd/
Future – What will be the way forward for EDI

One Standard Organization = GS1

Different Technologies for Data Exchange
- EDI-Classic (as2, …)
- WebEDI
- Hybrid EDI
- APIs (WebServices, …)
- Block chain

Different Standards
- EDIFACT / EANCOM
- UN/CEFACT_XML
- UBL_XML
- JSON
- ANSI_x12
- GS1_XML

One Harmonized Semantic Data Model

Strong User Community

Partnership with other Standard Organizations
More Information about EDI on website of Global Office
Thank you for attention!

Holger Clobes
Internal Senior Consultant eCommerce

B. Braun Melsungen AG
Global CRM Group

Phone:
49 (0) 5661-71-4581
49 (0) 561-76637-25

Cell Phone: 01752928023
eMail: holger.clobes@bbraun.com
Internet: www.bbraun.com
EDI for Accuracy and Efficiency between partners in the Healthcare Supply Chain

GS1 Healthcare Meeting: Noordwijk Netherlands

Dennis Black

Special thanks to Karen Conway and GHX for sharing metrics and insight on the US EDI Market. The metrics on adoption presented in this presentation were provided by GHX.
US EDI Market for Medical Devices

- It is estimated that 85% of Medical Device expenditures in the US are purchased via EDI.
- In many cases the industry has moved from individual partner-to-partner transactions to a common platform.
- More than 600 suppliers and 4,100 hospitals participate in EDI via a single company.
US EDI Market: Device Types

- Disposable/Consumable medical devices are ideal for EDI
- Implants and other products selected by physicians are increasingly purchased via EDI
- Capital equipment is less likely to be purchased via EDI
- IVDs, RUO, and other lab products may be purchased direct (depends on the category)

EDI is best for repeatable transactions without variable rules or conditions.
We have some history and experience using standards in EDI Transactions.

Sunrise Dates

2010 GLN Sunrise

“Adoption of GLN in Healthcare by 2010”**
Global Location Numbers (GLNs)**

- GLNs are assigned by location owners
- GLN hierarchy is defined and maintained by location owners
- GLN Registry for Healthcare® is used to facilitate correct location identification
- GLNs are used in appropriate business transactions and processes between trading partners

*December 2010
**Unique Location Identifiers

2012 GTIN Sunrise

“Adoption of GTIN in Healthcare by 2012”**
Global Trade Item Numbers (GTINs)**

- GTINs are assigned to healthcare products
- GTINs are marked on appropriate packaging levels
- GTINs are scanned at points-of-delivery to enhance clinical process
- GTINs are used in business transactions
- GTINs are used in product returns and recalls
- GTINs are registered in a GS1 GDSN-certified Data Pool

*December 2012
**Unique Product Identifiers
We have some history and experience using standards in EDI Transactions.
EDI/GS1 Success

- September 15, 2008, Seton Family of hospitals began purchasing products from BD via EDI using GS1 standards.
GLN Adoption: Stable Adoption Levels

Since 2016:
• 10% increase in transaction volume
• 15% increase in both provider and supplier organizations
GTIN Adoption: Increasingly Rapidly

Since 2016:
• 16% transaction volume increase
• 84% increase in providers; 15% increase in suppliers
Benefits in using GS1 Standards in EDI

Benefits

- No Unit of Measure EDI Errors
- No Confusion or Errors on Ship-to Locations
- Perfect Alignment on Contract Eligibility
- No Synchronization “Work Around” Processes
- One Source for Product Data
- Clarity on Manufacturer ID
- Provides accurate descriptions (expiry, clinical attributes…)

• The benefits haven’t changed since 06/17/09
Challenges with adopting GS1 Standards in EDI

- Inability of older Healthcare Provider ERP Systems and MMIS to “hold and process” the standards
- Next Generation (cloud-based) ERPs much more “standards ready”
- The will to align data, test, and validate transactions
- GHX will be introducing what it calls “intelligent business rules” to aid in the process
Increasing the use of GS1 Standards in EDI

- More "Validated" GLNs
- Commonality in GLN Hierarchies
- GTIN/Item Master: Reconciliation and Clean-up
- Will Power

Clinical use and POC scanning of GS1 Standards seems to be further enabled by holistic supply chain usage.
UDI Demonstration Project - Information Flow
Breaking the Mould for Purchase to Pay at St. James’s Hospital

Greg Magrane
St James’s Hospital

- 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
- Robotic Dispensers installed in pharmacy 2017
- Electronic Patient Record (Go Live Oct 2018)
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

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>Master Data Management and Structured coding</td>
</tr>
<tr>
<td>2003/4</td>
<td>Haemophilia Track and Trace project commenced GS1 Datamatrix</td>
</tr>
<tr>
<td>2008</td>
<td>Wireless Kanban for Ward stock management</td>
</tr>
<tr>
<td>2011</td>
<td>First hospital to pilot the Surgical Instrument track and trace programme using GS1 Standards</td>
</tr>
<tr>
<td>2012</td>
<td>eProcurement project (Standardised coding, data and messaging)</td>
</tr>
<tr>
<td></td>
<td>GTIN GLN GS1 XML 3.0</td>
</tr>
<tr>
<td>2014</td>
<td>1st Sep 2014 First Supplier to GoLive - Cruinn</td>
</tr>
<tr>
<td></td>
<td>Scan for Surgery Go Live</td>
</tr>
<tr>
<td></td>
<td>RFID tracking of Precious samples (Live)</td>
</tr>
<tr>
<td></td>
<td>Communications and meetings with Top 50 Suppliers</td>
</tr>
<tr>
<td></td>
<td>Next Projects: Rollout of Scan for Surgery, RFID tracking of patients, staff, assets</td>
</tr>
<tr>
<td>Today</td>
<td>Full Traceability to EHR (roll out of scan for surgery)</td>
</tr>
<tr>
<td></td>
<td>Working towards implementation of eProcurement with all Suppliers</td>
</tr>
<tr>
<td></td>
<td>Target to be fully compliant to GS1 Standards</td>
</tr>
</tbody>
</table>

**FUTURE**

- Full Traceability to EHR (roll out of scan for surgery)
- Working towards implementation of eProcurement with all Suppliers
- Target to be fully compliant to GS1 Standards
On-going Projects

Instrument T&T

Scan4Surgery

Haemophilia T&T

Automatic tracking (RFID)

eProcurement

Others...

SJH Healthcare Campus

implementing GS1 standards across the hospital campus
Supported by Regulation for medical devices and pharma
Drivers for Standardisation

Obstacle
- Lack of standardised product identification (and unit of measure)
- Lack of standardised location identification
- Multiple product catalogues
- Inaccurate and inefficient procurement practices

Solution
- Use GS1 Global Trade Identifier GTIN
- Use GS1 Global Location number GLN
  - Who we are, Who you are, Where to deliver
- Single Product Catalogue NPC
- Automated messaging using EDI that incorporate standard identifiers GTIN, GLN
  - Purchase Order (Starting point)
  - Advance Shipping Notice
  - Receiving Advice Notice
  - Invoice
The Correct Association of the UOM is Crucial

The GTIN changes for each packaging level

All levels of packaging from the individual unit to the case should be regardless of whether it is sold commercially
GDSN and EDI – Proof of Concept Overview

- Suppliers (J&J, Medtronic, Cruinn Diagnostics, Cook Medical)
- Sample of Products per Supplier (GTIN, GLN)
- Standardised data = NPC
- Standardised EDI messaging (GS1 XML)
  - Order (PO), Advanced Shipping Notice (ASN), Receiving Advice Note (RAN), Invoice (INV)
- Full integration into backend ERP (SAP)
- Key SJH Partners: GS1, GHX
“The Perfect Order”

**TRANSACTIONAL DATA**

1. Supplier publishes product data to NPC
2. Hospital subscribes to receive published data
3. eProcurement (GS1 XML)

- a) Purchase Order (PO)
- b) Advance Shipping Notice (ASN)
- c) Receiving Advice Notice (RAN)
- d) Invoice (INV)

**MASTER DATA**

- GLN

**PIM**

- Product synchronisation
- NPC (datasync.ie)
Awards, Accolades and Recognition

• SJH – Best Conceptual Business Design, GS1 Global Healthcare Conference
• Cruinn Diagnostics – Innovation in Supply Award, Irish National Procurement Awards
• Cruinn Diagnostics – Supplier of the Year Award, National Procurement Awards 2014
• SJH – E-Procurement Excellence Award, National Procurement Awards 2015

All achieved by

• Standalone hospital, no support for this project from government departments or agencies
• No mandate to suppliers / trading partners
• No budget
eInvoicing at a National Level

- HSE HBS Payment service target is to process 90% of all HSE invoices electronically by 2020

“Member States shall ensure that contracting authorities and contracting entities receive and process electronic invoices which comply with the European standard on electronic invoicing”

European Directive 2014/55/EU

- Compliance
- Business intelligence
- Process efficiencies
- Reduced administration
- Environment
- Better access for SMEs
- Digital Agenda
Lessons Learned, Recommendations

- Selection of EDI solution provider (change of EDI provider)
- Standardised File Formats & Messages
- Relationship with Suppliers
- Suppliers – are your GTINs allocated to and barcoded on each packaging hierarchy?
- Testing Strategies
- Buy-In from all stakeholders
- Suppliers weren’t ready and many are still not ready
- Data matching between hospital and supplier is not easy (product codes and hierarchy)
- SJH First Irish hospital to lead on this but many suppliers are waiting for a national approach
Steps to Encourage Suppliers

Become involved by

- making the commitment
- committing resources to the project
- engaging with SJH project team
- joining GS1 (if not already member)
- publishing product data to NPC
- contacting SJH and collectively assessing EDI capabilities
Thank You !!

Greg Magrane, St. James’s Hospital

gmagrane@stjames.ie

+353 87 7809 267
For questions from the audience we will use Slido

You can post questions at any time throughout the session!

1. Go to slido.com
2. Enter #GS1HCNoordwijk
3. Select the session you are in
4. Go to “Questions”
5. Make sure you enter your full name so that if the questions you’ve raised are not selected, the GS1 team can revert to you
6. Post your questions!
Scott Mooney
Vice President, Distribution Operations
Supply Chain Assurance
McKesson Corporation
scott.mooney@mckesson.com
www.mckesson.com