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

McKESSON

Today's speakers

- Holger Clobes, Internal Senior Consultant eCommerce, B.Braun Group, Germany

- Dennis Black, Global Regulatory Operations, BD, US

- Greg Magrane, eCommerce Project Manager, St. James's hospital, Dublin, Ireland

MCKESSON

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!**
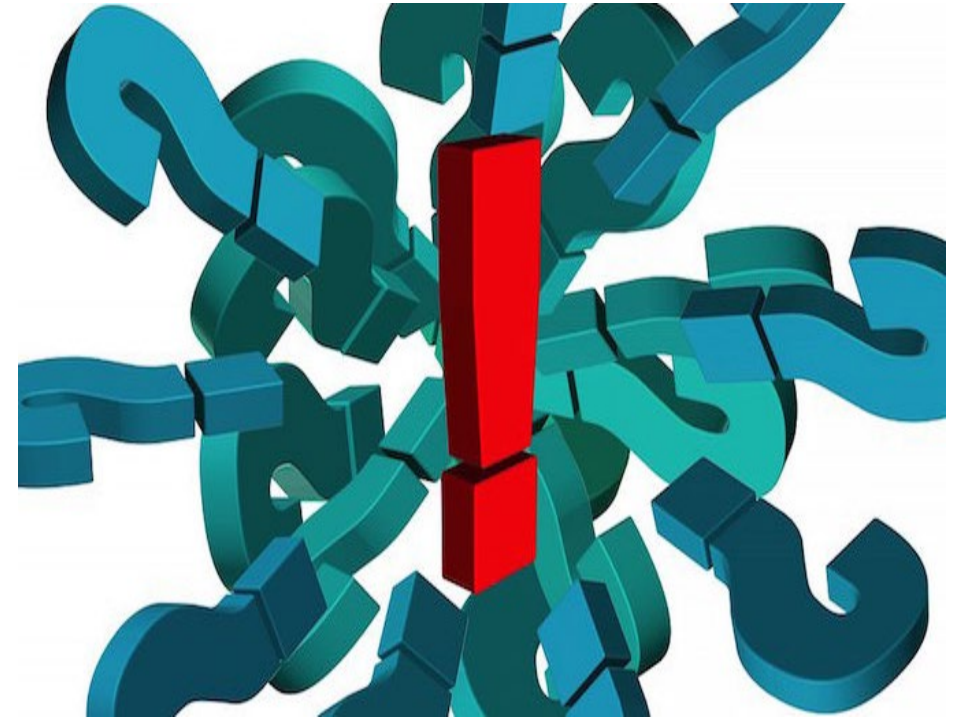
PANEL III - EDI FOR ACCURACY AND EFFICIENCY BETWEEN PARTNERS IN THE HEALTHCARE SUPPLY CHAIN

EDI @ B.BRAUN

Holger Clobes

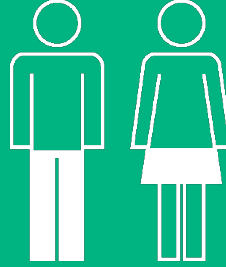Amsterdam NL / GS1 Healthcare Conference 2019, 12 February 2019

Agenda

1	B.Braun Company
2	EDI Process
3	Benefits and Obstacles
4	Upcomming Reqirements
5	Hybrid EDI
6	Future of EDI
7	Additional Informations

SALES

6,788.9

61,583
EMPLOYEES

INVESTMENTS
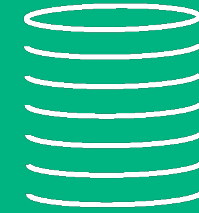
969.2 EUR million

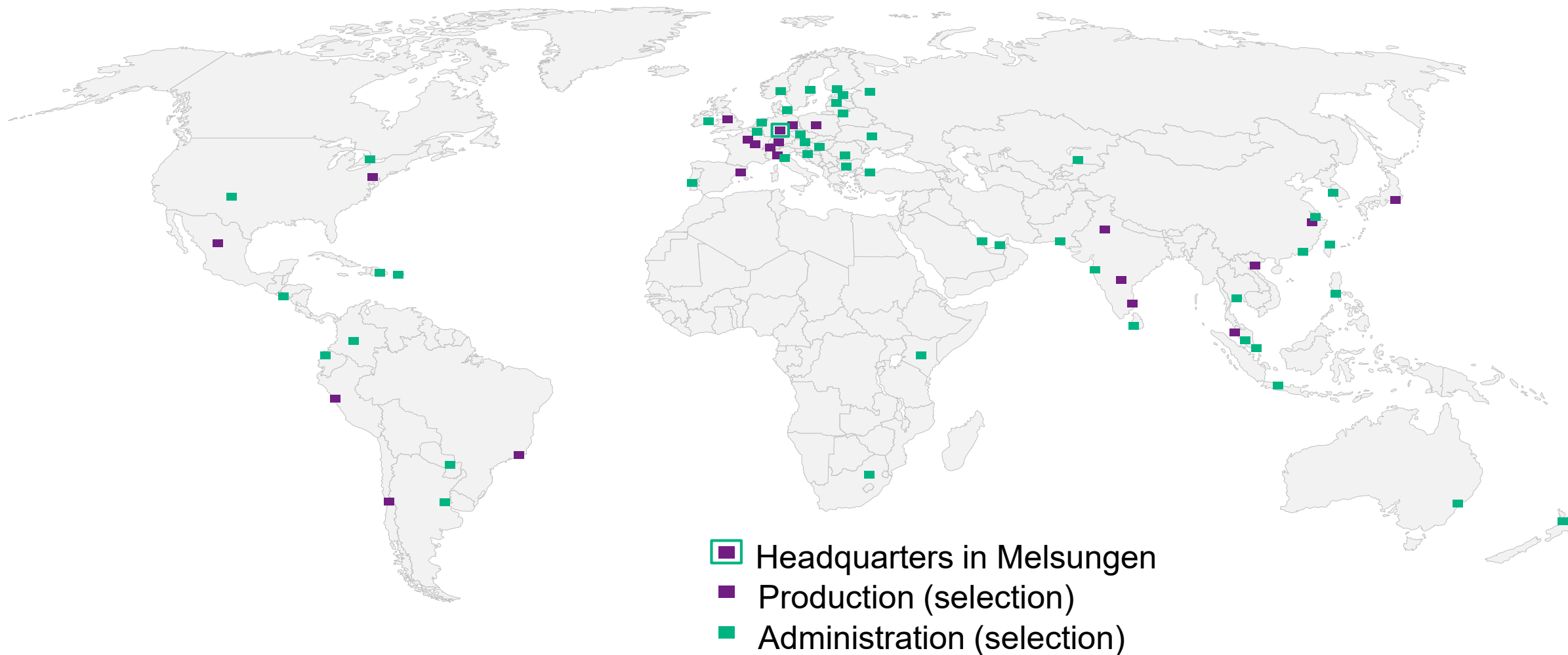B. BRAUN AT A GLANCE

239
CORPORATE SOCIAL
RESPONSIBILITY PROJECTS

COUNTRIES

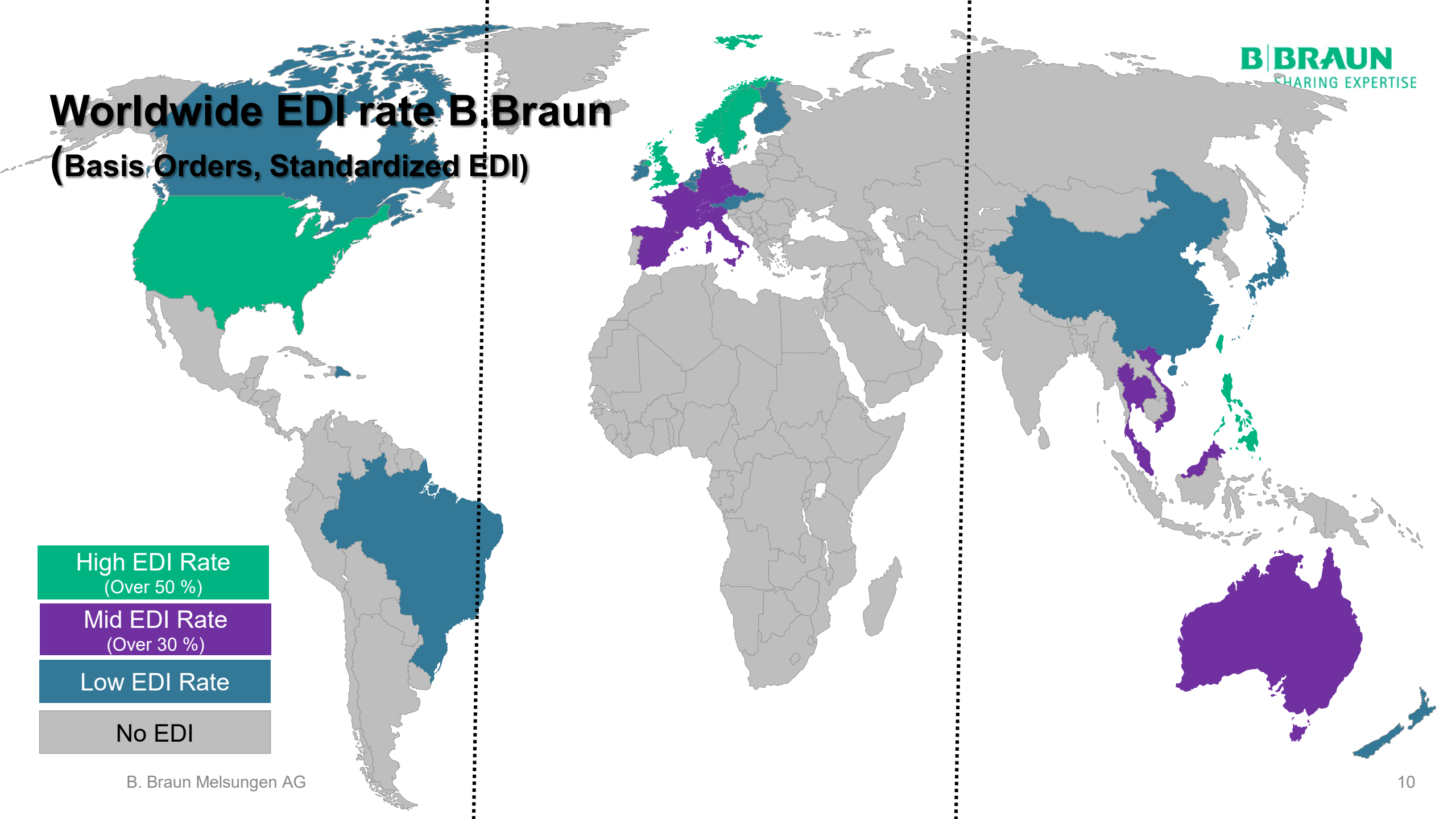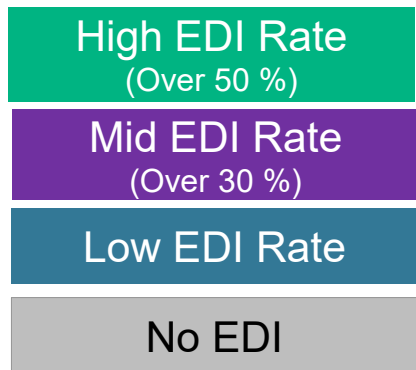64

RESEARCH AND
DEVELOPMENT ACTIVITIES

352.0
EUR million

3

We have subsidiaries in 64 countries.

- ☐ Headquarters in Melsungen
- ■ Production (selection)
- ■ Administration (selection)

Worldwide EDI rate B.Braun
(Basis Orders, Standardized EDI)

B|BRAUN
SHARING EXPERTISE

High EDI Rate
(Over 50 %)

Mid EDI Rate
(Over 30 %)

Low EDI Rate

No EDI

Orders rates in Europe and Asia (Basis: 2018)

Orders Rate Europe

618,380

565,653

23,784

1,262,486
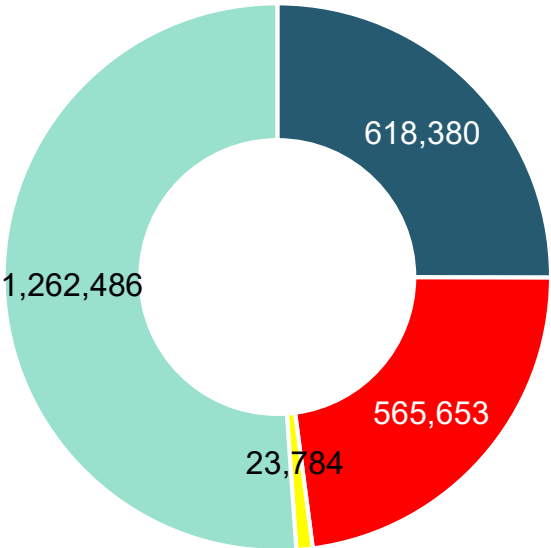
■ EDI ■ OCR ■ eShops ■ Others

Orders Rate Asia

194,805

76,862

1,058,544
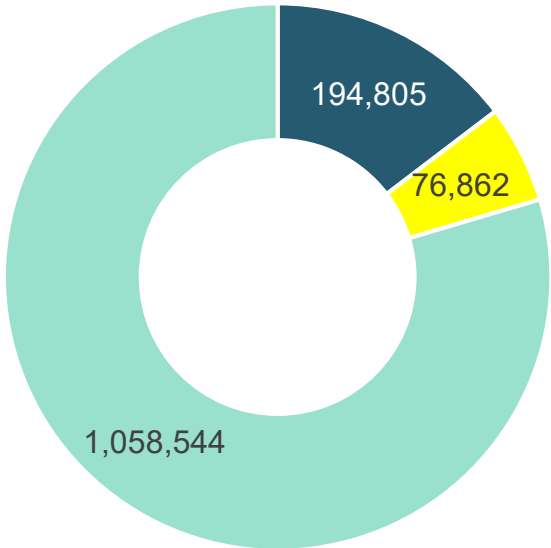
■ EDI ■ eShops ■ Others

Order To cash EDI process -
between B. Braun, providers and customers

B.Braun

solution provider

product catalogue

purchase order

orders response

dispatch advise

invoice

Customer
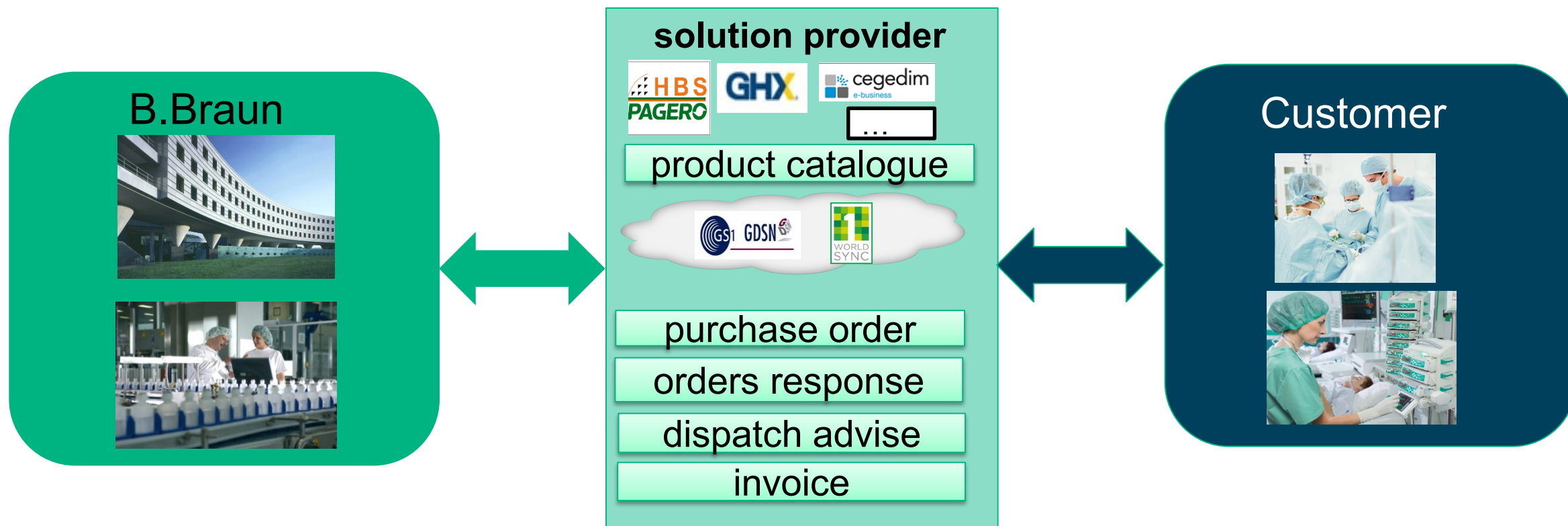
A lot of the EDI traffic is done by solution provider. But starting with new technology, hybrid EDI and specially for invoice (B2B/B2G) direct communication increases. Also more and more legal requirements are coming up.

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

❑ To 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

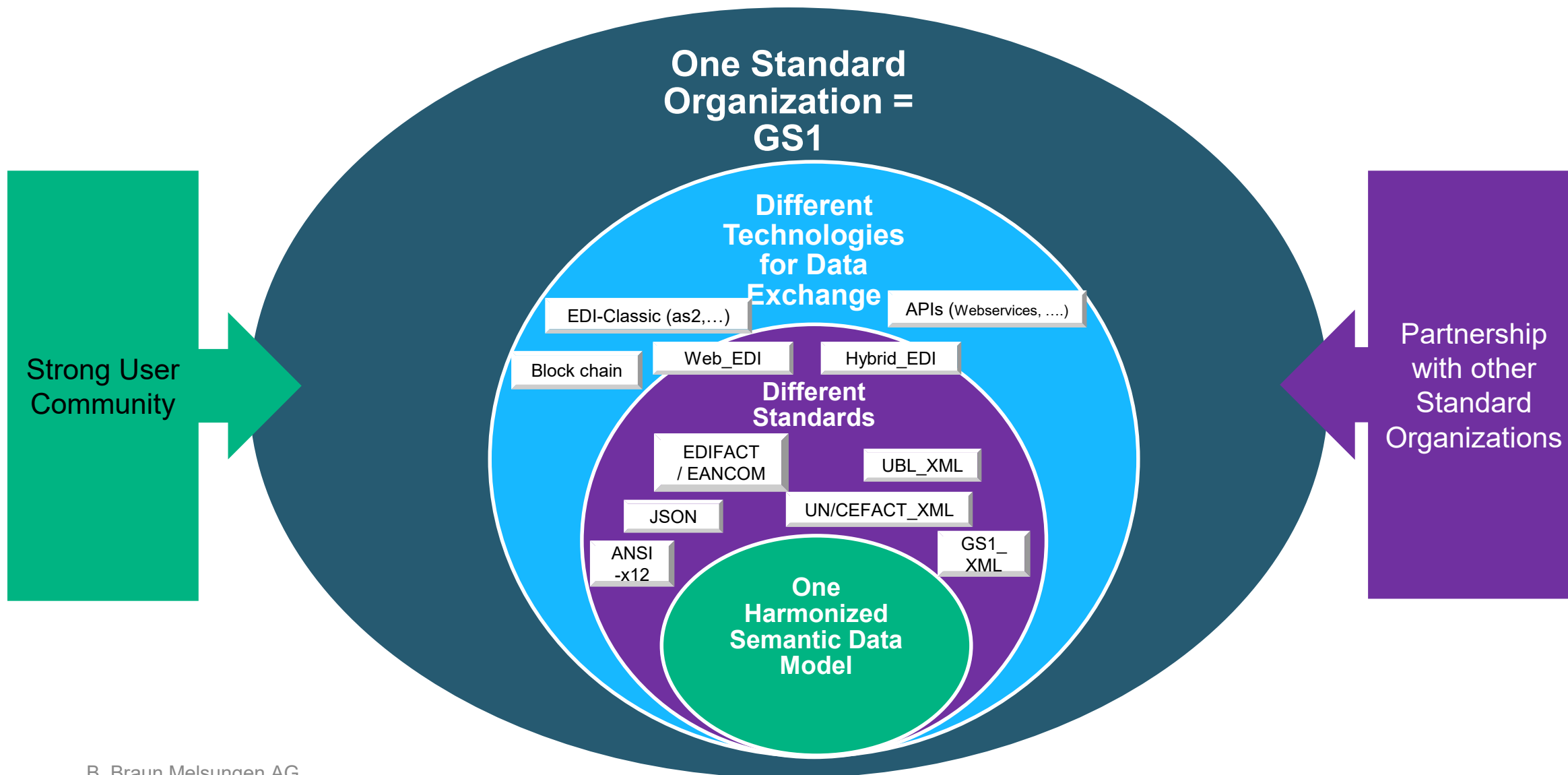- ❑ One organization for different standards

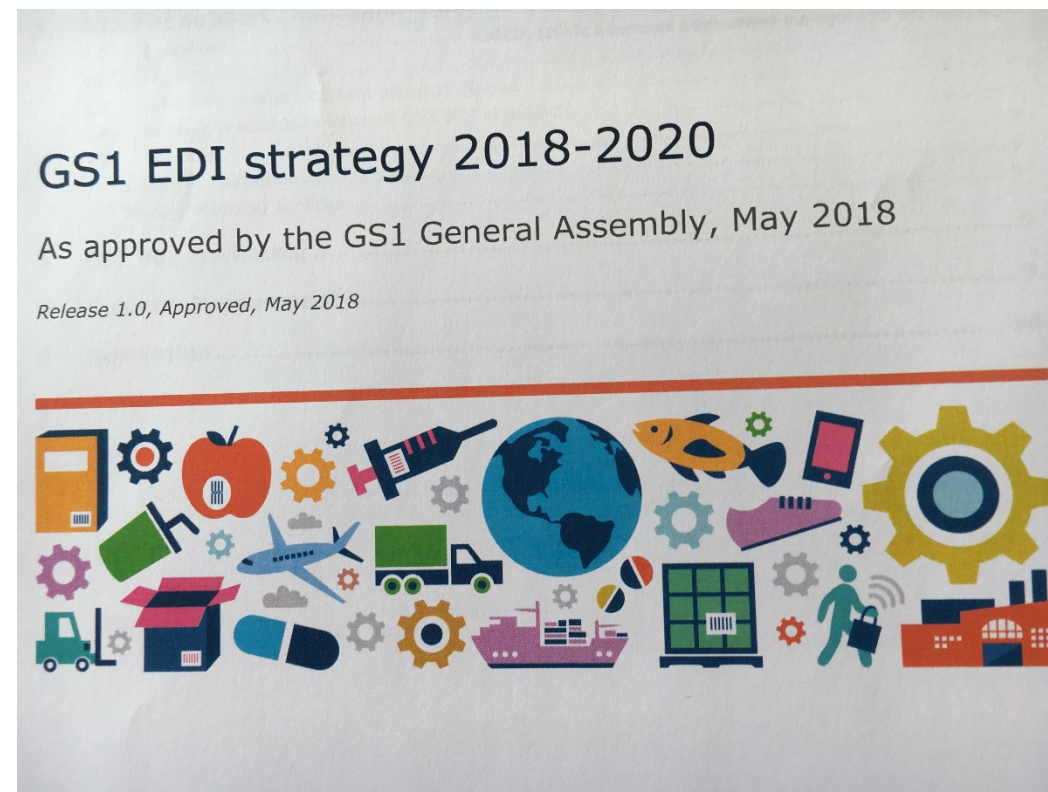- ❑ Legal requirements will be driver

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,…)

APIs (Webservices, ….)

Block chain

Web_EDI

Hybrid_EDI

Different Standards

EDIFACT / EANCOM

UBL_XML

JSON

UN/CEFACT_XML

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

BD

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 that 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.

BD

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.

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

3

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

13

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

GLN TRX by Type

Legend: 850 Order, 855 Order Acknowledgement, 810 Invoice, 856 Advance Ship Notice

GLN Adoption

Legend: Suppliers, Providers, Avg Monthly Transactions
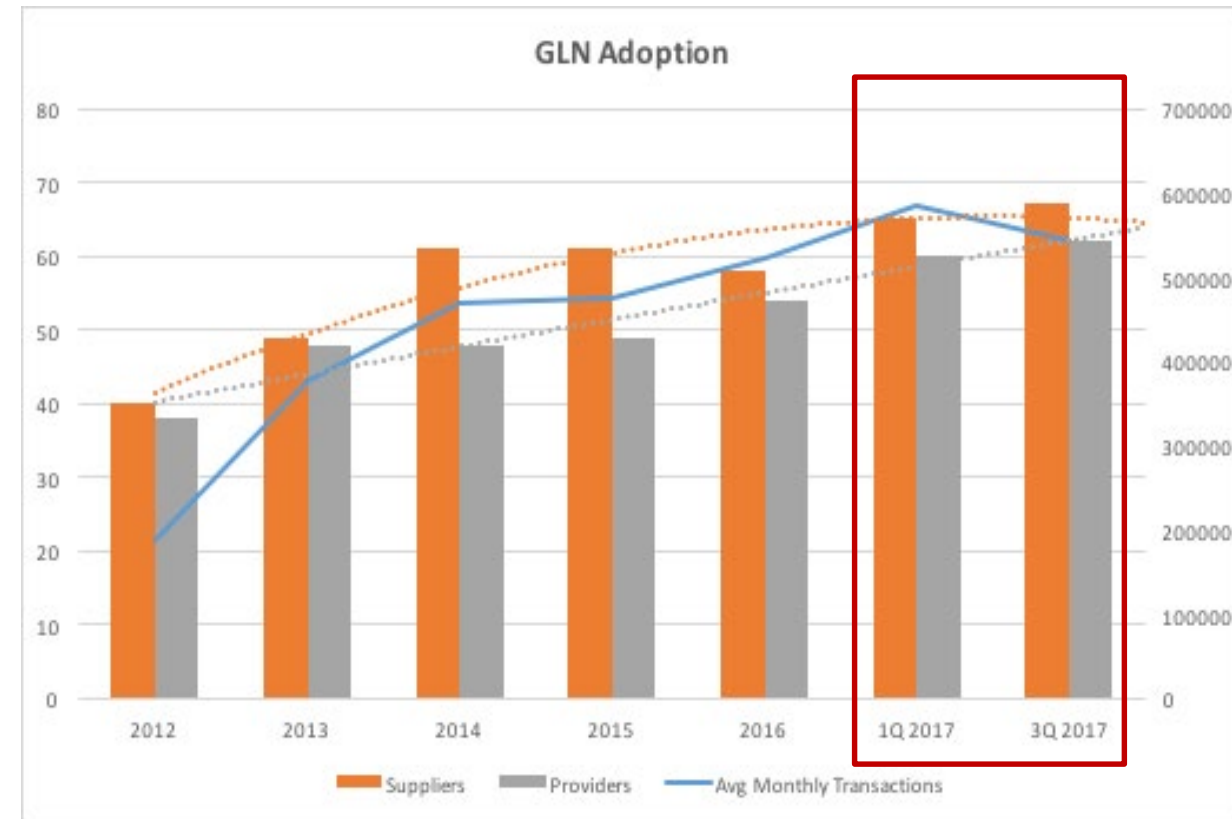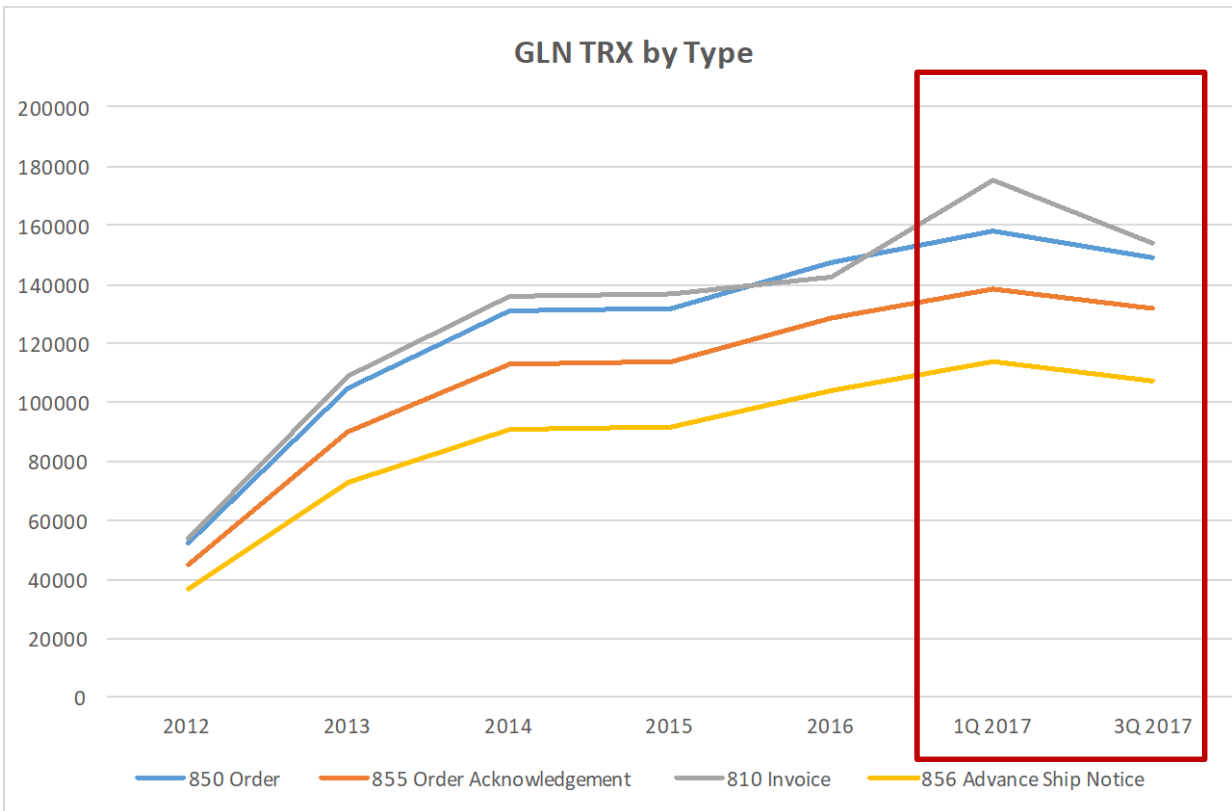
Since 2016:
- *10% increase in transaction volume*
- *15% increase in both provider and supplier organizations*

BD

GTIN Adoption: Increasingly Rapidly
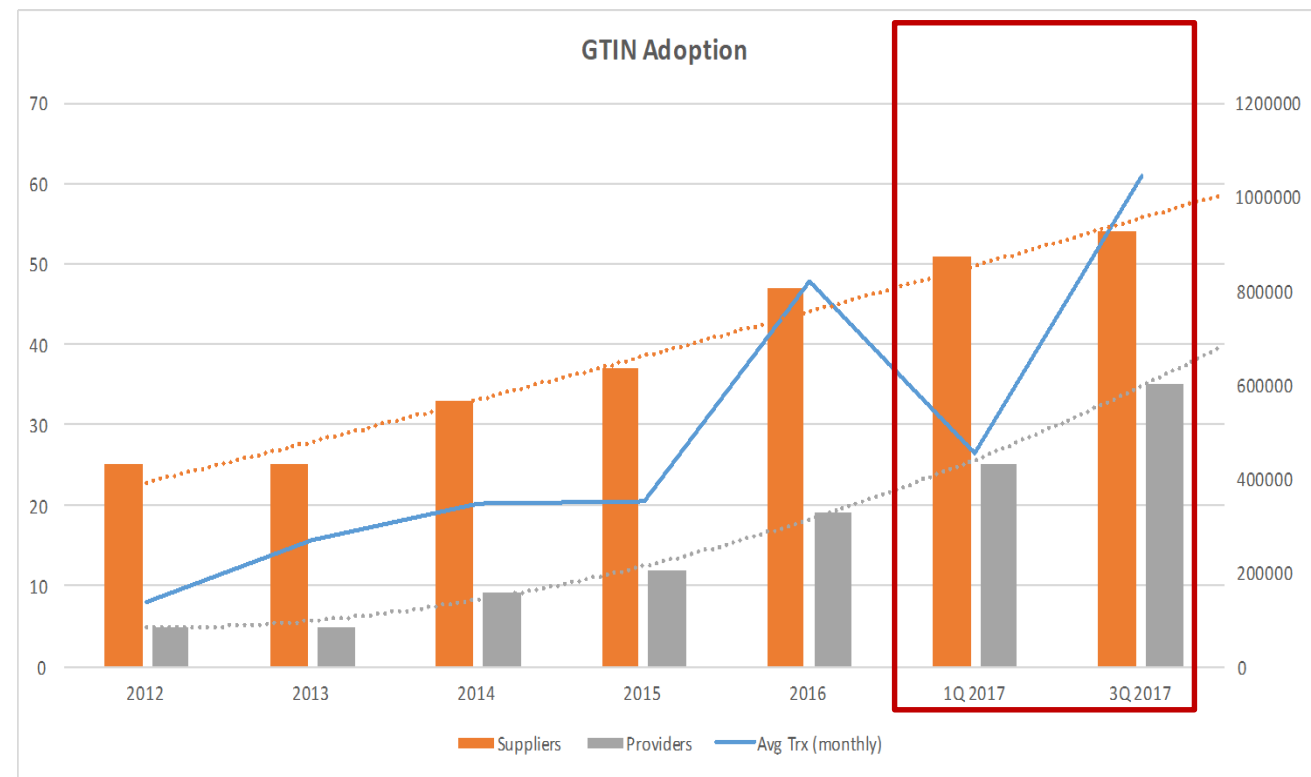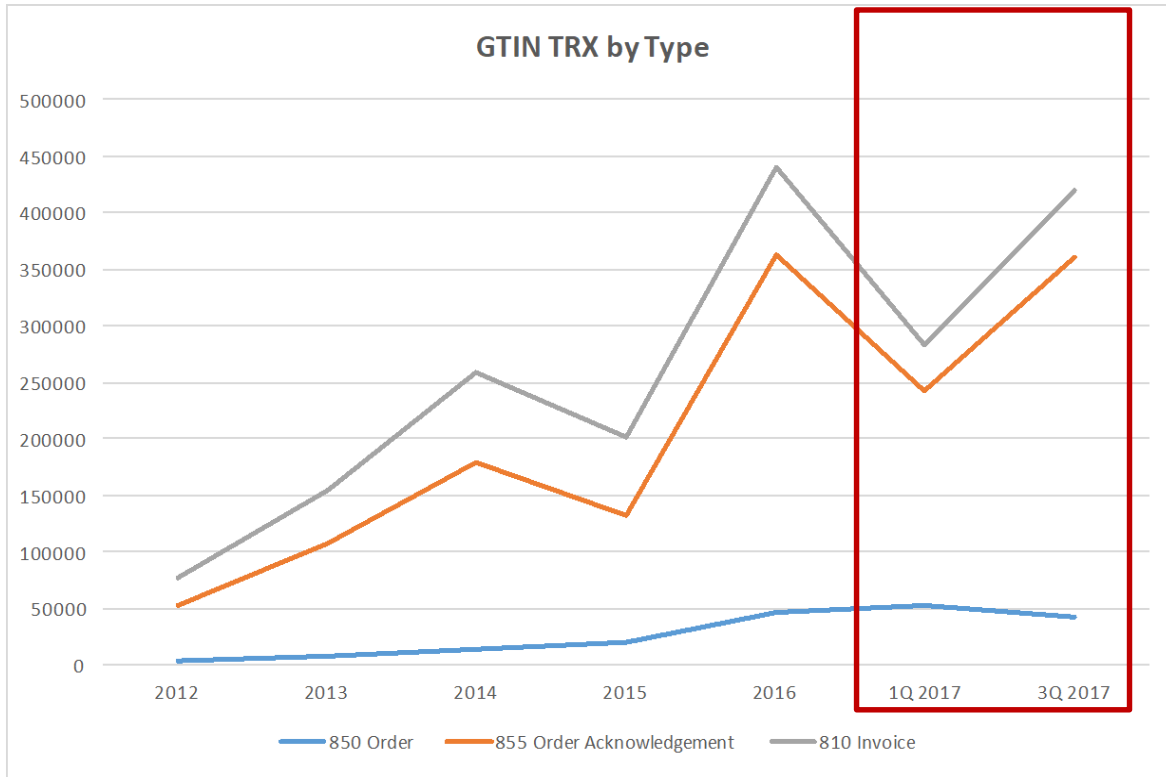
Since 2016:

- *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…)

ASCENSION HEALTH

BD

- The benefits haven't changed since 06/17/09

BD

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.

BD

UDI Demonstration Project - Information Flow
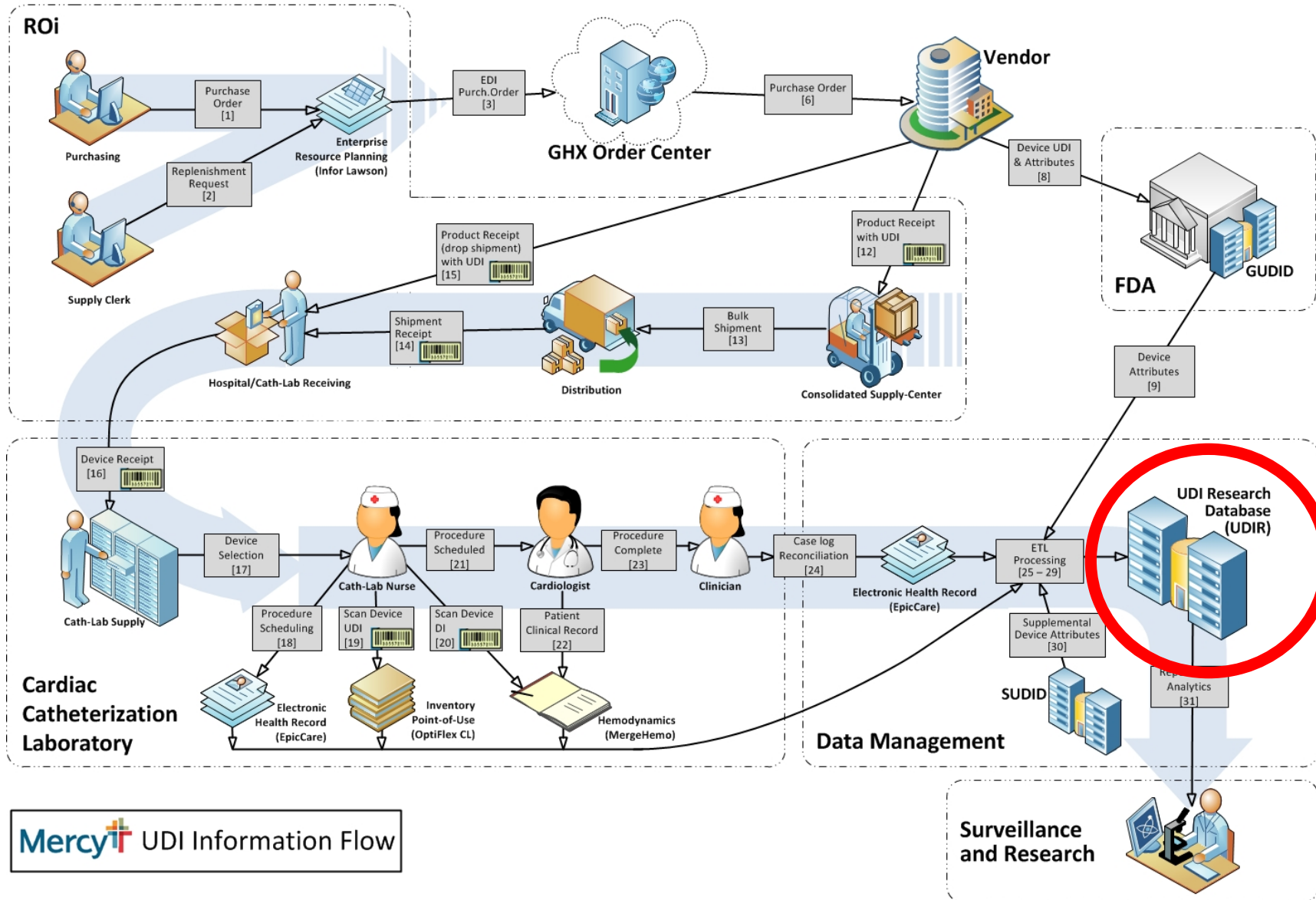
Breaking the Mould for Purchase to Pay at St. James's Hospital

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

NCH

Mercers Institute for Research on Ageing

National Children's Hospital

Business Process Innovation: Implementing GS1 Standards

1995	2003/4	2008	2011	2012	2014	Today	FUTURE
Master Data Management and Structured coding	**Haemophilia Track and Trace project commenced GS1 Datamatrix** **SAP Installed (EPR & GUI)**	**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)** ➢ <u>**Next Projects:**</u> ➢ **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 fully compliant to GS1 Standards**

SJH

ST. JAMES'S HOSPITAL

On-going Projects

Instrument T&T
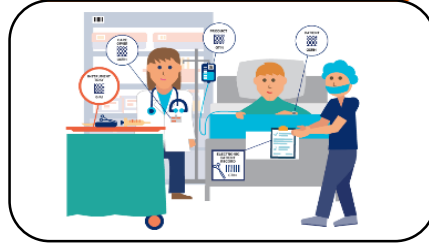
Scan4Surgery
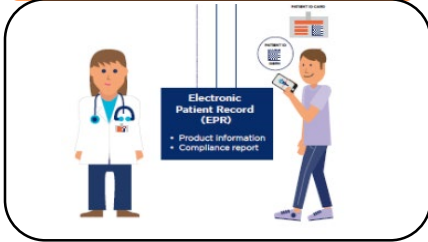
Automatic tracking (RFID)
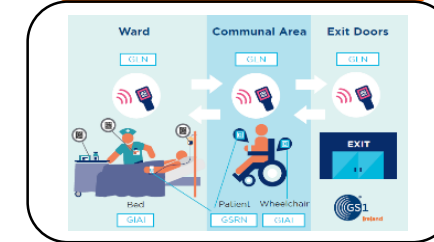
Haemophilia T&T
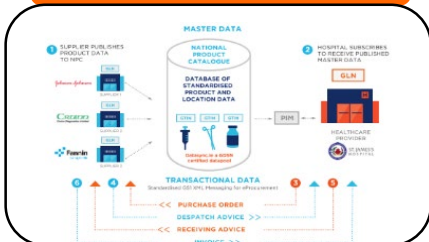
SJH Healthcare Campus

eProcurement

Others…

….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

ST. JAMES'S HOSPITAL

The Correct Association of the UOM is Crucial
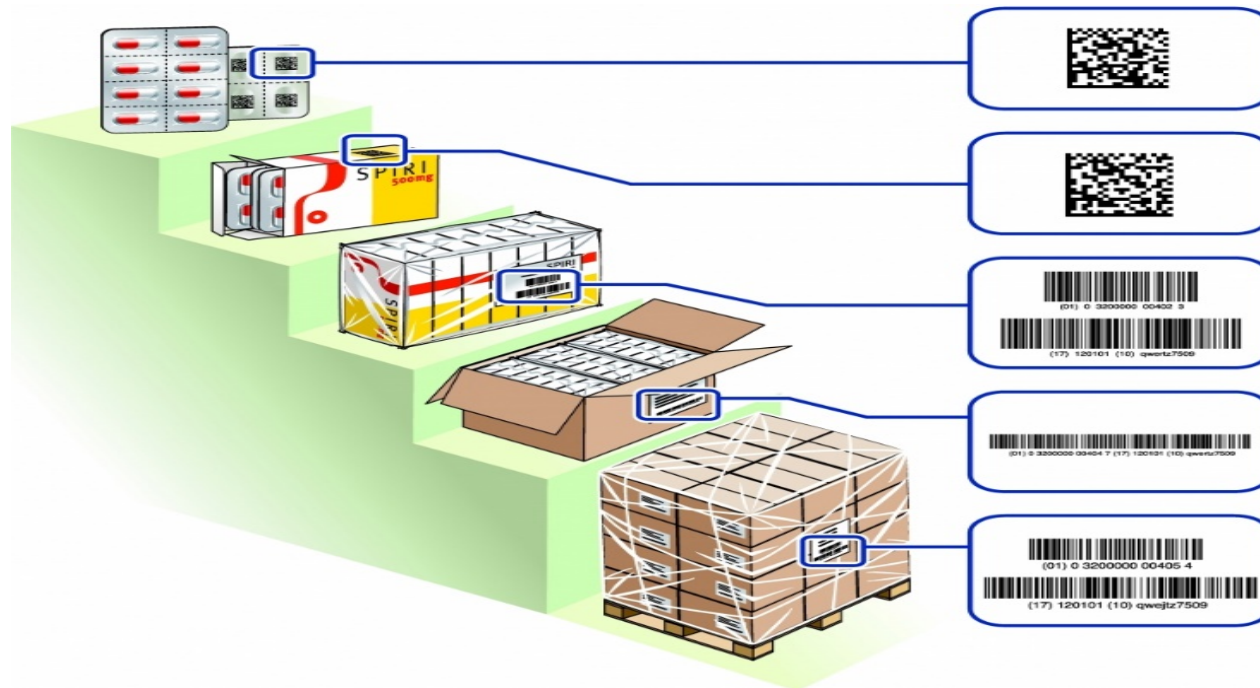
The GTIN changes for each packaging level

Each — GTIN 1
Box/Case — GTIN 2

GTIN (01) 05391234560008
Expiry (17) 151231
Batch (10) 987654321ABCD
Serial (21) ABCD1234

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 (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

3 eProcurement (GS1 XML)

a) Purchase Order (PO)

b) Advance Shipping Notice (ASN)

c) Receiving Advice Notice (RAN)

d) Invoice (INV)

PIM

Supplier

1 Publishes product data to NPC

NPC (datasync.ie)
Product synchronisation

Hospital

2 Subscribes to receive published data

GLN GLN GLN GLN GLN

MASTER DATA

ST. JAMES'S HOSPITAL

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

APRIL 2019 COMPLIANCE DATE: CENTRAL GOVERNMENT
SUB CENTRAL GOVERNMENT OPTION TO POSTPONE APRIL 2020

THERE IS NO REQUIREMENT ON SUPPLIERS IN IRELAND TO SEND eINVOICES TO IRISH PUBLIC BODIES AT THIS TIME

BUSINESSES CAN "CONNECT ONCE AND CONNECT TO ALL"
PUBLIC SECTOR ENTITIES ACROSS EUROPE THROUGH THE PEPPOL NETWORK (PAN EUROPEAN PUBLIC PROCUREMENT ONLINE)

eINVOICING ENABLES COST SAVINGS AND HELPS MODERNISE PUBLIC ADMINISTRATION ACROSS EUROPE SUPPORTING THE MOVE CLOSER TO A DIGITAL SINGLE MARKET

FOR FURTHER UPDATES CHECK WWW.OGP.GOV.IE

Oifig um Sholáthar Rialtais
Office of Government Procurement

eINVOICING
IRELAND | OGP.GOV.IE

"*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

European eInvoicing Directive

eInvoicing – The benefits

Compliance	Business intelligence	Process efficiencies
Reduced administration	Environment	Better access for SMEs
	Digital Agenda	

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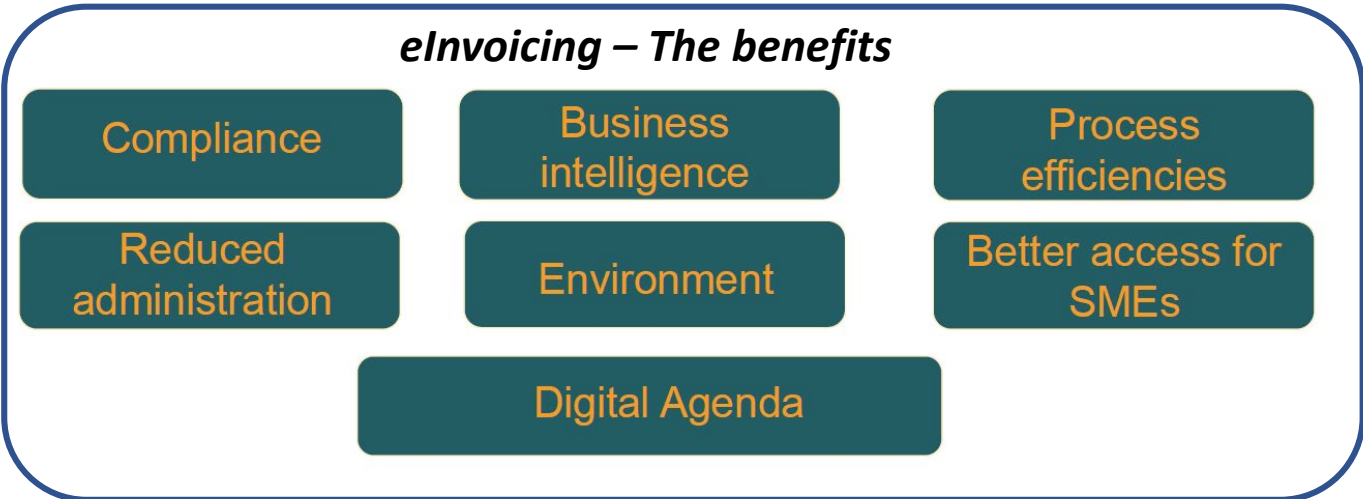
Lessons Learned, Recommendations

- 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!**
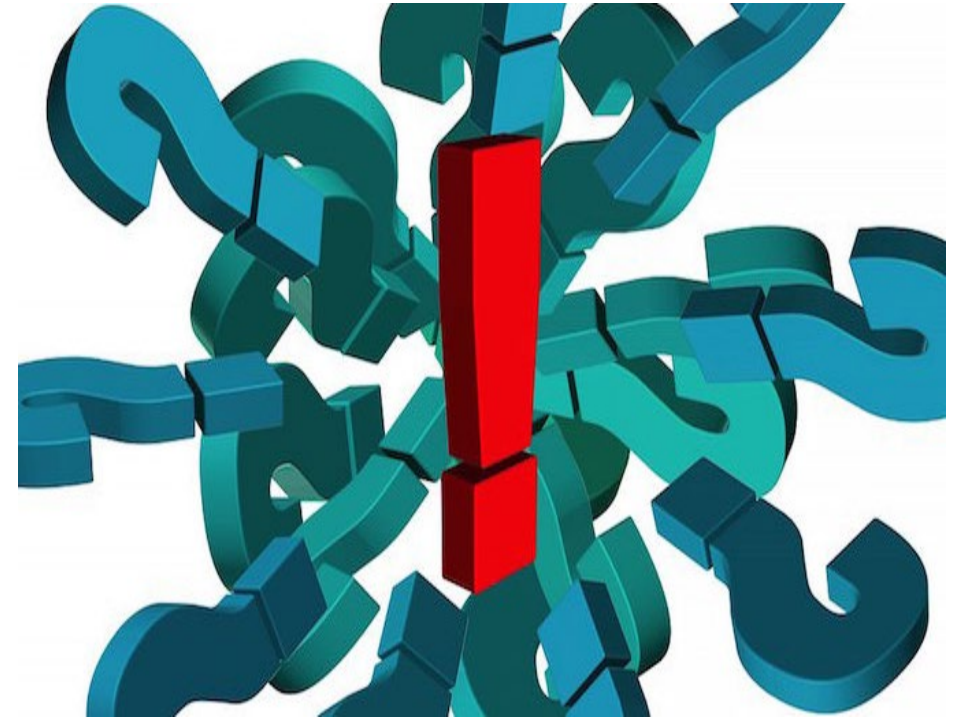
McKESSON

Scott Mooney
Vice President, Distribution Operations
Supply Chain Assurance
McKesson Corporation
scott.mooney@mckesson.com
www.mckesson.com

McKESSON

Moving Healthcare Forward