Cost savings through standards

Welcome!

GS1®

The Global Language of Business

Cost savings through standards

By implementing the Global Traceability Standards for Healthcare (GTSH)

Mr. Justin Bitter Ph.D., Business manager, Bernhoven Hospital, the Netherlands
17th October, 2017

bernhoven

Who is..

Dr. Justin Bitter

- 20 years of experience in hospital settings

- Medical- and business administration background

- Chairman of the Dutch GS1 focus group traceability 2010-2015

- Member of GS1 Global Health Care Leadership Team since 2014

- Currently working as a business manager at Bernhoven hospital, the Netherlands

Our experts, sharing their experiences…

- Ms. Cynthia Shumway, Director, Supply Chain Business Applications, Intermountain Healthcare, U.S.

- Mr. Matthew Mentel, Executive Director - Integrated Performance Solutions, Mercy, U.S.

- Ms. Betty Jo Rocchio, Vice President, Perioperative Services, Mercy, U.S.

Today's agenda

- 15 min intro and presentation – Justin
- 20 min presentation - Cynthia
- 25 min presentation – Betty Jo and Matthew
- 25 min Q & A – Facilitated by Justin
- 5 min close – Justin

Please be ready with your questions!

Bernhoven Hospital, the Netherlands

Why increasing efficiency in hospitals?

Implementing (GS1) Global Traceability Standards for Healthcare solve:

- No visibility of goods availability

- Strongly dependency on employee knowledge

- High inventory costs

- Excessive loss (yearly expired sterile stock up to $ 150.000,-)

- Higher error probability

- Inadequate monitoring capabilities

- No full scale

- Search and can not find

- Elimination of non-value adding activities

- Out of stock situations

Bernhoven winner HPAC Award 2014 Copenhagen

The following cost reductions were obtained:

- Reduction of stock by 31%

- Reduction in stock value by 23.6%

- Reduction of waste by 72% (representing a total value of $ 25,200)

- Return on investment within 14 months

International audit Bernhoven for implementation GTSH by GS1 Global Office

AUDIT INFORMATION	
Objective	Audit the Bernhoven O.R. department to assess compliance to the GS1 Global Traceability Standard for Healthcare (GTSH) utilizing the Global Traceability Conformance (GTC) framework (Issue 1, March 2009)
Scope	Medical Device Products, specifically implants and sterile disposables. From receipt into OR > OR Logistics process > Patient record; supported by OR Inventory Management System
Control Points Audited	1.3-1.5, 2.1, 2.3, 3.1-3.4, 3.7, 4.1, 4.3, 4.4, 4.6, 4.7, 4.9-4.11, 5.2-5.5, 5.11-5.14, 6.10-6.11, 6.14, 6.17-6.20, 6.22-6.23, 6.25, 6.27, 6.29-6.30, 7.1-7.6, 8.1-8.4, 9.1-9.3, 10.1-10.3, 10.8, 11.1-11.2, 12.1, 12.3.
Audit Place	Bernhoven Hospital, Uden, Netherlands
Audit Date	Friday 10th October 2014
Reference documents (Audit Criteria)	GTSH Issue 1.2.0, Oct-2013
	Global Traceability Conformance (GTC) framework (Issue 1, March

Creating efficiency by cost management

Implementing (GS1) Global Traceability Standards for Healthcare yield benefits:

- *Amplifying balance sheet of the hospital*

- *Track and trace supports current assets control*

- *Reduction of stock levels (25%)*

- *Reduction of expired products (80%)*

- *Lowering high indirect costs of staff*

Value (stock, lost and expiration)

OR-stock owned by Bernhoven	2012 (pre)	2013 (start T&T)	2014	2015	2016	2017 (est. incl.Q4-'17)
STOCK	€ 800.000 (est.)	€ 684.054	€ 601.825	€ 700.075	€ 754.107	€ 673.065
USED	Unknown	€ 858.326	€ 1.458.914	€ 1.707.948	€ 1.840.798	€ 1.795.880 (est.)
LOSS	Unknown	€ 27.502	€ 56.043	€ 6.935	€ 10.886	€ 12.150 (est.)
EXPIRED	€ 32.000 (est.)	€ 543	€ 1.299	€ 8.904	€4.530	€ 1.750 (est.)

Items (stock, lost and expiration)

OR-stock **owned** by Bernhoven	2012 (pre)	2013 (start T&T)	2014	2015	2016	2017 (est. incl.Q4-'17)
STOCK	Unknown	1.676	1.624	2.262	2.421	2.162
USED	Unknown	2.412	3.905	4.710	6.475	7.110 (est.)
LOSS	Unknown	149	278	30	51	60 (est.)
EXPIRED	Unknown	6	4	36	10	8 (est.)

Cost Savings through standards

Cynthia Shumway, Intermountain Healthcare

October 2017

A Large, Integrated Health System with a Tradition of Innovation

Helping people live the healthiest lives possible ™

Based in Salt Lake City, Utah

Intermountain® Healthcare
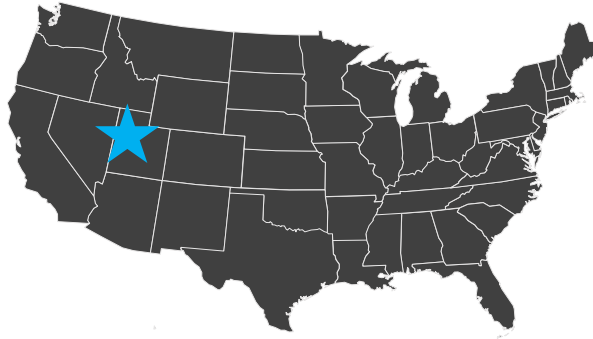
39,500	employees
$2 B	non-labor spend
AA+	Standard & Poor's
Aa1	Moody's

Hospitals
- 1975 Began
- 22 Hospitals
- 2,800 Beds

Health Plans
- 1983 Started
- SelectHealth
- 850,000 Members

Medical Group
- 1994 Started
- 1,400 Employed physicians
- 4,000 Affiliated physicians
- ~200 Clinics

Continuum Care
- TeleHealth
- Homecare
- Life Flight
- Central lab
- Central pharmacy

Intalere
- 1986 Started
- 2015 Ownership
- Commercial platform
- $9B Spend GPO

Intermountain® Healthcare

Supply Chain Center

- Supply Chain Center opened in September 2012
- Built to Gold LEED Certification
- 327,000 Square Feet
- Located within 50 miles of 80% of our facilities
- It is one piece of the journey

Intermountain Data Standards Journey

- 1993   Standard Item Master – 23 to 1
- 1998   "UPN"
- 2000 – 2007   Various "standards" groups
- 2007   Aligned with GS1
- 2008/09   GLN
- 2010   5 providers form 'HTG' Healthcare Transformation Group
- 2010 – current   It's all about GTIN!

Intermountain Data Standards Journey

Data Synch → Transactions → Data Sharing

Intermountain Data Standards Journey

Data Synch

- **Master data management**
  - Contract Price Management

  - Item Master Management

  - Supplier Management

Supplier Name	Supplier #	GTIN	UOM	Cost	Conversion to EA
Demo X	7763	10130984782914	EA	$1.00	1
Demo X	7763	10130984327934	BX	$10.00	10
Demo X	7763	10138943290985	CA	$40.00	40
Demo X	7760	10137652873746	EA	$20.00	1
Demo X	7760	10135748329834	BX	$100.00	5
Demo X	7760	10132342783948	CA	$200.00	10

Intermountain Data Standards Journey

Transactions

Source to Settle w/GLN & GTINs – "Touchless"
- PO 850
- PO acknowledgement (855) – match by GTIN *exception touch only
- Advanced Ship Notice (ASN – 856) and/or SSCC – match by GTIN
- Invoice (810) – match by GTIN
  - Right price loaded by GTIN
  - Right match on invoice by GTIN

Intermountain Data Standards Journey

Provider — 850 → **Distributor**

855, 856, 810

850, 867, 852

845

832

867

855, 856, 810, 832, 861

867

GLN/GTIN

GPO — 845 → **Supplier**
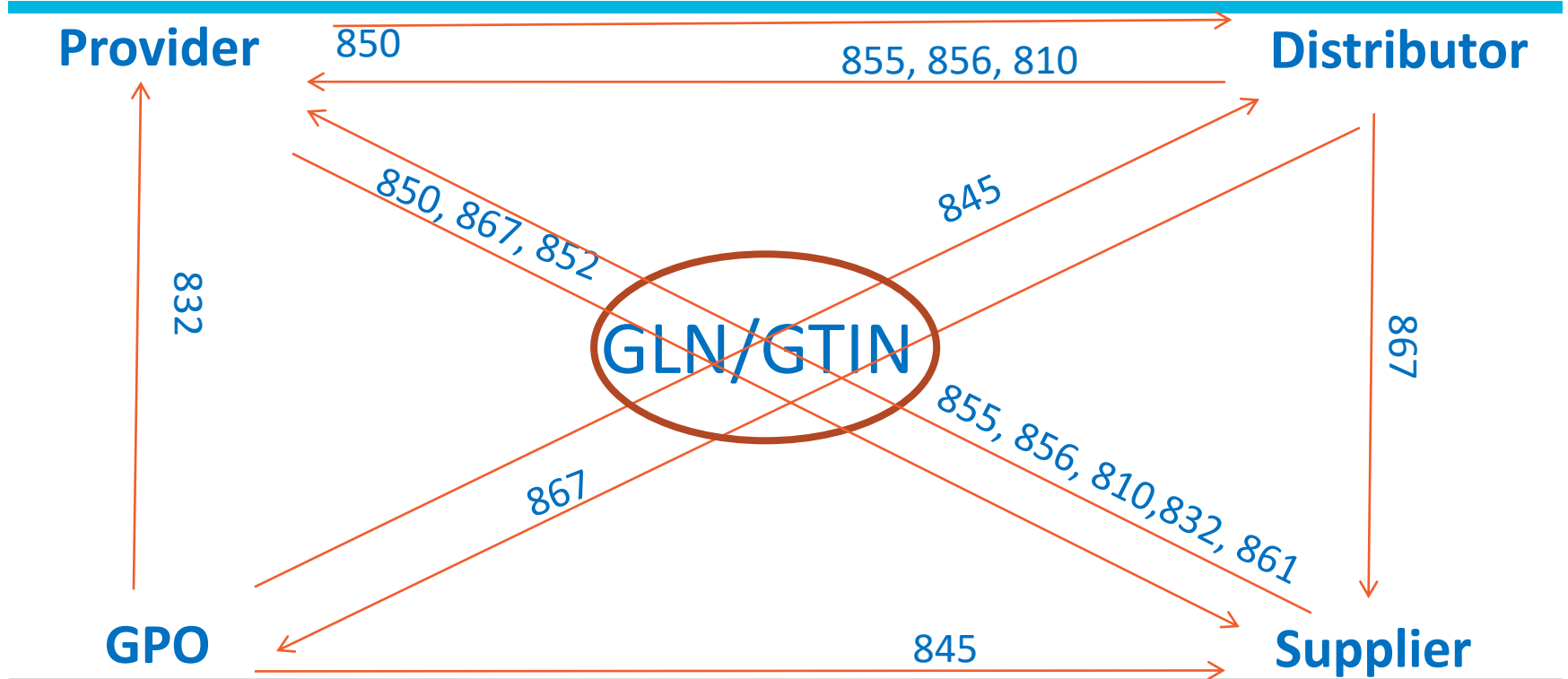
Intermountain Data Standards Journey

Transactions

- Inventory Management
  - Expiration Alerts
  - Lot/Serial Tracking
  - Point of Use

- Casual Requisitions – Scan to order

Intermountain Data Standards Journey

Data Sharing

- Clinical Point of Use (POU)

Manipulating and trending smart pump data is where the real benefits lie.

ORACLE

KAISER PERMANENTE
HEALTH CONNECT

Cerner

AJRR American Joint Replacement Registry

IMPORTANT! SAFETY RECALL
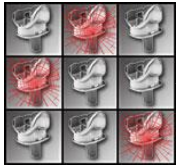
Registries/Databases for Comparative Effectiveness & Surveillance

What are we striving for . . .

What we want

- **Perfect Contract**
- **Perfect Pricing**
- **Perfect Order**
- **Perfect Receipt**
- **Perfect Invoice**
- **Perfect Scan**
- **Perfect Charge Capture**
- **Perfect Patient Data**

Benefits/Cost Savings

- **Improved customer experience**
- **Clinical & Operational time savings**
- **Reduction in error rates**
- **On time Payment**
- **Improved Patient Safety**
- **Clinical comparative effectiveness analysis**

What are we striving for . . . Transparency

" The key to effective variation
is standardization "

Dr. Brent James

Chief Quality Officer

Intermountain Healthcare

There is an enormous responsibility in the role we serve - we have an obligation to NEVER become the weak link in our company's value chain.

Intermountain Healthcare

Capturing UDI at Point of Care—Lessons Learned

Matthew Mentel, Executive Director – Performance Solutions – Mercy

Betty Jo Rocchio, Vice President – Perioperative Performance Acceleration - Mercy

October 2017
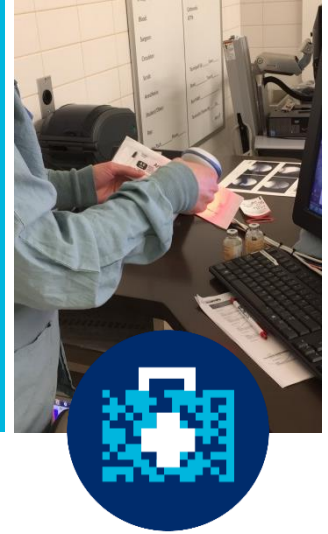
Antitrust Caution

GS1 US is committed to complying fully with antitrust laws.

We ask and expect everyone to refrain from discussing prices, margins, discounts, suppliers, the timing of price changes, marketing or product plans, or other competitively sensitive topics.

If anyone has concerns about the propriety of a discussion, please inform a GS1 US representative as soon as possible.

Please remember to make your own business decisions and that all GS1 standards are voluntary and not mandatory.

Please review the complete GS1 US antitrust policy at:
www.gs1us.org/gs1-us-antitrust-compliance-policy

Introductions

BETTY JO ROCCHIO

RN, BSN, CRNA, MS

VICE PRESIDENT
PERIOPERATIVE PERFORMANCE
ACCELERATION

MATTHEW MENTEL

CMRP, MHA, MBA

EXECUTIVE DIRECTOR
INTEGRATED PERFORMANCE
SOLUTIONS

Hospital
Outpatient Surgery Center
Clinic
Urgent/Convenient Care
Commercial Virtual Care Site
Community Outreach Ministry

15 TOP
HEALTH SYSTEMS
2017

Mercy

Headquartered in St. Louis with a multi-state footprint, Mercy is the 5th largest Catholic health system in the US.

1827 founded

44 hospitals

Outreach ministries in Arkansas, Louisiana, Mississippi and Texas.

350 outpatient facilities

3,000 integrated providers[1]

Opened the first of its kind virtual care center.

40,000 co-workers

Serving millions each year.

>$5B revenue

Top 5 consistent best performing large health system[2]

1 Physicians & advanced practice clinicians
2 Truven Health 15 Top Health System consecutive years: 2016 & 2017

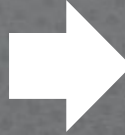# Leveraging for Tomorrow

TODAY
- **Revenue center**
- **Volume-driven**
- **Pre-certification just starting**
- **Managing cost post-case**

TOMORROW
- **Cost center**
- **Quality-driven**
- **Pre-certification increases**
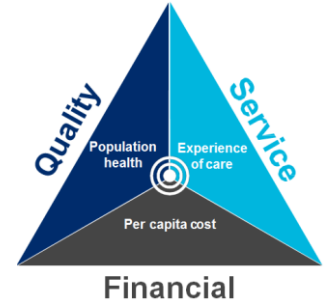- **Managing cost in real-time**

Appropriate Surgical Solutions:

Matching clinical need, which includes costs and efficiencies

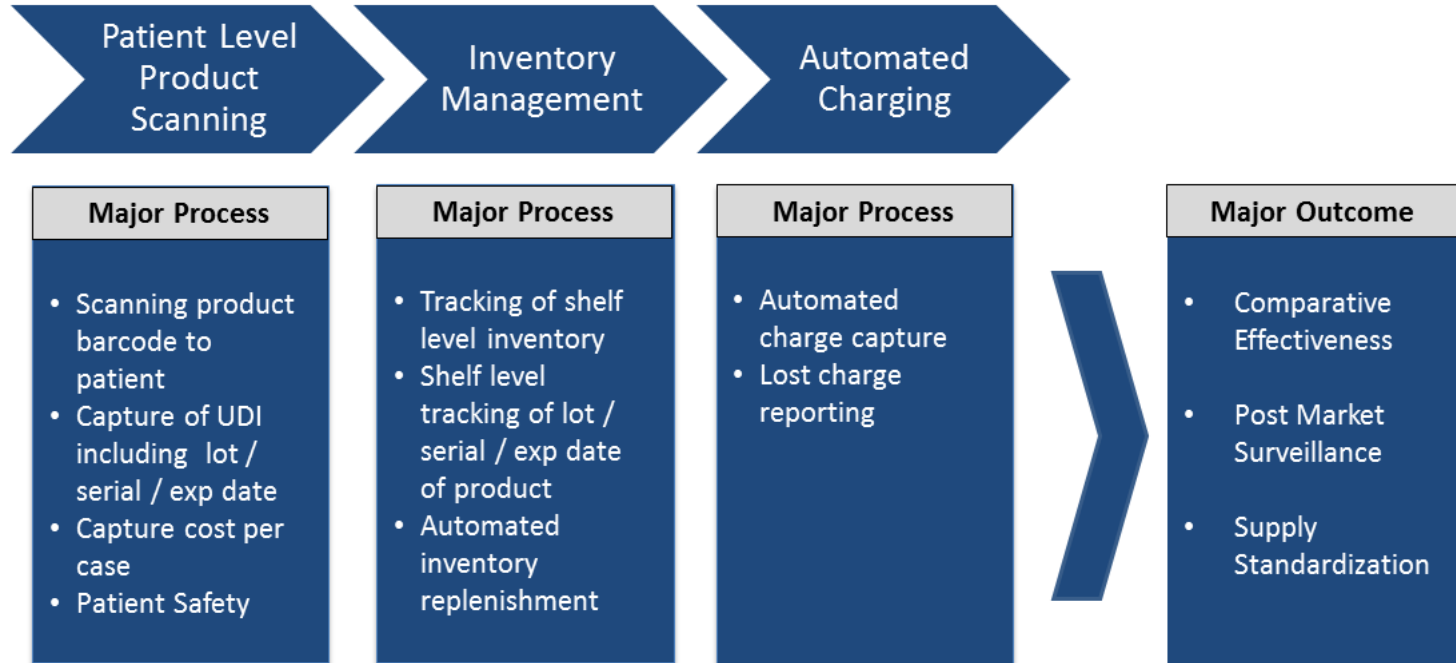**Business Bottom Line:**

Managing cost of supplies, labor, and overhead

Revenue Cycle:

Penalties based on Medicare spending and value-based purchasing

Quality — Population health

Service — Experience of care

Per capita cost

Financial

How does UDI fit in?

Patient Level Product Scanning	Inventory Management	Automated Charging	
Major Process	**Major Process**	**Major Process**	**Major Outcome**
• Scanning product barcode to patient • Capture of UDI including lot / serial / exp date • Capture cost per case • Patient Safety	• Tracking of shelf level inventory • Shelf level tracking of lot / serial / exp date of product • Automated inventory replenishment	• Automated charge capture • Lost charge reporting	• Comparative Effectiveness • Post Market Surveillance • Supply Standardization

Goal: Enable capture of the UDI to the patient…
Apply automation to highly manual process

How does UDI impact clinical workflow?

- UDI Drives

  - (EMR) documentation

  - Product consumption

  - Inventory replenishment

  - Patient charging

  - Complete cost accounting

  - Expiry & recall notification

Augments supply chains ability to positively impact Mercy's core business function, patient care

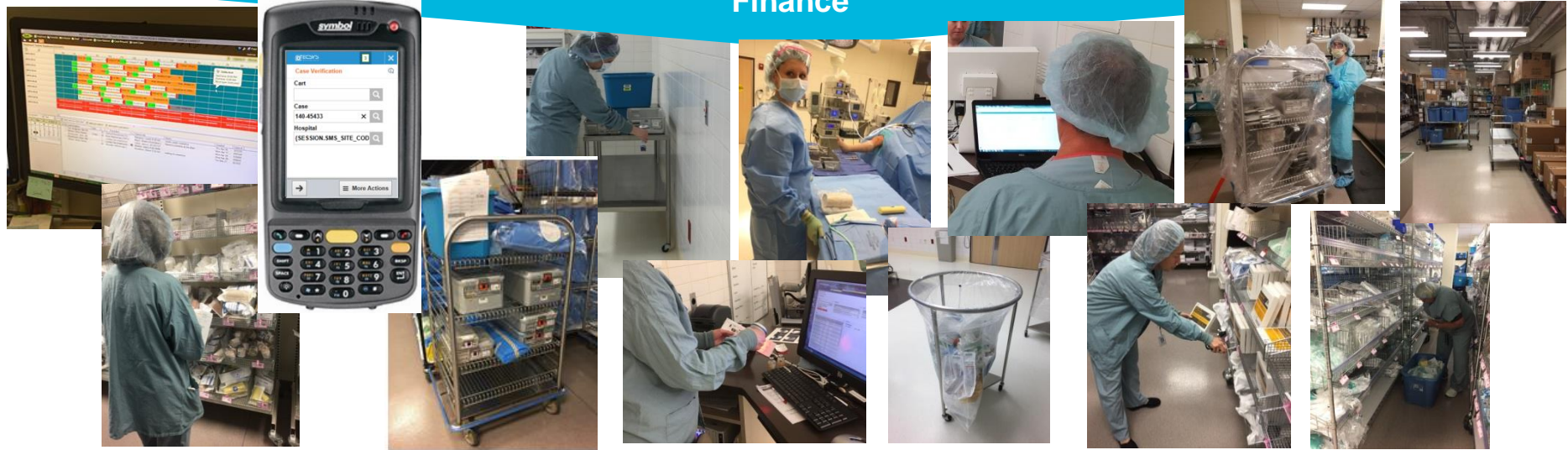# Scheduling a Case

Schedule Case → Pick Case Cart → Procedure → Verify Case → Posting/Returns → Replenish/Receiving
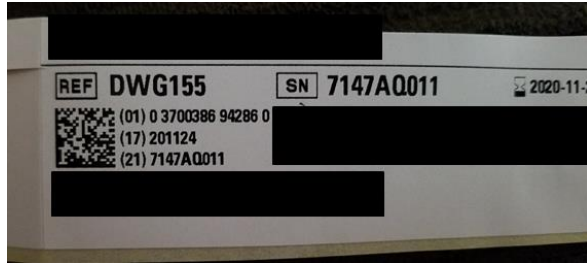
Finance

Challenges to UDI Nirvana

- Barcodes
  - Quality
  - Layout standardization
  - Adoption of barcode by Manufacturers
- Content synchronization
- Disconnect between sales and contracting
- Lack of understanding and buy in:
  - Clinicians
  - Physicians
  - Supply chain

Barcode Challenges

Unexpected Segment 21

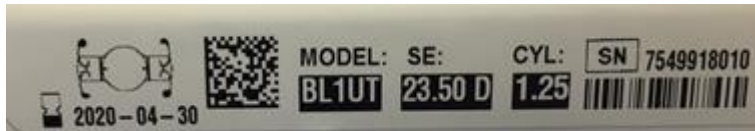**Missing Code Breaks**

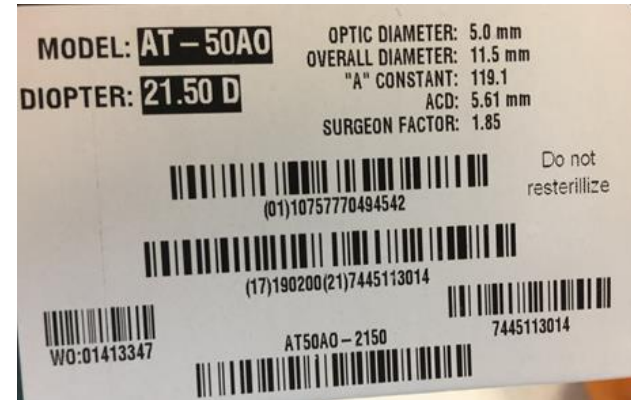**Unexpected Segment 30**

No Check Digit

Barcode Challenges

6 Barcodes – Contains both a Lot and a Serial number
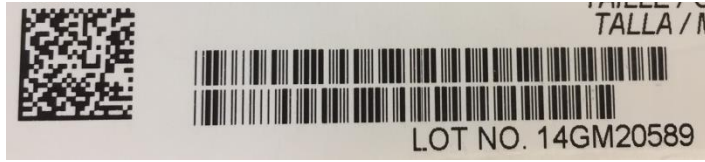

Same Product – Spine

6 Barcodes – Clinical confusion

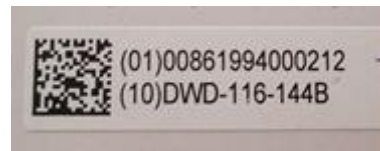**Same Product – Spine**

Barcode Challenges

Linear barcode does nothing and the 2D triggers an EPIC executable

Barcode Confusion

New item brought in from vendor – Not on contract

Lot but no expiration

Barcode Confusion

The Global Language of Business

Benefits of UDI capture

FINANCE **Reimbursement**	OPERATIONAL **Process and Workflow**	CLINICAL **Inventory Management**
• Healthcare cost • Patient safety & outcomes • Patient/coworker satisfaction • Charge capture • Comparative effectiveness	• Management of expired product & recalls • Medical legal product documentation • Product tied to patient & outcome • Enhance clinical workflow • Tissue tracking & regulatory compliance	• Inventory visibility & standardization • Multiple product locations • Inventory valuation • Preference card accuracy • Owned vs consigned • Recognizing consumption on demand • Preference card optimization

Key Driver

OPERATIONALLY DRIVEN

Patient-centered to improve care and flow through the OR with awareness of financial impacts to the delivery of consistent or improved outcomes

Right patient, right procedure, right supplies, right time....every time.

People ➡ *Process* ➡ *Technology*

Financial Benefits of UDI Capture

CLINICALLY LED	OPERATIONALLY DRIVEN

Realizing unrecognized inventory assets
$2.4M

Improving inventory utilization
$4.7M

Optimizing charge capture
$13M

Improving Preference card accuracy
$459K

Automation of replenishment
$4.8K

Reduction in cycle counts
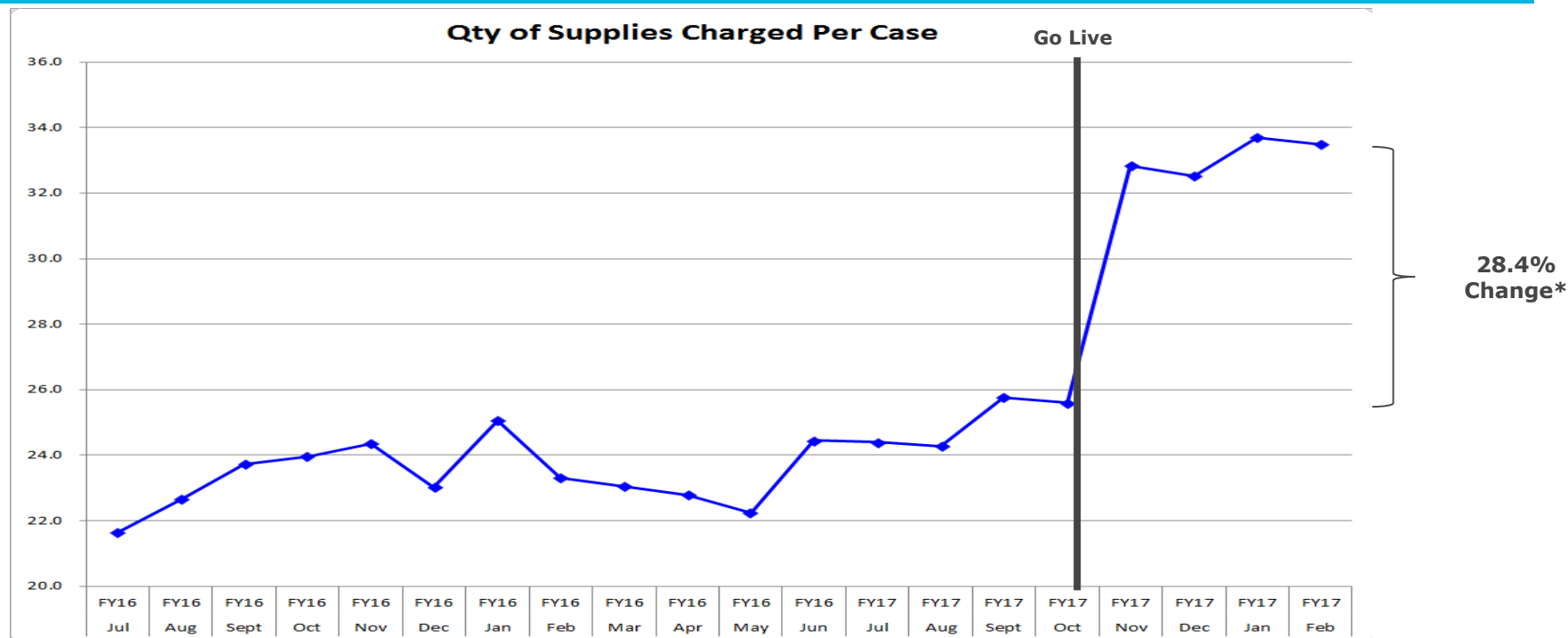**$167K**

Improving clinical user satisfaction
Survey

Optimally Manage owned vs. consigned inventory

Benefits of UDI Capture

Qty of Supplies Charged Per Case

Go Live

28.4% Change*

Chart showing quantity of supplies charged per case across months from FY16 Jul through FY17 Feb, with a "Go Live" vertical line at FY17 Oct. Values rise from about 21.6 (FY16 Jul) to approximately 33.4 (FY17 Feb).

* This equates to a $341.30 increase in charge per case

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Questions

Right patient, right procedure, right supplies, right time....every time.

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Questions from the audience

Two key messages to take away

- Use of GS1 standards can help increase patient safety <u>and at the same time</u> provide a financial outcome

- Learn from today's presenters about how best to calculate ROI and apply this to your implementations

Poster reception tonight!

5:00 pm – 6:00 pm Promenade Ballroom

Vote for your favorite poster

Thank you for your attention and enjoy the rest of the conference!