Why GS1 Standards?

Mike Rose
Vice President
Supply Chain Visibility
Johnson & Johnson: Global Presence

Global Leader in Health Care

More than 250 Operating Companies In 60 Countries

Selling Products in More Than 175 Countries

118,000 Employees Worldwide
Johnson & Johnson Family of Companies

- Sixth-largest consumer health care company
- The world’s largest and most diverse medical devices and diagnostics company
- The world’s fifth-largest biologics company
- The world’s eighth-largest pharmaceuticals company

Jesica Harrington
Diagnostic test fueled hope in her fight against cancer
2011 Sales by Segment

$ U.S. Billions

- **MD&D**
  - 40%
  - $25.8B
  - 4.8%*

- **Pharmaceuticals**
  - 37%
  - $24.4B
  - 8.8%*

- **Consumer**
  - 23%
  - $14.9B
  - 2.0%*

2011 Sales: $65.0 Billion

* Growth vs. 2010
Our Consumer Business Segment

- 2011 sales of $14.9 billion
- Broad portfolio of iconic CPG and OTC brands
- Based on sound science and technology
- Touching a billion lives every day
Our Pharmaceuticals Business Segment

- 2011 sales of $24.4 billion
- Now unified under the Janssen name
- A well-positioned pipeline
  - Growing demand
  - Emerging markets
  - Unmet needs around the world
- Recent product approvals

[Image of product logos]
Our Medical Devices & Diagnostics Business Segment

- 2011 sales of $25.8 billion
- The world’s largest medical technology business
- Focused on emerging markets and an aging population
- Our most recent acquisition

SYNTHESES®
A premier manufacturer of orthopedic devices
Our Credo

We believe our first responsibility is to the doctors, nurses and patients, to mothers and fathers and all others who use our products and services. In meeting their needs, everything we do must be of high quality. We must constantly strive to reduce our costs in order to maintain reasonable prices. Customers’ orders must be serviced promptly and accurately. Our suppliers and distributors must have an opportunity to make a fair profit.

We are responsible to our employees, the men and women who work with us throughout the world. Everyone must be considered as an individual. We must respect their dignity and recognize their merit. They must have a sense of security in their jobs. Compensation must be fair and adequate, and working conditions clean, orderly and safe. We must be mindful of ways to help our employees fulfill their family responsibilities. Employees must feel free to make suggestions and complaints. There must be equal opportunity for employment, development and advancement for those qualified. We must provide competent management, and their actions must be just and ethical.

We are responsible to the communities in which we live and work and to the world community as well. We must be good citizens—support good works and charities and bear our fair share of taxes. We must encourage civic improvements and better health and education. We must maintain in good order the property we are privileged to use, protecting the environment and natural resources.

Our final responsibility is to our stockholders. Business must make a sound profit. We must experiment with new ideas. Research must be carried on, innovative programs developed and mistakes paid for. New equipment must be purchased, new facilities provided and new products launched. Reserves must be created to provide for adverse times. When we operate according to these principles, the stockholders should realize a fair return.
Johnson & Johnson’s Perspective

Barcode scanning revolutionized the consumer goods supply chain:

- Reduced stock-outs
- Speeding consumer retail check-out
- Improved accuracy

The health care adoption of GS1 and EPCglobal standards can provide many benefits including:

- Increased patient safety
- Improved supply chain efficiency
- Strengthening healthcare supply chain integrity
GS1 and EPCglobal in Healthcare

Patient Safety

Healthcare Supply Chain Efficiency

- Automatic Data Capture
  - Barcodes
  - Data Matrix
  - RFID
- E-Commerce EDI/XML Transactions
- Electronic Record Management
  - e-Records
  - e-Prescriptions
- Assets & Equipment Tracking
- Traceability e-Pedigree Recalls

Standardized Product Definition (GDSN®)

Standardized Location Identification (GLN)

Standardized Product Identification (GTIN®)

Standardization → Interoperability
GS1 standards and actionable visibility

Johnson & Johnson subscribes to the GS1 model

<table>
<thead>
<tr>
<th>IDENTIFY: GS1 System Identification Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GLN</strong> Global Location Number</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAPTURE: GS1 System Data Carriers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BARCODES</strong></td>
</tr>
<tr>
<td>EAN/U.P.C.</td>
</tr>
<tr>
<td>GS1-128</td>
</tr>
<tr>
<td>GS1-128 SSCC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SHARE: GS1 Interface Standards for Data Exchange</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MASTER DATA</strong> GLN Registry for Healthcare, Global Data Synchronization Network (GDSN)</td>
</tr>
</tbody>
</table>

**INTEROPERABILITY**
- Replenishment
- Cold Chain
- Supply Chain Integrity
- Pricing
- Contract Compliance
- Returns
- Product Recall
- Traceability
## Johnson & Johnson GS1 standards adoption

<table>
<thead>
<tr>
<th>Consumer</th>
<th>Pharmaceuticals</th>
<th>Medical Device &amp; Diagnostics</th>
</tr>
</thead>
<tbody>
<tr>
<td>• GTIN adopted globally, assigned to 100% of products</td>
<td>• Using GTINs to meet FDA &amp; EU barcode rules</td>
<td>• GS1 labeling migration project underway</td>
</tr>
<tr>
<td>• Major retailers driving GLN adoption</td>
<td>• GLN in limited use</td>
<td>– 100,000+ GTINs</td>
</tr>
<tr>
<td>• GDSN in use</td>
<td>• GDSN interest emerging with GTIN sunrise</td>
<td>• Harmonizing GLNs with “ready” US customers; investigating ROW</td>
</tr>
<tr>
<td>• Select retailers piloted EPC/RFID</td>
<td>• Serialization and compliance with pedigree and track &amp; trace regulations</td>
<td>• Initiated GDSN projects</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Targeted EPC/RFID pilots</td>
</tr>
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</table>
Medical Devices & Diagnostics
GS1 Standards Adoption – Current Status

• Johnson & Johnson Medical Devices & Diagnostics companies are implementing GS1 Standards. See http://www.commerce.jnjgateway.com/commerce/JJ_GS1.jsp

• Medical devices and diagnostics products shall be labeled with GS1 bar codes at the appropriate levels of packaging. The bar codes will contain the Global Trade Item Number (GTIN) as well as other appropriate identifiers: expiry, lot number and/or serial number.

• GTINs and other product data shall be made available through the GS1 Global Data Synchronization Network (GDSN®) to authorized distributors and end-customers when system, data quality, and business criteria are met.

• Johnson & Johnson supports the use of the GS1 US GLN Registry for Healthcare® and will cross-match the appropriate customer global location numbers to account numbers when system, data quality, and business criteria are met.
Gs1 Bar Code Adoption – Medical Devices

DePuy Transitions Product Label Barcodes to GS1 Standard

Dear Valued Customer:

DePuy companies have begun making a label format transition from the Health Industry Barcode (HIBC) to the GS1 standard. GS1 is the most widely used system for identification (numbering) and data carrier (barcode) standards throughout the world.

As a result of the transition to GS1, you will notice a different barcode image on our product labels. The process of scanning will continue to be the same.

The only change is the barcode.

Please visit https://mngateway.com and click on the ‘View the Medical Device Supplier Guide’ link. A companion guide is available. If you encounter any problems or have feedback, please let us know as we strive to enhance your future service experience.

HIBC vs. GS1 Barcode Formats

Use Barcodes Below for Testing

HIBC 128

<table>
<thead>
<tr>
<th>PRIMARY Barcode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mfr. ID</td>
</tr>
<tr>
<td>+H207</td>
</tr>
</tbody>
</table>

GS1 - 128

<table>
<thead>
<tr>
<th>PRIMARY Barcode</th>
</tr>
</thead>
<tbody>
<tr>
<td>GTIN Application ID</td>
</tr>
<tr>
<td>(01)</td>
</tr>
</tbody>
</table>

SECONDARY Barcode

<table>
<thead>
<tr>
<th>Quantity/ Data Identifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expiry Date (YYMMDD)</td>
</tr>
<tr>
<td>+555</td>
</tr>
</tbody>
</table>

Global Trade Item Number (GTIN): A number that uniquely identifies products. For example, for product code 222720 the GTIN is 20886705008220 (Product Code to GTIN – cross reference required).
Johnson & Johnson GS1 US Hospital Market Pilots

**Project Ice Augur**

- Johnson & Johnson
- Mayo
- Cardinal Health
- Novation
- GHX

**Including:**

- GS1 standards to identify products from manufacturing through distribution and use
- Maps of product and data flow
- Uses GDSN and EDI
Johnson & Johnson GS1 - US Implementation Status

- Over 100,000 GTINs assigned
- Manufacturing sites preparing label systems
- Distribution centers preparing data collection systems
- Integrating GS1 capability into order-to-cash system
- Independent franchise starts with target date for all: year-end 2012

http://www.commerce.jnjgateway.com/commerce/JJ_GS1.jsp
GS1 BeneLux Health Care Pilot
AZ Sint-Jan Brugge-Oostende AV and Ethicon

Ethicon Migration from HIBCC to GS1 GTIN
GDSN® Adoption

• Currently sending data to 54 retailers worldwide

• Recently began sending data to U.S. Department of Defense in support of the “war fighter”

• Synchronized 8,000 GTINs for sutures with U.S. Defense Medical Logistics Agency
GS1 US GLN Registry® Usage

Johnson & Johnson Health Care Systems Inc. GLN 0705038000007
All 3 Healthcare Companies on the GS1 Management Board support engaging McKinsey & Company consulting firm to provide advice on how to further accelerate GS1 adoption.

Over 71% of the respondents are moving towards the adoption of data standards in the next five years. 99% of these are moving towards GS1 adoption.

Source: Center for Innovation in Healthcare Logistics - GS1 Data Standards Adoption Survey December 2011
Objectives for the development of a GS1 Business Case in Healthcare

- Characterize and quantify the benefits of GS1 global standards in healthcare
  - Patient and business benefits
  - Across multiple applications (track & trace, pharmacovigilance, etc.)
  - In all healthcare categories (drug and device)
  - In near-term and longer-term
  - For C-suite audience

- Define a high-level industry implementation roadmap
  - To optimize patient and business value capture relative to cost in current business models
  - To set the foundation for new business models
  - To meet current and expected regulatory requirements
  - To shape the evolution of the global regulatory environment
  - To accelerate an inflection in global standards adoption
Building the Business Case for Adopting GS1 Standards in Health Care

A C-suite communication should describe the benefits of Global Standards relative to both patient and business needs

**Public health**

- **Patient product safety**
- **Patient dosage/medication accuracy**
- **Product access and availability**
- **Patient empowerment/information**

**“Bending the healthcare cost curve”**

- Counterfeit and theft avoidance/recovery
- Brand protection
- Compliance and persistence
- Global supply chain efficiency and integrity
- Cross-company coordination and efficiency
- Recall effectiveness and efficiency
- Brand as trustmark
Benefits will vary by supply chain participant: Track & Trace example

<table>
<thead>
<tr>
<th>Potential benefits, by supply chain participant</th>
<th>API</th>
<th>Manufacturer</th>
<th>Distributor 1</th>
<th>Distributor 2</th>
<th>Pharmacy</th>
<th>Patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue recapture</td>
<td>✗</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Supply chain efficiency optimization</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Brand protection</td>
<td>✗</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Common global data language and processes</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

SOURCE: Team analysis

Next steps: assessment of benefit captured by supply chain participants by adopting harmonized T&T standards
7 Billion Reasons to Care

Global Standards Will Benefit Patients and Consumers Around the Globe