Canadian Healthcare Supply Chain Standards

WRHA LOGISTICS SERVICES
2010 SUPPLY CHAIN FORUM
November 17, 2010
1. GS1 Canada and Carenet
2. Healthcare Supply Chain without Standardization
3. Canadian Healthcare Supply Chain Standards Project
4. Standards in the Healthcare Supply Chain
5. Canadian Healthcare Product Registry
6. What Does the Future Look Like?
GS1 Canada and Carenet
Enables organizations to enhance their efficiency and cost effectiveness by adopting electronic supply chain standards and best practices.

- **Member of GS1**, the world’s leading supply chain standards organization
- **Neutral, not-for profit** organization
- **10,000** members and growing (80% are SMEs)
- **20** industry sectors
Carenet is Canada’s healthcare sector strategy to standardize the healthcare supply chain. Represents over 471 healthcare providers and over 97 suppliers.

Carenet will guide the healthcare sector toward the adoption of global standards such as:

- **Product Identification** = GTIN
- **Location Identification** = GLN
- **Medical Product and Location Registries** = Canadian Healthcare Product Registry & GLN Registry
- **Electronic Communications** = Electronic Data Interchange (EDI)
Hospitals Represented by Members

<table>
<thead>
<tr>
<th>Province</th>
<th>Hospitals</th>
<th>Carenet</th>
<th>Carenet Members as % of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>British Columbia</td>
<td>92</td>
<td>92</td>
<td>100%</td>
</tr>
<tr>
<td>Alberta</td>
<td>95</td>
<td>81</td>
<td>85%</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>35</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Manitoba</td>
<td>43</td>
<td>39</td>
<td>91%</td>
</tr>
<tr>
<td>Ontario</td>
<td>228</td>
<td>142</td>
<td>62%</td>
</tr>
<tr>
<td>Quebec</td>
<td>163</td>
<td>12</td>
<td>7%</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>31</td>
<td>31</td>
<td>100%</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>43</td>
<td>43</td>
<td>100%</td>
</tr>
<tr>
<td>PEI</td>
<td>7</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Newfoundland</td>
<td>32</td>
<td>30</td>
<td>91%</td>
</tr>
<tr>
<td>Territories (3)</td>
<td>8</td>
<td>1</td>
<td>13%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>777</strong></td>
<td><strong>471</strong></td>
<td><strong>61%</strong></td>
</tr>
</tbody>
</table>

*As of November 2010
Healthcare Supply Chain without Standardization
Lack of Global Standards & Consistency
Same Product – Different Numbers

For Example*:

3M Product with Reference #8630

Same Product in Different Databases of Distributors:

<table>
<thead>
<tr>
<th>Distributor</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allegiance</td>
<td>M8630</td>
</tr>
<tr>
<td>Owens &amp; Minor</td>
<td>4509008630</td>
</tr>
<tr>
<td>BBMC-Colonial</td>
<td>045098630</td>
</tr>
<tr>
<td>BBMC-Durr</td>
<td>081048</td>
</tr>
<tr>
<td>Kreisers</td>
<td>MINN8630</td>
</tr>
<tr>
<td>Midwest</td>
<td>TM-8630</td>
</tr>
<tr>
<td>Pacific</td>
<td>3/M8630</td>
</tr>
<tr>
<td>UnitedUMS</td>
<td>001880</td>
</tr>
</tbody>
</table>

Different Products – Same Number

For Example*:

Part Number 10313 in Premier Inc. Product Item Master Refers to:

- Medtronic’s - “Needle cardioplegia adult 16ga 5/8in tip 10in”
- Hantover’s - “Cartridge replacement stunner yellow f/calves/heavy hogs”
- Chattanooga Group’s - “Accessory traction replacement strap xl for halter thoracic restraint”
- HF Scientific’s - “Test kit water free chlorine dpd 25ml sample photometric 1000/pk”

* Source: US DoD Study
## No Standardized Location Identification

Many Identifiers for the Same Location

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Manufacturer</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOUTHLAND TECHNOLOGY 3M</td>
<td>3M 800-327-5380</td>
</tr>
<tr>
<td>3M CO PHOTO PRODUCT3 DIV</td>
<td>3M CO</td>
</tr>
<tr>
<td>3M DIAGNOSTIC SYSTEMS INC</td>
<td>3M DENTAL 800-237-1650</td>
</tr>
<tr>
<td>3M ELECTRICAL SPECIALTIES DIV</td>
<td>3M ESPE DENTAL DIVISION 800-364-3577</td>
</tr>
<tr>
<td>3M HEALTH</td>
<td>3M ESPE</td>
</tr>
<tr>
<td>3M HEALTH CARE CDI</td>
<td>3M ESPE UNITED STATES</td>
</tr>
<tr>
<td>3M HEARING COMPONENTS</td>
<td>3M HEALTHCARE 800-521-2819</td>
</tr>
<tr>
<td>3M INDUSTRIAL TAPES LTD</td>
<td>3M HEALTHCARE PRODUCT</td>
</tr>
<tr>
<td>3M MEDICAL DEVICE DIV</td>
<td>3M HEALTHCATE</td>
</tr>
<tr>
<td>3M MEDICAL IMAGING SYSTEMS DIV</td>
<td>3M MEDITOREX</td>
</tr>
<tr>
<td>3M MEDICAL PRODUCTS DIV</td>
<td>3M MINNESOTA MINING &amp; MFG.CO.</td>
</tr>
<tr>
<td>3M MEDICAL-SURGICAL DIV</td>
<td>3M OCC. HEALTH AND ENV. SAFETY DIV</td>
</tr>
<tr>
<td>3M MEDICAL/SURG</td>
<td>3M OCC. HEALTH AND ENV. SAFETY DIV</td>
</tr>
<tr>
<td>3M PHARMACEUTICALS AND MEDICAL S</td>
<td>3M OCC. HEALTH AND ENV. SAFETY DIV</td>
</tr>
<tr>
<td>3M-MEDICAL/SURGICAL</td>
<td>3M SARNS/CDI</td>
</tr>
<tr>
<td>3M OCCUPATIONAL AND SAFETY DIV</td>
<td>3M SURGICAL</td>
</tr>
<tr>
<td>3M - MINNESOTA MINING &amp;</td>
<td>3M UNITEK 800-423-4588</td>
</tr>
<tr>
<td>3M FEDERAL GOVERNMENT</td>
<td>3M UNITEK</td>
</tr>
<tr>
<td>3M FEDERAL SYSTEMS DEPARTMENT</td>
<td>THREE MV ESPE</td>
</tr>
<tr>
<td>3M HEALTHCARE SYSTEMS</td>
<td>3M COMPANY/C/O WAHL CORP.</td>
</tr>
<tr>
<td>3M HEALTHCARE</td>
<td>3M COMPANY/C/O WAHL CORP.</td>
</tr>
<tr>
<td>3M HEALTHCARE $250 MINIMUM ORDER</td>
<td>3M COMPANY/C/O WAHL CORP.</td>
</tr>
<tr>
<td>3M HEALTHCARE(MINNESOTA MINING)</td>
<td>3M CUSTOMER SERV</td>
</tr>
<tr>
<td>3M MEDICAL - CREDIT CARD</td>
<td>3M MEDICAL PRODUCTS</td>
</tr>
<tr>
<td>3M MEDICAL PRODUCTS</td>
<td>3-M</td>
</tr>
<tr>
<td>3M OCC. HEALTH AND ENV. SAFETY DIVISION</td>
<td>3-M COMPANY</td>
</tr>
<tr>
<td>3M OCCUPATIONAL AND SAFETY DIV</td>
<td>3-M COMPANY/C/O O</td>
</tr>
<tr>
<td>3M SAFETY DIVISION</td>
<td>3-M COMPANY/C/O OEM PRODUCTS</td>
</tr>
<tr>
<td>3M-DEPARTMENTAL PRODUCTS DIVISION</td>
<td>3-M PHARMACEUTICALS</td>
</tr>
<tr>
<td>3M-HEALTH CARE</td>
<td>3M PHARMACEUTICALS</td>
</tr>
<tr>
<td>3M HEALTCARE PRODUCTS DIV.</td>
<td>3M</td>
</tr>
<tr>
<td>3M UNITEK CORPORATION</td>
<td>3M DENTAL PRODUCTS</td>
</tr>
<tr>
<td>3M UNITEK CORPORATION</td>
<td>3M DENTAL PRODUCTS</td>
</tr>
<tr>
<td>3M UNITEK DENTAL PRODUCTS</td>
<td>3M DENTAL PRODUCTS</td>
</tr>
<tr>
<td>3M BIOLOGICAL</td>
<td>3M SPECIALITY CHEMICAL</td>
</tr>
<tr>
<td>3M ESPE DENTAL PRODUCTS</td>
<td>3M SPECIALITY CHEMICAL</td>
</tr>
<tr>
<td>3M HEALTHCARE (MED/SURG PRODS)</td>
<td>3M DENTAL PRODUCTS</td>
</tr>
<tr>
<td>3M C/O CHECKPOINT METQ</td>
<td>3M - MINNESOTA MINING &amp; MFG.CO</td>
</tr>
</tbody>
</table>

Confusion, Loss of Identity, Inefficiency
Fighting Counterfeiting

A Counterfeit Medicine « Factory »

Which Product is Counterfeit?
Item Master Files Are A Mess

% Bad Product Data Among Trading Partners

<table>
<thead>
<tr>
<th>Product Data Errors</th>
<th>Manufacturer</th>
<th>Distributor</th>
<th>GPO</th>
<th>End User Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missing Middle Levels of Packaging</td>
<td>15-20%</td>
<td>1-4%</td>
<td>20-25%</td>
<td>15-25%</td>
</tr>
<tr>
<td>Hard “Packaging Quantity” Errors</td>
<td>1%</td>
<td>1%</td>
<td>2%</td>
<td>2-5%</td>
</tr>
<tr>
<td>Unit of Measure Confusion/Misuse</td>
<td>2-6%</td>
<td>1-3%</td>
<td>2-5%</td>
<td>Unknown</td>
</tr>
<tr>
<td>Missing Packaging, not Middle Level</td>
<td>3-8%</td>
<td>3-8%</td>
<td>3-7%</td>
<td>5%</td>
</tr>
<tr>
<td>Manufacturer Name Problems</td>
<td>NA</td>
<td>2-5%</td>
<td>1-4%</td>
<td>30%</td>
</tr>
<tr>
<td>Obsolete Products</td>
<td>1-4%</td>
<td>2-5%</td>
<td>1-8%</td>
<td>5-15%</td>
</tr>
<tr>
<td>Missing Product Brand Names</td>
<td>2-5%</td>
<td>5-10%</td>
<td>5-10%</td>
<td>20-25%</td>
</tr>
<tr>
<td>Incomplete Item Descriptions</td>
<td>5-15%</td>
<td>3-12%</td>
<td>5-15%</td>
<td>10-20%</td>
</tr>
<tr>
<td>Wrong Customer Unit Prices</td>
<td>Unknown</td>
<td>1-2%</td>
<td>NA</td>
<td>1-2%</td>
</tr>
<tr>
<td>Customer Paid More than Lowest Contract Price</td>
<td>NA</td>
<td>Unknown</td>
<td>NA</td>
<td>3-6%</td>
</tr>
</tbody>
</table>

Source: Department of Defense Data Synchronization Study
Why Now?

Strategic focus on **patient safety**
- Out of the 2.5 million people who are admitted into hospital every year in Canada, about 9,000 – 24,000 people died as a result of preventable adverse events
- Early adopters of bedside bar code scanning reduced error rates by >80%

Critical shortage of **time and resources**
- 20-30% of healthcare supply chain administrators’ time is spent fixing data errors
- Hospitals continue to manually order and re-label product due to lack of integrated supply chain standards
- Estimated that up to 70% of hospital orders contain an error that require manual intervention

**Canadian healthcare consolidation** is driving the need to standardization, interoperability and traceability

Sources: Canadian Institute for Health Information and Canada Health Infoway
Why Now?
National Trend Towards Consolidation

• British Columbia is consolidating 6 Health Authorities into 1 Shared Services Organization
• Alberta is consolidating 9 Health Authorities into 1 Health Authority
• Ontario is modernizing healthcare supply chains through the Ministry of Finance’s OntarioBuys program
• New Brunswick is consolidating 8 Health Authorities into 1 Shared Services Organization
• Nova Scotia – One ERP for all of government and Broader Public Services (healthcare and education)
Why Now?
Time to Get Engaged

- Currently 471 Carenet member providers are utilizing electronic commerce to trade with their vendors.
- These organizations have future plans to increase the use of e-commerce with their vendors.
- GPO’s and vendors alike are streamlining their processes to eliminate manual paperwork and increase efficiencies.
- Terms of Trade documents that incorporate supply chain requirements are becoming more common in future contracts and in amendments to existing contracts between supply chain trading partners.
- Electronic commerce will soon be considered a requirement to do business.
Canadian Healthcare Supply Chain Standards Project
Vision for Canadian Healthcare

Our vision is for all healthcare stakeholders to use a common set of standards that enhance patient safety, supply chain efficiency and interoperability.
Project Supporters

Partners in Driving Patient Safety and Supply Chain Efficiency

Alberta Health Services

Facilicorp

Health Shared Services BC

Nova Scotia

Ontario

HealthPRO

Life is Easier

URMED

St. Michael’s

Inspired Care.

Inspiring Science.

ACART

COVIDIEN

MEDICALMART
May 8, 2009 – ISMP & CPSI Joint Announcement

The Institute for Safe Medication Practices Canada (ISMP Canada) and the Canadian Patient Safety Institute (CPSI), following broad consultation, jointly endorse the adoption of the GS1 global standard for automated identification (e.g., bar coding) of pharmaceutical products in Canada.

December 10, 2008 - HealthPRO and Medbuy Endorsement

In a move that will have a major impact on driving efficiencies and reducing costs in the healthcare supply chain, HealthPRO and Medbuy, two of Canada’s most prominent group purchasing organizations, affirmed their commitment to driving the adoption of GS1 global standards with their members.
October 25, 2010 – Ontario Hospital Association endorses GS1 standards

The Ontario Hospital Association supports the adoption of GS1 supply chain standards throughout Ontario’s hospitals. Global standards improve efficiency, visibility and safety in supply chains, including providing the foundation for a central repository for product information for products used throughout the hospital. Access to timely, accurate and trusted data will contribute significantly to a safer, more patient focused, sustainable and efficient healthcare system.

May 2010 – HSCN Supports GS1 Standards

The Healthcare Supply Chain Network (HSCN) announces its support of GS1 standards, specifically the Global Location Number (GLN) to standardize location identification and the Global Trade Item Number (GTIN) to standardize product identification. The HSCN Board and its membership are in support of the GS1 Standards movement in healthcare because they understand the impact that data standards will have on improving patient safety and supply chain efficiency.
Phase I – Standards Development

1. Advancing Electronic Commerce (EDI) in Healthcare
   • Six Transaction Sets Developed - Specific to Healthcare
   • Conducted a National Survey to Assess Readiness and Establish Benchmarks

2. Healthcare Industry Outreach and Communications Program
   • 6 Customized Healthcare Implementation Guidelines for the Transaction Sets
   • 3 Healthcare Specific Education Modules Developed

3. Global Supply Chain Standards in Healthcare
   • Implementation Roadmap for Product and Location Numbers (GTIN/GLN)
   • Development of Medical Product Registry and GLN Registry
Phase II - Implementation

EDI Standards Advancement and Implementation

• Implementation of at least 3 pilot projects including:
  • Integration of standardized EDI transaction set attributes
  • Global product identifiers (GTIN and GLN)

• Provide one-on-one support and “how to”, to enable EDI implementation

• Develop up to four new EDI transaction sets
Phase II - Implementation

Healthcare Industry Outreach, Engagement and Education Program

- Establish industry stakeholders committee to drive implementation plan
- Establish software providers committee to drive integration of standards, processes and registries into systems
- Develop education support including education modules and support materials
- Advance media relations implementation strategy
- Create implementation support material
Data Synchronization, Product/Location Standards Implementation

• Implement first wave project sites to establish data synchronization with the Canadian Healthcare Product Registry
  • Early adopter pilot participants confirmed as part of OntarioBuys proposal:
    • COHPA – Central Ontario Healthcare Procurement Alliance SSO
    • PROcure – South Western Ontario SSO
    • McKesson Provider Solutions

• Establish committee of sector representatives with accountability for trading partner data synchronization (item master file integrity)
• Launch standards implementation in healthcare facilities
• Provide data synchronization implementation support to healthcare sector

Phase II - Implementation
<table>
<thead>
<tr>
<th>Milestones</th>
<th>Dates</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar. '09</td>
<td>Carenet Standards Implementation Roadmap Announced</td>
<td></td>
</tr>
<tr>
<td>July '09</td>
<td>Canadian Healthcare Product ID Standards Announced</td>
<td></td>
</tr>
<tr>
<td>Dec. '09</td>
<td>EDI Guidelines Completed (832, 850, 997, 855, 856, 810)</td>
<td></td>
</tr>
<tr>
<td>Mar. '10</td>
<td>Canadian Product Description Guidelines Finalized</td>
<td></td>
</tr>
<tr>
<td>Apr. '10</td>
<td>Canadian Global Location Number Registry Launch</td>
<td></td>
</tr>
<tr>
<td>Q3 2011</td>
<td>Canadian Healthcare Product Registry Launch</td>
<td></td>
</tr>
<tr>
<td>Dec. '10</td>
<td>Carenet/North American GLN Sunrise Date</td>
<td></td>
</tr>
<tr>
<td>Dec. '12</td>
<td>Carenet/North American GTIN Sunrise Date</td>
<td></td>
</tr>
</tbody>
</table>

Carenet Healthcare Community Groups

2011

- Product ID and Location ID
- Product Description Standardization Guidelines
- GLN Implementation
- GLN Data Synchronization
- Healthcare Product Data Synchronization
- Implementation of EDI Transactions

2010

- Product ID (GTIN)
- Global Trade Item Number (GTIN) Implementation
- Develop GLN Registry
- Develop Canadian Healthcare Product Registry
- Standardize EDI Transactions

2009

- E-commerce and Data Synchronization
- Supply Chain Standards Project – Phase 1
- Sector Implementation – Phase 2

Dec. 2009

Carenet Standards Implementation Roadmap

December 2009
Standards in the Healthcare Supply Chain
Aligning with the North American Roadmap for Implementation

Carenet Healthcare Sector Board voted to accept the standards implementation roadmap, aligning Canada with US industry-accepted sunrise dates adoption of GS1 standards.

The roadmap will drive the adoption of the GS1 system of standards in Canada by:

- December 2010 for the GS1 Global Location Number (GLN) to standardize location identification
- December 2012 for the GS1 Global Trade Item Number (GTIN) to standardize product identification
Location Identification
Global Location Number (GLN)

Identifies physical locations using a global standard.

Locations may include:
• Manufacturing Plants
• Distribution Centres
• Hospitals
• Loading Docks or Departments

0123456700123
Unique number at every level of packaging and with every variant of the product

Identifies any product or service for which there is a need to retrieve pre-defined information. The item may be priced, ordered or invoiced at any point in any supply chain.
Future Healthcare Supply Chain

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Product</th>
<th>GPO</th>
<th>Distributor</th>
<th>Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>GTIN = 12565448739714</td>
<td>GTIN = 12565448739714</td>
<td>GTIN = 12565448739714</td>
<td>GTIN = 12565448739714</td>
<td>GTIN = 12565448739714</td>
</tr>
</tbody>
</table>

No relabeling of product needed...

One bar code from point of manufacture, to point of use...
Canadian Healthcare Product Registry
The electronic exchange of accurate product information with minimal human intervention is the founding principle of Data Synchronization. The downstream business benefits of which include:

- Productivity for supply chain transaction processing by automating product listing process
- Error reduction through the elimination of paper and manual processes
- Improving velocity of supply chain
- Decreasing freight costs through accurate dimensional information
- Enhanced trading partner collaboration via the electronic exchange of information
Source Product Information

Pharmaceutical
Food Service
Grocery
Consumer Goods
Medical/Surgical*
Manufacturers

Canadian Healthcare Product Registry GDSN Enabled

Data Integrity/Data Validation/Normalization
Data Integrity/Data Cleansing

Data Loading Solutions
Data Retrieval Solutions

Hospitals
GPOs
Shared Service Organizations

*Available July 2011
Canadian Healthcare Product Registry GDSN Enabled

Source Product Information

Pharmaceutical
Food Service
Grocery
Consumer Goods
Medical/ Surgical*
Manufacturers

Hospitals
GPOs
Shared Service Organizations

Data Loading Solutions
Data Integrity/ Data Validation/ Normalization
Data Integrity/ Data Cleansing

GS1 Canada Data Pool powered by GHX

Global Data Synchronization Network

*Available July 2011
How Does Product Get Into the Registry?

- Product data is owned, loaded and managed by the supplier.
- Product attributes are identified and standardized by healthcare trading partners through the GS1 Canada Community Management Process.
- Registry will enable Canadian healthcare suppliers and providers to load and pull product data that is community-specific, ensuring Canadian requirements for trade and data synchronization are met.
- Registry will receive data from the Global Data Synchronization Network (GDSN) so that organizations with international trading partners have access to up-to-date product information from around the world.
Information within the Canadian Healthcare Product Registry

Over 90 Supply Chain and Clinical Attributes:

- Global Trade Item Number (GTIN) (M)
- Description Short (English and French) (M)
- Additional Trade Item Identification (O)
- Width (M)
- Manufacturer Name (M)
- Brand Name (O)
- Medical Device Class (O-M)
- DEHP (Di-ethylhexyl phthalate) (M)
- Mercury (M)
- PVC (Polyvinyl Chloride) (M)
- Special Handling – Storage (O)
- Latex Content (M)
- Sterilization Method (M)
- Porcine content (M)
- Bovine content (M)

(M) Mandatory   (O) Optional   (D) Dependant
Canadian Healthcare Product Registry - Critical Path

**June 2009** - Carenet Board passes motion to develop National Registry of Medical Surgical Products

**April 2010** - Medical-Surgical attributes Identified and Business Rules Defined by Community.


**June 2011** - GS1 Canada Data Pool Launched

**July 2011** - Launch of National Medical-Surgical Product Registry to Canadian Healthcare Providers

**July 2011** - Med-Surge supplier onboarding to National Registry begins

**December 2010**

- GLN Sunrise Date

**December 2012** - Proposed Industry Sunrise date for loading med-surge product data into the Registry

**December 2012** - GTIN Sunrise Date
What Does the Future Look Like?
# Why GS1 Standards are Needed in Healthcare

<table>
<thead>
<tr>
<th>Before GS1 Standards</th>
<th>After GS1 Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Silos within healthcare organizations and/or regional supply chain practices lead to a lack of interoperability. As a result, there are increased costs across the healthcare sector</td>
<td>• Healthcare sector will engage in ongoing collaboration to drive adoption of a national standards implementation plan</td>
</tr>
<tr>
<td>• Hospitals re-label drugs and medical devices with proprietary identification codes when they arrive at the shipping doors, taking up valuable staff time and leaving room for error</td>
<td>• Products will carry the same label from the manufacturer all the way through to end-use</td>
</tr>
<tr>
<td>• Hospitals manually enter and update product data and inventory lists, resulting in the potential for inaccurate, outdated information</td>
<td>• Product information will be loaded and maintained directly by manufacturers in a single, central, online source accessible to all healthcare providers, preventing errors and reducing administrative burden</td>
</tr>
</tbody>
</table>
Goals of a Standardized Healthcare Supply Chain

- Improved patient safety
- Reduction in medical errors
- Cost savings through improved productivity and supply chain efficiencies
- Effective track and trace
- Interoperability between all supply chain trading partners
- Drive a sustainable healthcare supply chain
QUESTIONS?
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GS1 Canada
Rob.bell@gs1ca.org
416-510-8039 ext. 2268