

20
24

Canada West Health Leaders
CONFERENCE

@CCHL_CCLS

#CWHLC2024



Synergies in action: The power of collaboration

Track and Trace - Dock to Bedside

Leveraging the Potential of the
GS1 DataMatrix (2D) Barcode and Identifier Technology Standard

Anjan Sidhu B.Eng., M.B.A.

Vice President, Healthcare

anjan.sidhu@gs1ca.org



Cameron McEwen B.A.

Director, Business Solutions

cameron.mcewen@gs1ca.org

CANADIAN COLLEGE OF
HEALTH LEADERS



COLLÈGE CANADIEN DES
LEADERS EN SANTÉ

Imagine: People, Technology, Resources...



K	▶ kelvin (<i>temperature</i>)
m	▶ meter (<i>distance</i>)
A	▶ ampere (<i>electric current</i>)
s	▶ second (<i>time</i>)
mol	▶ mole (<i>amount of substance</i>)
kg	▶ kilogram (<i>mass</i>)
cd	▶ candela (<i>intensity of light</i>)



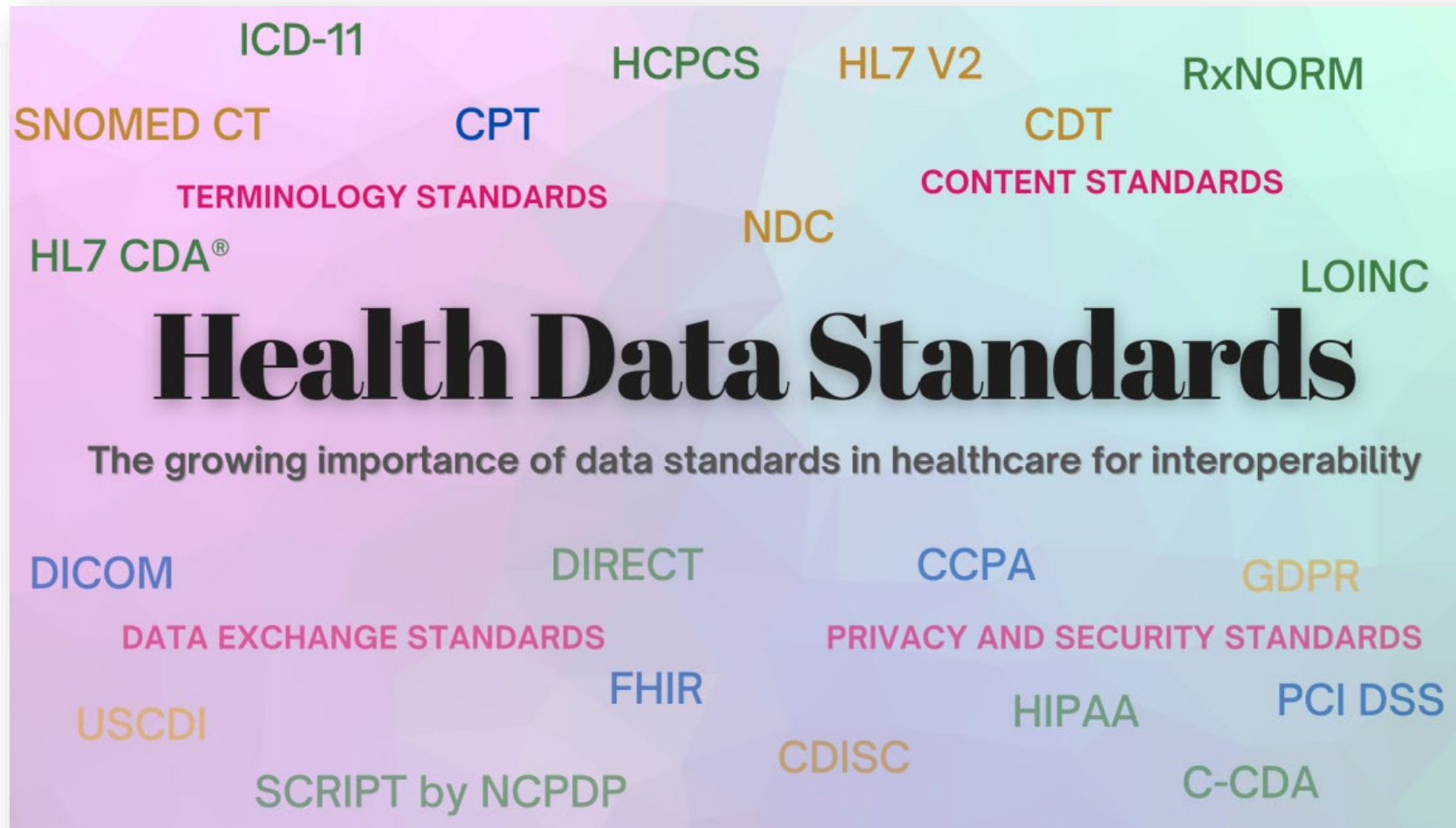
152 O Come, All Ye Faithful.
Adeste Fideles. Portuguese Hymn. Irregular. Anon.
Tr. by Frederick Oakeley.

1. O come, all ye faith-ful, joy-ful and tri-um-phant, O come ye, O
2. Sing, choirs of an- gels, sing in ex- ul- ta- tion, O sing, all ye
3. Yea, Lord, we greet Thee, born this happy morning, Je- sus, to

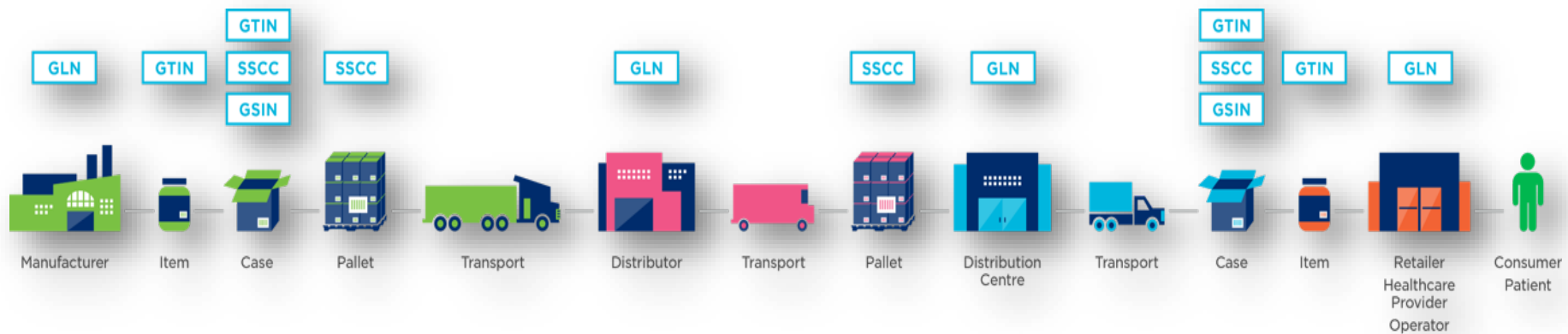
come ye to Beth- le- hem: Come and ho- bor Him born the King of



Digital Standards in Healthcare



GS1 Identification Keys – Connecting the Physical and Digital Worlds



Interactive Session



Thursday, November 14, 2024
1:45 -3:15

- 1 About GS1
- 2 GS1 Standards
- 3 Exercises
- 4 Call to Action

About You – Your Role



- Are you aware of GS1 Canada?**
- Clinical** (M.D., Nurse, CNO, Pharmacist, Allied Health)
- Non-Clinical** (Supply chain, Purchasing, Inventory Mgt., Finance, I.T.)
- Other**

About GS1





but back then,

GS1 is a global standards organisation

Neutral and
not-for-profit

User-driven
and governed

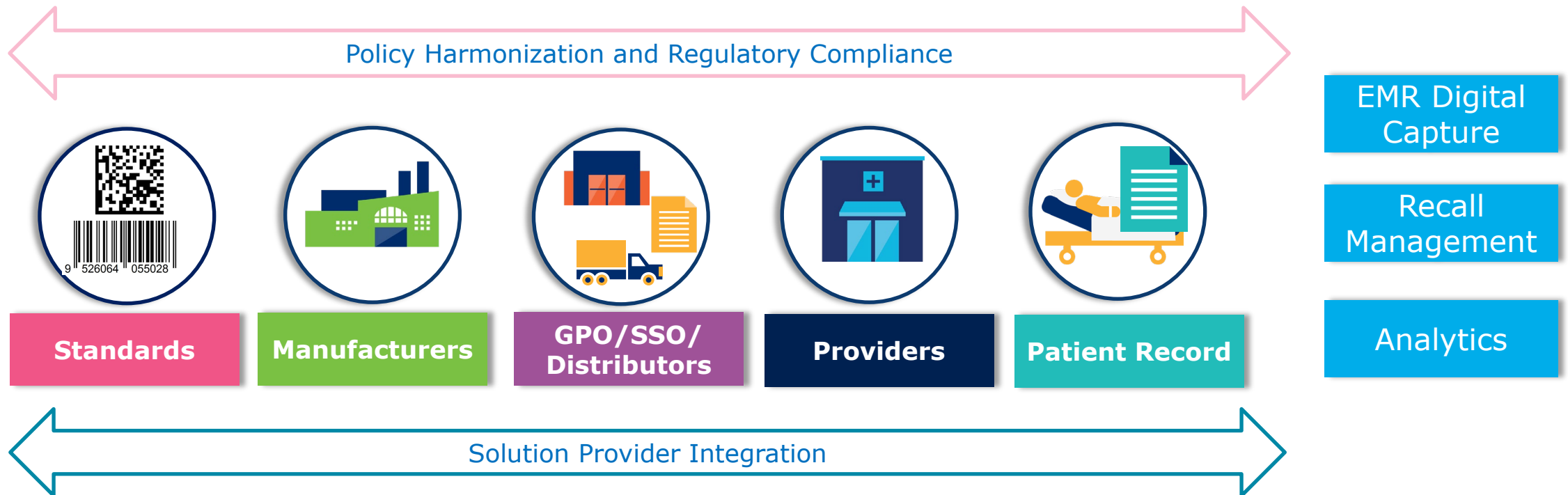
Global
and local

Inclusive and
collaborative



Clinically Integrate Supply Chain

Every patient record incorporates common language (standards) and accurate data that establish the foundation of **patient safety** | **robust analytics** | **effective product recall management** | **efficiencies**



GS1 standards



Identify



Capture



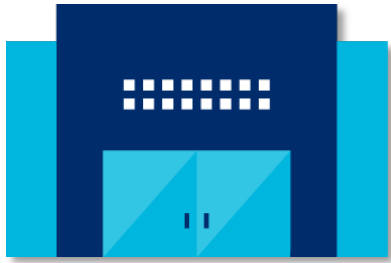
Share

Pharma Unique Trade Item Identification

A Global Trade Item Number (GTIN) is used to uniquely identify any type of item (product or service) upon which there is a need to retrieve pre-defined information.



GTIN: Trade Item identification rules



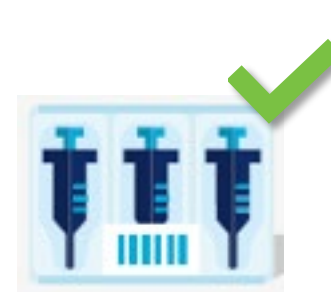
The manufacturer / brand owner allocates the GTIN




One trade item, one GTIN



A GTIN for every different variant of a trade item




(01) 0 9524000 05926 0
(17) 250425
(10) ABC123
(21) abcd1234

Re-use of a GTIN is not permitted

Unique Device Identifier (UDI) – In GS1 terms – for Medical Devices

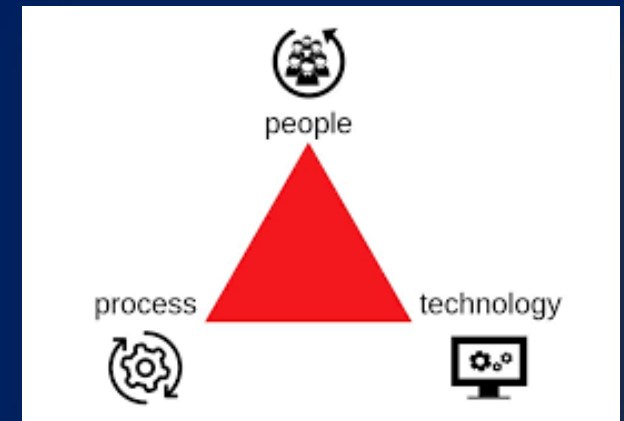
<p>UDI Unique Device Identification</p>	<p>GS1 standards Product Identification</p>
<p>DI Device Identifier (DI)</p>	<p>GTIN Global Trade Item Number</p>
<p>PI Production Identifier (PI) <i>if applicable</i></p>	<p>AI Application Identifier (AI)</p> <ul style="list-style-type: none"> • Expiration date AI(17) - e.g. 141120 • Batch – lot AI(10) - e.g. 1234AB • Serial number AI(21) - e.g. 12345XYZ
<p><i>Production Identifier data will vary by medical device type and manufacturer current practice.</i></p>	
<p>DI + PI = UDI</p>	<p>GTIN or GTIN + AI(s) = UDI</p>

Exercise

Scenario: Your hospital's cardiology implantable device vendor has introduced a new coronary stent, which the hospital has agreed to purchase. What is the process for adding this product to your formulary, and what critical data is required for this process?

CONSIDERATIONS

- Internal stakeholders – clinical, non-clinical, who are the “keepers” of the data?
- Systems impacted – e.g. ERP, EMR, WMS, etc.
- How will products be identified and captured ?
- What will you identify?
- Who will identify and why?
- How long will the process take from “agreement” to “implant”



GS1 standards



Identify



Capture



Share

GS1 Barcodes for healthcare products



EAN/UPC



**GS1
DataMatrix**



(01)19506000117843
(17)141120
(10)NYFUL01
(21)192837

GS1-128



(01)19506000117843(17)141120(10)NYFUL01(21)192837

GS1 Barcode transition



Who
is who...?



This is a DataMatrix

Ensures product traceability and patient safety in healthcare and other sectors

Approved for healthcare product identification



This is a QR Code

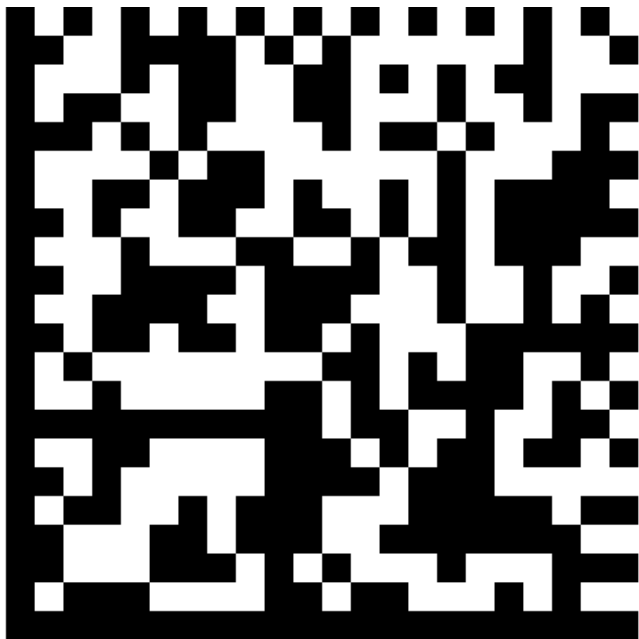
Primarily used in the retail sector

Not intended for healthcare product identification

GS1 DataMatrix barcode

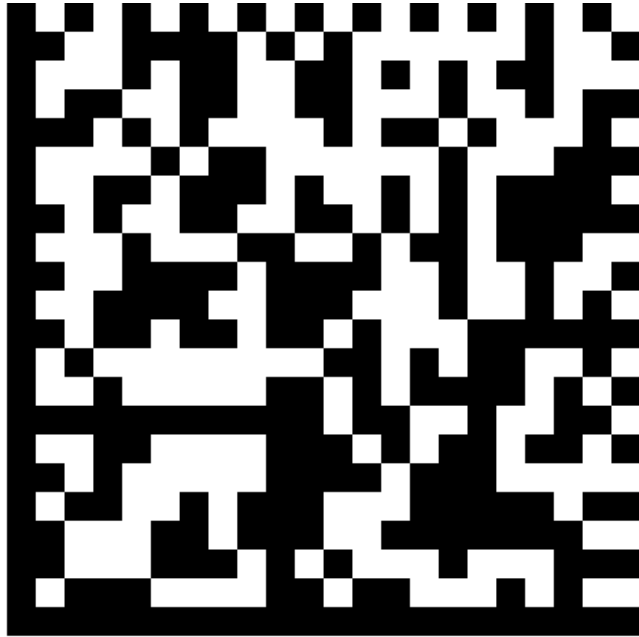


ABOUT



- Requires Image scanner
- It can encode:
 - Up to **2334 alphanumeric** characters capacity
 - Up to **3114 numeric** capacity
 - GTIN, Expiry, Batch, Lot
- Primary Healthcare Application Areas:
 - Medical Devices
 - Pharmaceuticals

GS1 Datamatrix: Features and Benefits



- Size
- Information Storage
- Error Correction
- Printing Flexibility
- Global Compliance

Community Engagement

GS1 Healthcare: **ONE** product **ONE** barcode, to avoid confusion and risk

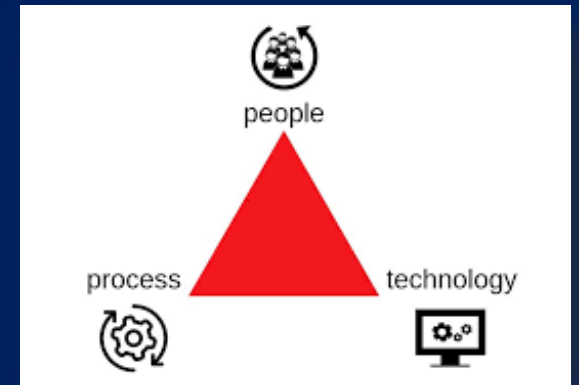


Exercise

Scenario: Your hospital's coronary stent supplier has issued a Health Canada recall. Hundreds of affected stents were implanted over the past two years, with more in inventory. What steps are needed to identify affected patients, isolate inventory, and mitigate further risk?

CONSIDERATIONS

- How do you identify and “target” patient and product?
- Internal stakeholders – who do you contact?
- Systems impacted / needed – ERM, EMR, WMS etc.?
- Product concern?
- Timeframe?
- How do you ensure all affected is removed from all locations (warehouse, local storage, med. carts etc.)
- How do you assess if you achieved success?



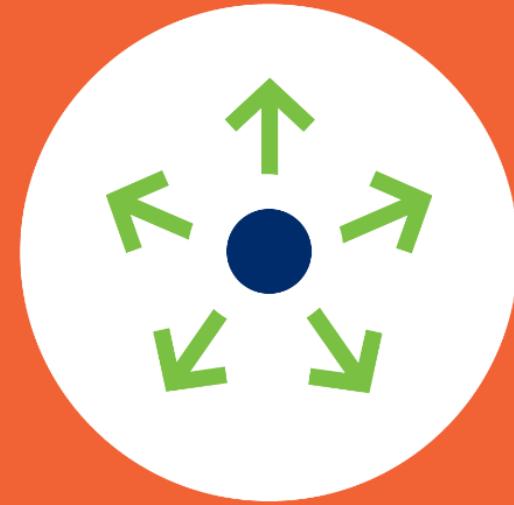
GS1 standards



Identify



Capture



Share

Sharing – What

- Brand owner certified Data
- Standardized naming conventions
- Standardized Product Attributes
 - Pharmaceutical (DIN, GTIN)
 - Medical Device (UDI, GTIN)
- Standardized images – at all hierarchy levels

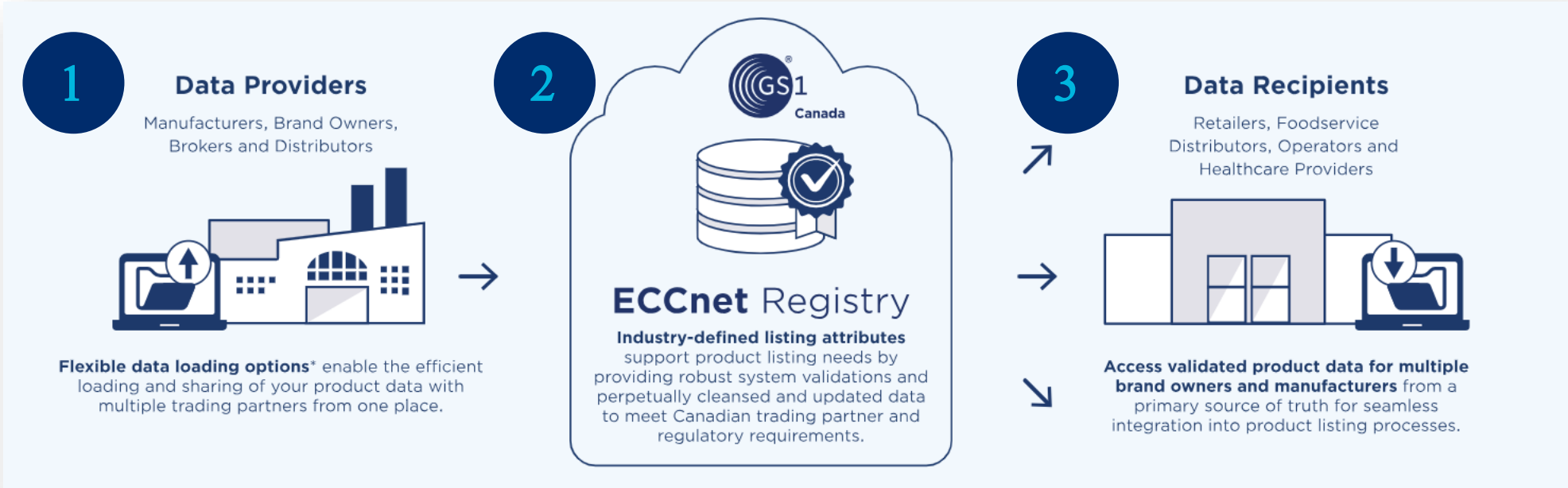


Attribute Name
Brand Name - English
Brand Name - French
Global Product Classification Code (GPC)
GTIN (Global Trade Item Number)
Manufacturer Company Name
Manufacturer GLN/DUNS+4
Medical Device Class
Product Contains Latex
Product Type
Short Description - English
Short Description - French
Base Unit
Consumer Unit
Invoice Unit
Orderable Unit
Shipping Unit
Medical Device License Number (MDL)
Brand Owner Name
Brand Owner GLN

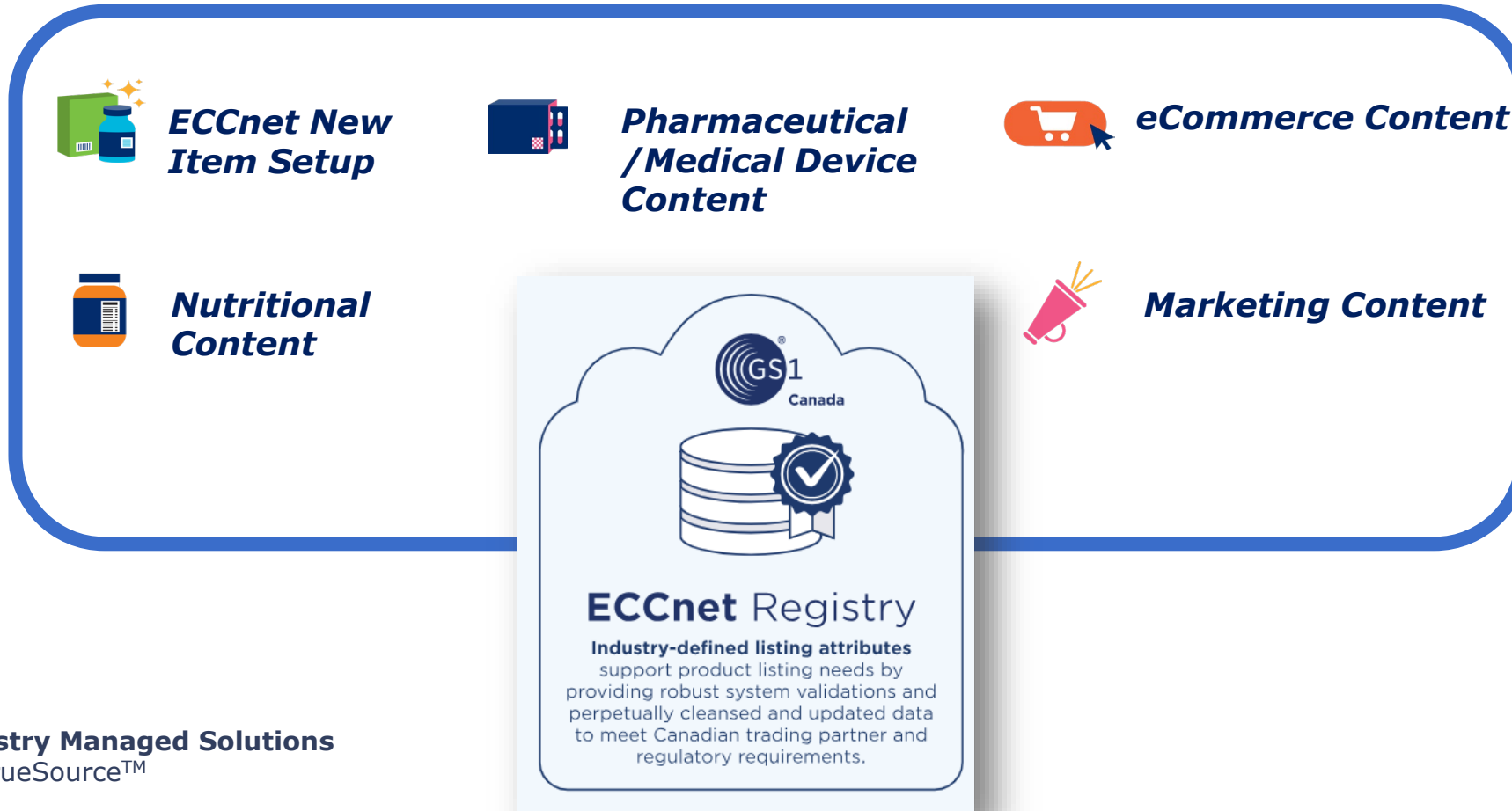
Partial Attribution List. GS1 Canada ECCnet.

Sharing – How?

GS1 Canada ECCnet Industry



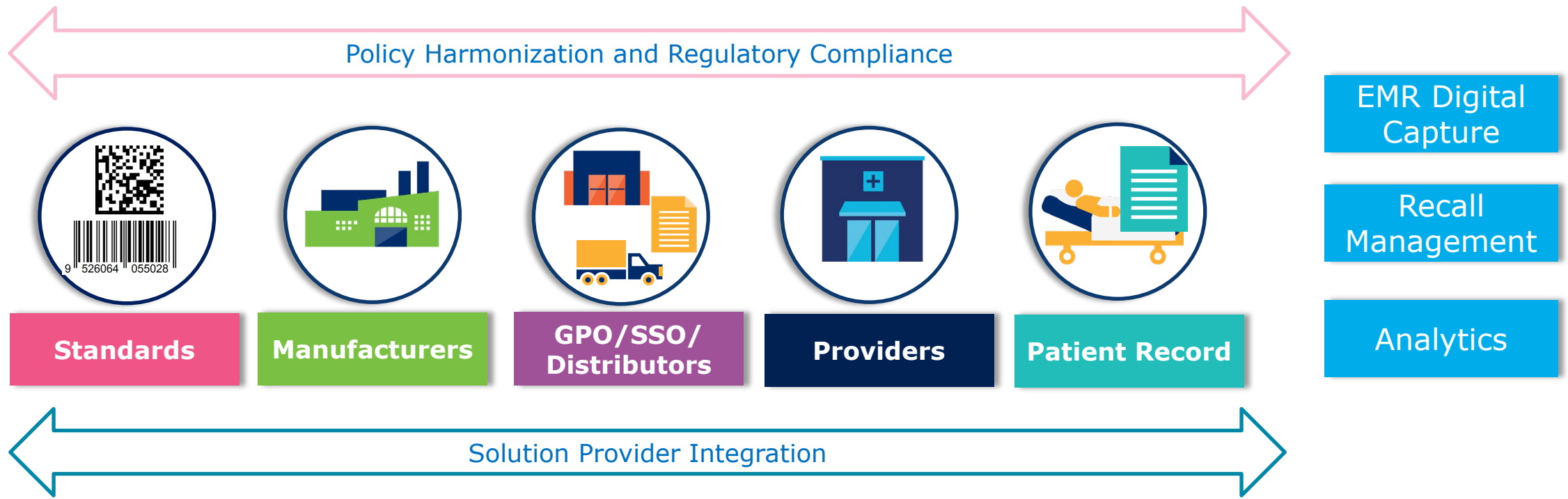
GS1 Canada ECCnet Industry Managed Solutions



ECCnet Industry Managed Solutions
Powered by TrueSource™

Clinically Integrate Supply Chain

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Call to Action

Healthcare Leaders, what is keeping you up at night?

**Let's start a dialogue.
Let's stay connected.**

Anjan Sidhu
Vice President,
Healthcare
anjan.sidhu@gs1ca.org

