



Healthcare Transformation Group

Implementation Reality
GS1Healthcare Global Conference
October 2nd 2013





Agenda

- Welcome
- HTG Introduction and Video
- GS1 HC US & HTG Together
- Standards Penetration in Healthcare- Barcode Assessments
 - Benchmarking
 - Results
 - Are we there yet?
- Interactive Session





Welcome

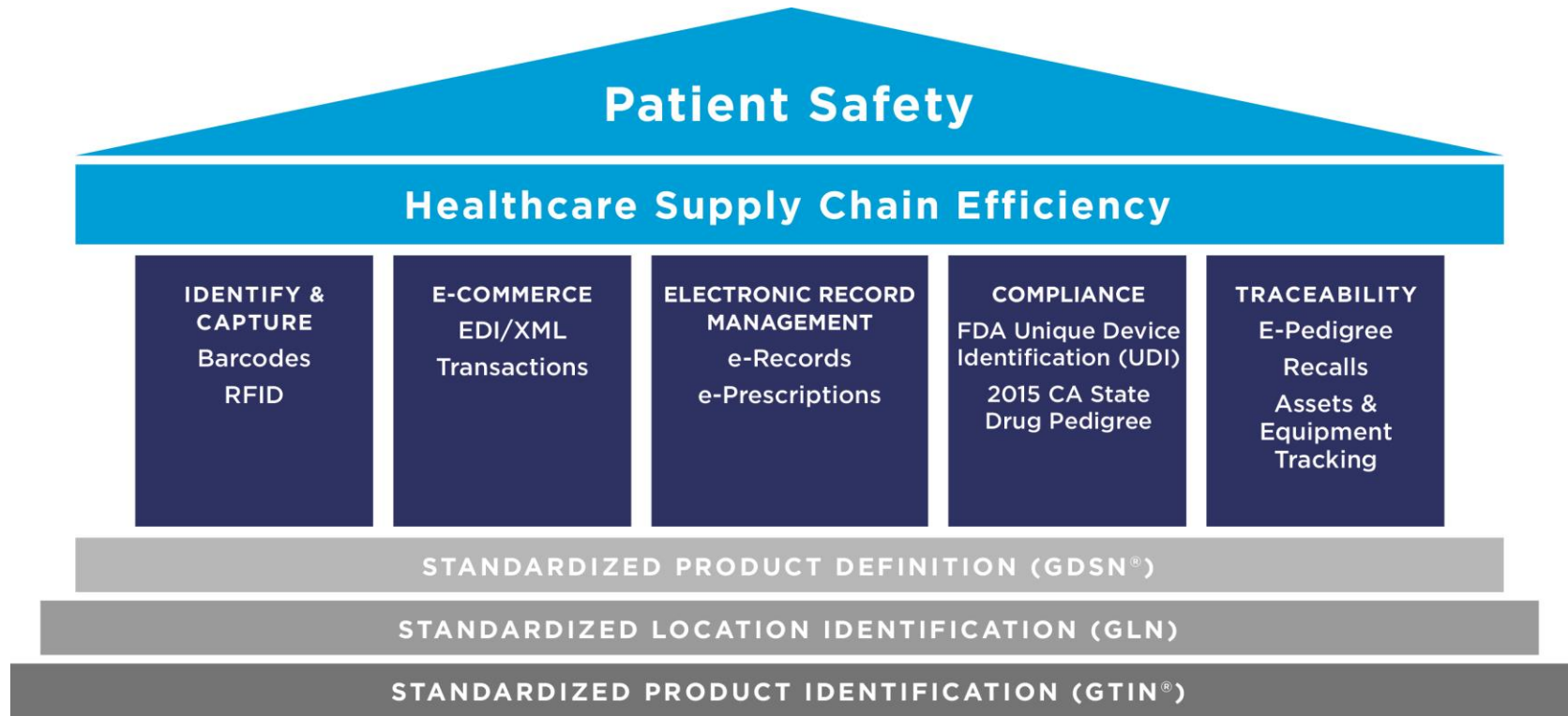
GS1® is a neutral, not-for-profit organization dedicated to the design and implementation of global standards and solutions to improve efficiency and visibility in supply chains.

- > 1M companies, executing >6B transactions/day with GS1 Standards.
- Member Organizations in 111 countries, with the Global Office in Brussels, Belgium.

GS1 Healthcare is a voluntary user of stakeholders including manufacturers, wholesalers & distributors, as well as hospitals and pharmacy retailers, regulatory agencies and trade organizations.



GS1 HEALTHCARE US



STANDARDIZATION **INTEROPERABILITY**





GS1 Healthcare US Leadership Team

Healthcare Category	Term ends 12/31/13	Term ends 12/31/14
Acute Care Provider	Cynthia Shumway Intermountain Healthcare	Michael Innes Kaiser Permanente
Alternate Site Provider	Craig Short Good Shepherd Rehabilitation Network	Karen Wolfe Mayo Clinic
Distributor	Ron Bone McKesson Corporation	Danielle Fink Cardinal Health
Group Purchasing Organization	Dennis Byer Novation, LLC	Pat Klancer Amerinet
Healthcare Associations, Education, Government ¹	Deb Sprindzunas AHRMM	Curtis Rooney HSCA
Medical Device Manufacturer	Dennis Black BD	Corwin Hee Covidien
Pharmaceutical Manufacturer	Michael Ventura GlaxoSmithKline	Peggy Staver Pfizer, Inc.
Retail Pharmacy	Vacant	Vacant
Solution Provider ¹	Keith Lohkamp Lawson Software	Josh Skiba GHX
Member-at-Large	John Terwilliger Abbott Laboratories	Jean Sargent MedAssets
Regulatory/Advisory Rep	Vacant	Jay Crowley FDA
Ex-Officio ¹ (1 year term)	Dennis Orthman SMI	

¹ Non voting members



Introductions

Chris Chandler, GS1 US

Michael Innes and Kirk Metzger, Kaiser
Permanente

Cynthia Shumway, Intermountain Healthcare





The Healthcare Transformation Group





Who

The HTG is a coalition composed of the following;

- 5 Integrated Delivery Networks (IDN's)
 - Geisinger Health System
 - Mayo Clinic
 - Intermountain Healthcare
 - Mercy Health
 - Kaiser Permanente
- Over \$50B in combined operating revenue
- Over 100 Hospitals represented
- Over 300K employees
- Over 18K licensed beds





What

A coalition is a pact or treaty among individuals or groups, during which they cooperate in joint action, each in their own self-interest, joining forces together for a common cause. This alliance may be temporary or a matter of convenience.





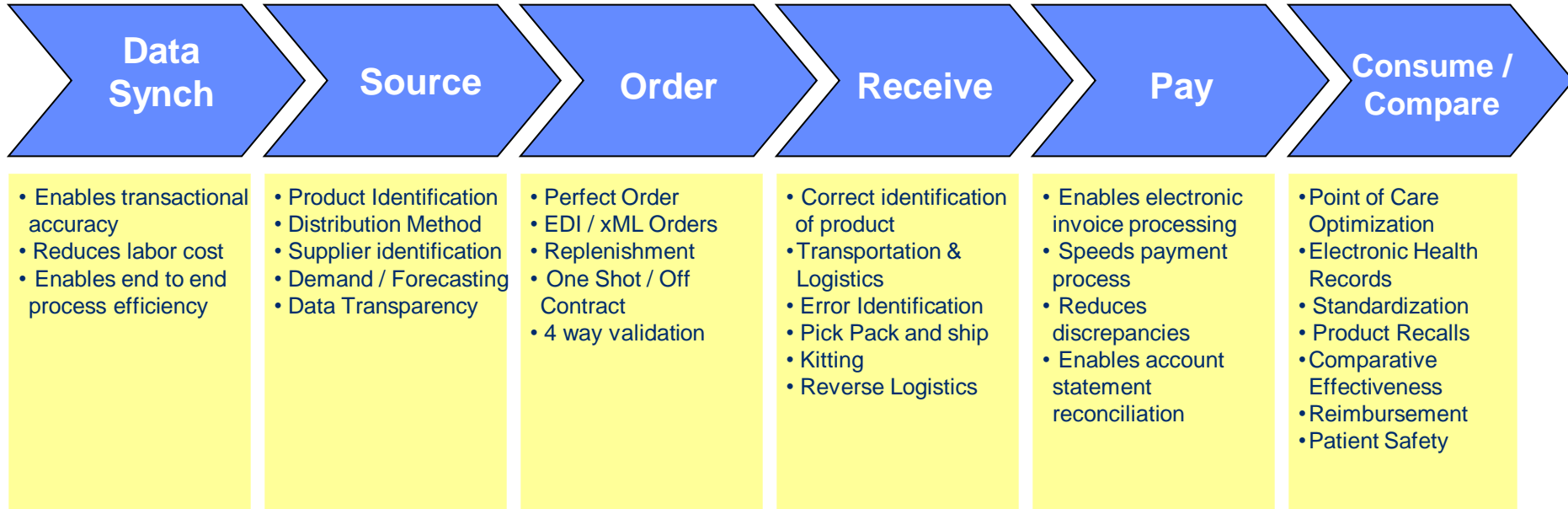
Why

HTG was conceived on the following foundations;

- Collectively we (providers) can accelerate change across the supply chain
- Enhance patient safety
- Improvement of backend business processes
- Providers can influence the adoption of GS1 Standards
- GS1 Standards will impact patient care beyond the Point of Use
- Communicate with the market place with one voice of the customer



Source to Consumption Vision



The application of the GS1 standards will be used in all areas in the Source to Consumption model...

Master Data Synchronization

Enables end to end transactional efficiency



HTG Video

http://www.youtube.com/watch?v=g7D6pm_bLyU&feature=youtu.be





GS1 and HTG





Lessons at the Checkout Counter

- Our grocery colleagues chose a single standard without national regulation in only a few years with industry organizations and innovative leaders from top suppliers and purchasers.
- They created a single standard, the Uniform Code Council (UCC) to administer the system for the U.P.C. barcode, combining with the European Article Numbering Association (EAN) in 2005 and now known as GS1.
- This work transformed interactions with consumers through automation offering quality and value, eliminating inefficiencies while leveraging information technology.
- Sound familiar to our goals today?



GS1 US- Forty Years of Experience

- GS1 US® is dedicated to the adoption and implementation of standards-based, global supply chain solutions in the US, serves > 300K companies -- 16,000 of which are in healthcare.
- GS1 Healthcare US® began our journey in 2008 after FDA regulations utilized the technologies from retail industries for healthcare. We focus on driving the adoption and implementation of GS1 Standards in the healthcare industry to improve patient safety and supply chain efficiency.



Global Healthcare Stakeholders Support the Adoption of GS1 Standards



Vance Moore

Senior Vice President - Operations

Laurel Junk

Chair, Healthcare Transformation Group

Vice President Supply Chain, Kaiser Permanente



Gene Kirtser

President/CEO



Deborah Petretich Templeton
Chief, Care Support Services



MAYO CLINIC

By: James R. Francis

Division Chair
Mayo Clinic Supply Chain Management

Healthcare Transformation Group

April 25, 2013

*News Release from Geisinger, Intermountain Healthcare,
Kaiser Permanente, Mayo Clinic and Mercy*

Physicians and Clinical Researchers Take the Lead on UDI

ST. LOUIS – The Healthcare Transformation Group (HTG) has announced the establishment of a Research and Development (R&D) Team, comprised of physicians and clinical researchers from the five HTG healthcare systems – Geisinger, Intermountain Healthcare, Kaiser Permanente, Mayo Clinic and Mercy.

The team will advance the goals of the HTG, including the adoption of GS1® Standards, and jointly accelerate the healthcare systems' work to implement a Unique Device Identification (UDI) system. The HTG R&D team is made up of the following representatives:

- Joseph Drozda, Jr., M.D., Director of Outcomes Research, Mercy
- Jove Graham, Ph.D., Director of Clinical Research Project Development, Geisinger Center for Health Research, Geisinger Health System
- J. Brent Muhlestein, M.D., Cardiology, Intermountain Healthcare
- Liz Paxton, M.A., Director of Surgical Outcomes, Kaiser Permanente
- Robert F. Rea, M.D., Cardiovascular Diseases, Mayo Clinic



US FDA Barcode Standards

GS1 Standards meet requirements for the FDA Pharmaceutical Barcode Rule and UDI Rule for medical devices and supplies used widely by manufacturers and supply chain partners.

- The 2004 FDA Barcode Rule currently requires a standards-based linear barcode for prescription medications; reopened for comment in 2012 to accommodate alternative technologies as BCMA rates steadily increase at >65% of US hospitals.
- With the Final FDA UDI Rule, scanning in US hospitals can now include medical devices marked with standardized unique identifiers allowing automated identification and data capture (AIDC) from procurement through their use in patient procedures.





Benchmarking- Barcode Assessments





GS1 US Barcode Assessments

- To assess the current state of products marked with barcodes for AIDC in US hospitals, GS1 US conducts pharmaceutical and medical device scanning assessments in warehouse receiving, storerooms, and surgical areas.
- The assessment results provide insight into current barcoding practice given the impact of the above current and proposed rules, allowing health systems to use scanning technologies in additional areas to provide patient care.



Assessment Objectives

- The GS1 US Barcode Assessments will benchmark for a 3 – 5 year study to allow both GS1 US and our stakeholders (hospital, distributor or manufacturer) to report and track over time:
 - Prevalence of barcoded product.
 - Compliance with GS1 standard barcodes.
 - Non-scanning barcodes.
 - Secondary information, types of symbologies.
 - Barcode hierarchy (marked at unit of use?)



Assessment Methodology

- Facility spreadsheet of item master database with total number of items and products coded to shelf labeled internal identifiers and GTINs when available.
- Current business practices and challenges at facility; storage areas including labeled with internal item master identifier, areas barcodes are scanned at the facility, products that scan poorly, other pain points.
- Determine locations to scan (DC, warehouse, storeroom, O.R.)
- Determine number of products to scan.



Assessment Data

Whether scanning pharmaceuticals or medical/surgical devices, the following will be assessed and reported:

- % of GTINs in item master databases.
- % barcoded by each, intermediate and case.
- Non GS1 barcodes (HIBCC or non-compliant).
- % GS1 Barcodes (and those including NDC).
- % of products barcoded with secondary info, UDI Application Identifiers or serialization.
- Type of barcodes GS1-128, GS1 DataMatrix, U.P.C., etc.



Early Benchmarking



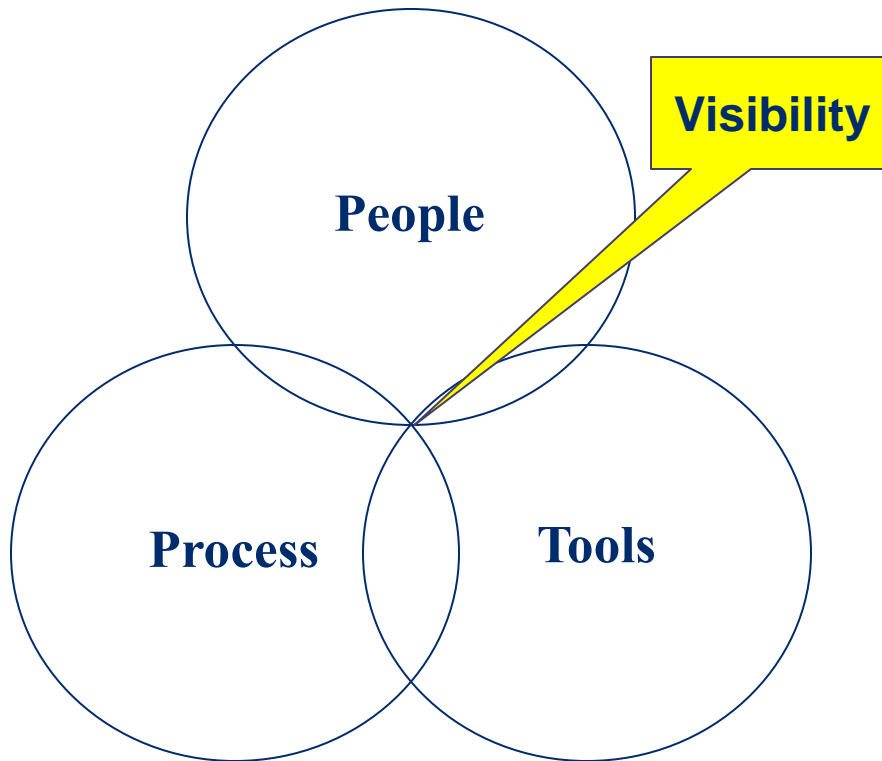


Kaiser Permanente

- Founded in 1945
- Largest non profit Integrated Delivery Network (IDN) in the U.S.
- ~ 9m members
- >167K employees
- \$60B Revenue
- 37 Hospitals, 611 Medical office buildings
- 2nd Largest employer in California
- 2nd largest real estate owner in the California
- Largest civilian medical record system in the world



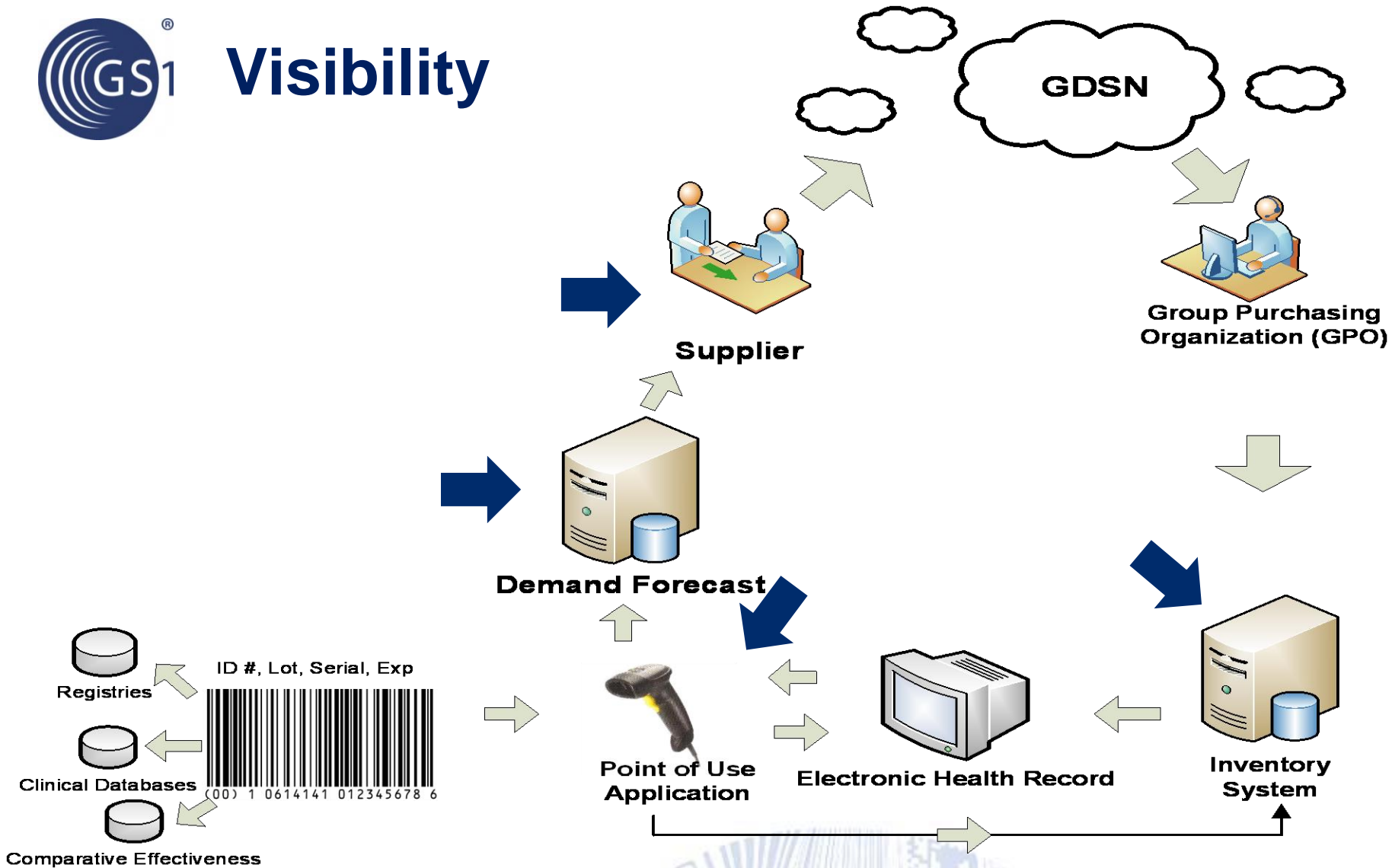
Supply Chain (SC) Transformation Initiative



- Drive Accountability
- Optimize SC Processes
- Standardize tools



Visibility





Kaiser Permanente Benchmarking

- In our continuing efforts to promote the mission of the Healthcare Transformation Group (HTG), Kaiser Permanente (KP) completed a GS1 Barcode Compliance Survey within selected KP facilities.
- The survey reflects a current snapshot of the GS1labeled inventory in selected Procedure Rooms at selected KP facilities.
- We surveyed over 33,000 unique SKU's in KP Operating Rooms, and noted all barcode types affixed to each product.



Barcoding Compliance

- Conducted in Q4 2012
- Performed by 3rd party inventory auditors
- 4 Facilities surveyed
- Over 33,000 unique SKU's surveyed in the Operating Room

Standard	Barcode Compliance
GS1 barcodes	42%
HIBCC barcodes	37%
Non-standard barcodes	8%
No barcode	19%



Summary



- Current compliance rates are low
- Limited value from 'End to End' implementation
- One voice from 'the customer'
- Mandatory vs. voluntary
- Utilize leverage points





Progress- 2013

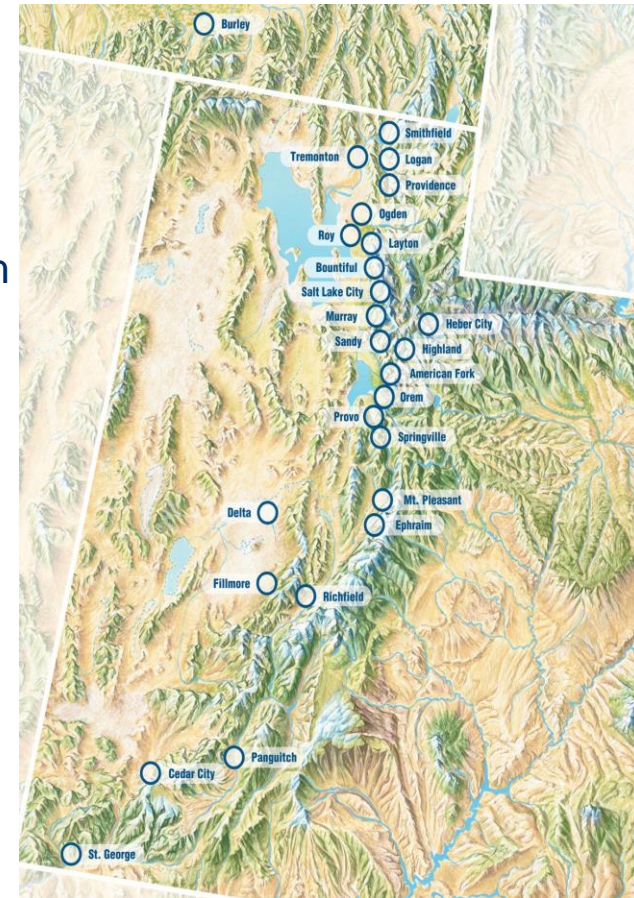
Barcode Assessments





Intermountain Healthcare

- Headquarters in Salt Lake City, UT
- Created in 1975 – gifted to the community by the LDS Church
- Largest employer in Utah – more than 33,000 employees
- Modern Healthcare #1 or #2 for the last seven years
- Hospital Network
 - 23 Hospitals; 2,500 + Licensed Beds
- Homecare
- Medical Group
 - 800 Employed Physicians; 200 Clinics
- Select Health – Health Plans
 - 550,000 Direct Enrollees
- \$4.4 Billion in Net Patient Services Revenue
- \$6 Billion in Assets
- AA+ Standard & Poor's; Aa1 Moody's
 - *only system to receive highest rating from both S&P and Moody's*





What are we striving for?

- **Perfect Contract**
- **Perfect Pricing**
- **Perfect Order**
- **Perfect Receipt**
- **Perfect Invoice**
- **On time Payment**
- **Perfect Charge Capture**
- **Perfect Patient Data**
- **Improved Patient Safety**





Intermountain & Geisinger 2013 Scan Study

- 4593 scans - pharmaceutical and medical/surgical devices
 - 68% Med Surg
 - Receiving dock, Storerooms, OR, Central Processing, Cath Lab and Interventional Radiology
- 52% of GS1 barcodes contained additional attributes
 - Lot 80%
 - Expiry date 65%,
 - Serial Number 5%

Standard	Prevalence-Medical Devices	Medical Device Details
GS1 barcodes	49%	GS1-128 83%, UPC 12% DataBar 2%, DataMatrix 1%,ITF-14 2%
HIBCC barcodes	29%	
Non-standard barcodes	40%	
No barcode	9%	



What did we learn?

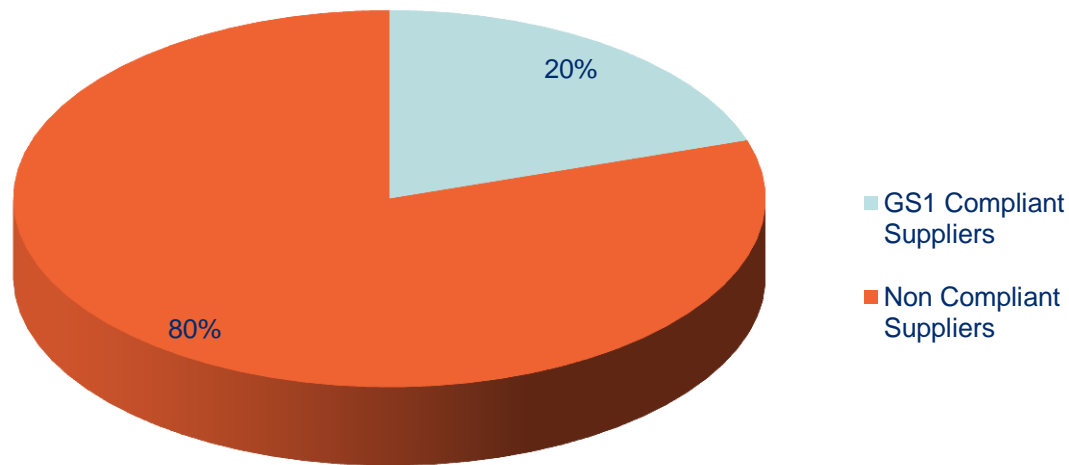
- Med/Surg supplies – increase of 7% from late 2012 to July 2013 in GS1 compliance
- Unmarked product rates fell to 9%.
- HIBCC scans fell to 29% comprising over 40 suppliers
 - Many included GS1 barcodes indicating GS1 conversions are occurring
- Mid to small size companies making good progress
- Gaps in levels of packaging with GS1 compliant suppliers



Reality Check – is there light at the end of the tunnel?



- Progress, however only 20% of suppliers scanned are GS1 compliant



- Critical mass for clinicians to scan is needed



What are you waiting for?

- Suppliers
- Providers
- Solution providers





Limitations

- Pharmaceuticals were scanned at 1 location only however achieved the expected number of items compared to the item master; controlled substances and cold chain items were excluded.
- Medical/Surgical devices were scanned at a combination of receiving dock, storage shelved in the warehouse and OR area at all available levels of manufacturer packaging representing 68% of scans; Inpatient and Outpatient Pharmacy represented 32% of scans.
- Overall, scans represented packaging for 81% unit-level, 11% intermediate and, 8% case labels.
 - For unit-level scans, it is noted this may not be the lowest level of use (level below the each) used at the point of care).
- Of the items that would not scan, 10% were without a barcode and 0.6% with poor barcode quality.





Summary

In Pharmacy, the majority of barcodes (75%) adhered to the GS1 standard.

- With less than 1% of products without a barcode, the remaining 24% of companies have an opportunity to engage with GS1 to:
 - meet the 2004 FDA Pharmaceutical Barcode Rule.
 - further the benefits of GS1 adoption once the FDA's 2010 guidance on the use of Standardized Numerical Identification (SNI) is enacted in California's 2015 Pharmaceutical Pedigree Law.

In the Medical/Surgical areas, a majority of devices chose GS1 barcodes (49%, increased from KPs benchmark at 42%).

- Unmarked product rates fell to 9%.
- HIBCC scans fell to 29% comprising over 40 companies, however many included GS1 barcodes indicating GS1 conversions are occurring as the benefits of increased data attributes and visibility are realized for implementation of the FDA UDI Rule.



Moving forward- are we there yet?

- GS1 adoption readiness will be reassessed yearly with these assessments to determine manufacturer compliance with GS1 Standards and increased depth of usage.
 - What is the threshold to cross to begin scanning medical devices, and is it based on % marked or % matched in item masters?
 - At what points in the hospital will scanning begin, at receiving or point of care?
 - Will point of care scans allow AIs transmitted into the EHR?
 - What do we have to learn from bedside scanning of pharmaceuticals?



Discussion & Questions

Coffee Break 3:00-3:30pm

Next session 3:30-5:00 PM

5:05 PM bus leaves for Hyatt,

***5:45pm bus leaves for networking
event***



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