

The Past: 1990's

Supply Efficiencies

Pallet Through Retail Packages

The Present: 2000-2005

Prevention of Dispensing Errors

Unit Dose and Unit of Use Packages

The Future: 2005 Forward

Counterfeit Deterrence

Pallet/Case/Retail Packages

GS1 **GLOBAL** Healthcare User Group

- Mission
- Vision
- Focus Areas





## The Past: Supply Chain Efficiencies



## Early 1990's

#### Retail Packs -

- Wholesalers' Need for Increased Levels of Automation in their Warehousing and Distribution Facilities
- Initial Focus on Retail Packages
- National Drug Code in Barcode Format (UPC)
  - Manufacturer/Labeler, Product, and Package Size
- Code Utilized by Wholesalers, Pharmacists and FDA
- All Retail Packages by 1992



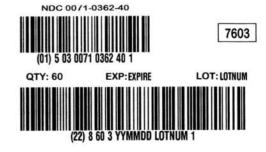


1993 - 1996
Shipping Containers —
Healthcare Distribution
Management Association (HDMA)
Voluntary Standards for Barcodes

- NDC, Case Quantity, Lot Number, and Expiration Date
- Two Adjacent Panels







60 Cartons x 100 Capsules

#### Dilantin<sub>®</sub>

(Extended Phenytoin Sodium Capsules, USP) 100 mg

Store at controlled room temperature, 15°- 30°C (59°- 86°F). Protect from light and moisture.



Parke-Davis



## The Present:

**Patient Safety** 

**Dispensing Error Prevention** 



## Patient Safety – Unit Dose and Unit of Use Packages

- March 2004: Final Rule Published
  - NDC on Unit Dose or Unit of Use Container Labels
  - Lot and Expiration Date Optional
  - Linear Symbology
  - UCC.EAN or HIBCC Standards
  - Two Year Implementation





#### Pfizer Position:

- Meet or Exceed Regulatory Requirements
- Meet Customer Needs Where Feasible
  - Utilize all Three Data Elements
    - NDC, Lot Number and Expiration Date





On Line Platen Printing

Hospital Unit Dose Blister
Reduced Space Symbology with
« GS1, a new name, a global vision to properties Code

©2004 GS1



## Importance of Data Standards: Structures vs. Carriers

#### Data Structures -

- Global Trade Item Number
  - Enables us to use existing NDC (or JAN/EAN)
  - Identifies Package Level
    - Mitigates the Need to Change Code for Unit Dose Level
- Application Identifiers for Format
  - 01 for Global Trade Identification Number (GTIN)
  - 10 for Lot Number
  - 17 for Expiration Date
    - Addresses Individual Site Needs on Dating Formats





## Importance of Data Standards: Structures vs. Carriers

#### **Data Carriers -**

- Barcodes Linear vs. Two Dimensional
  - 2D Codes
    - More Information, Less Space
    - Improved Readability over Linear Codes
  - Laser Scanner vs. Imaging Scanner
    - Price Differential is Declining
  - FDA Requires Linear for NDC
    - OK with 2D for Lot and Expiration Date
  - Market will Drive in the End
    - Those Hospitals Wanting the Variable Info, Will Invest in the Technologies
    - Those Drug Manufacturers Wanting Improved Relations, Will evaluate how to accomplish





## The Future: 2005 Forward

**Patient Safety** 

Secure Supply Chain



#### Lots of Discussion About Data Elements Needed

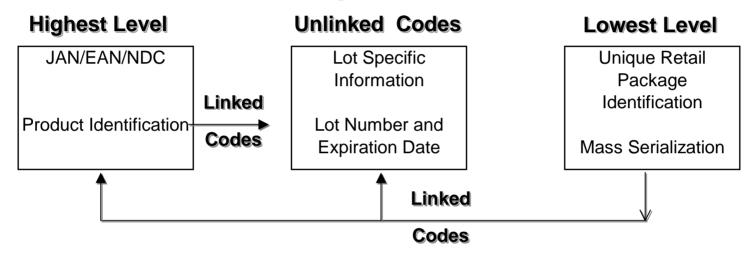
- Product Codes NDC/EAN/JAN
  - Prevention of Dispensing Errors
  - Inventory Management (via GTIN)
- Lot Number
  - Traceability and Recalls
- Expiration Date
  - Dispensing of Expired Medicine
  - Pharmacy Stock Rotation / Pharmacy Returns
- Serialization of Retail Packages
  - Authentication
  - Anti Counterfeiting via Track and Trace
  - Anti Diversion
    - Italian Bolino Initiative Ready for Implementation
    - Portugal, Belgium and South Africa Reviewing

All Four Data Elements are Related!





## **Relationship of Data Elements**



Product Code and Serial Numbers are "Pointers" to more information

- Product Name:
  - Latest Available Full Prescribing Information
  - UCC/EAN Standards Allow Linkage to Lot Specific Info
- Serial Number:
  - Lot Specific Info
    - Recall Information
    - Product Tracking and Authentication
    - Can Live on Its Own (EPC)



## What has Delayed Mass Serialization?

- Pallet and Cases Possible Today via EAN.UCC Barcode Standards
- Attempts at Package Level Stalled
  - Technology
    - Barcodes Require Line of Site
    - Contradicts Term "Mass"
  - Standards
    - Proprietary Solutions => High Cost

#### What will Enable Mass Serialization?

- Electronic Product Code
- Radio Frequency Identification and/or 2D Barcodes





# Global Healthcare User Group (HUG)

#### **Mission:**

<u>Lead</u> the healthcare industry to the effective utilization and development of global standards with the primary focus on <u>automatic identification</u> to <u>improve patient safety</u>

#### **Vision:**

Become the <u>single source</u> for <u>regulatory agencies and trade</u> <u>organizations</u> (manufacturer, wholesaler, hospital and pharmacy) to seek input and direction for <u>global standards</u> in the healthcare industry.





## Prevention of Medical Errors

- Encoding of the unit dose or unit of use package to enable automated verification to ensure right dose, for the right patient at the right time
- Encoding of the unit of use package to enable automated verification to ensure the right device for the right patient.

## **Product Authentication**

 Utilizing a GS1 data structure, enable authentication of individual packages, cases or pallets





## **Tracking and Tracing**

• Utilizing a GS1 data structure, work with supply chain trading partners to enable an electronic pedigree<sup>[1]</sup> for individual packages such that in the event of a counterfeiting incident, tracing of the suspect product can occur

## Increase Total Supply Chain Efficiency

Through greater visibility, accuracy and velocity





## Communication Strategy – To Date

- ✓ With charter members, ensure mission, vision etc are approved by member companies
- ✓ Develop a press release announcing the formation of the HUG describing mission, vision and initial focus areas
  - ✓ Distribute to:
    - **✓** HUG Members
      - ✓ Encourage distribution to press through their channels with their individual company comments.
    - ✓ GS1 Members via GS1 Affiliates
    - ✓ Major health regulatory authorities
    - √ Trade organizations (manufacturer, wholesaler, pharmacy, hospital)
  - ✓ Post to GS1 HUG Web Site
    - Let's Take a Quick Tour



- ✓ Develop electronic newsletter to:
  - Raise awareness of HUG activities
    - Emerging Standards, Practices and Positions
    - Sub-team Progress
  - GS1 will maintain a distribution list for newsletter
  - GS1 will distribute as appropriate
- Solicit members as needed
- Solicit sub-group members as needed

