



Healthcare

HUG Standards Implementation

GS1 Healthcare User Group (HUG)



Healthcare

Topics

Product Distribution Channels in Acute Healthcare

Information Channels in Acute Healthcare

A manufacturer's perspective

A clinician's perspective

AIDC Variables

Key country review

Member review

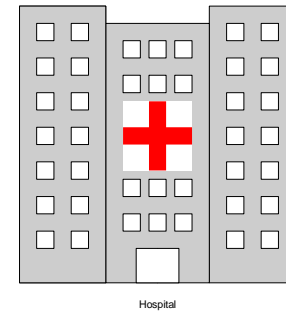
Gap analysis



Product Distribution Channels in Acute Healthcare

Food
Retail / Consumer
OTC (over the counter)
Rx
Cold Chain
Medical Supplies
Medical Devices
Equipment and spare parts

Direct
Distributor
Retail
Consignment
Used / Resale
VAR
Internet
Transfer



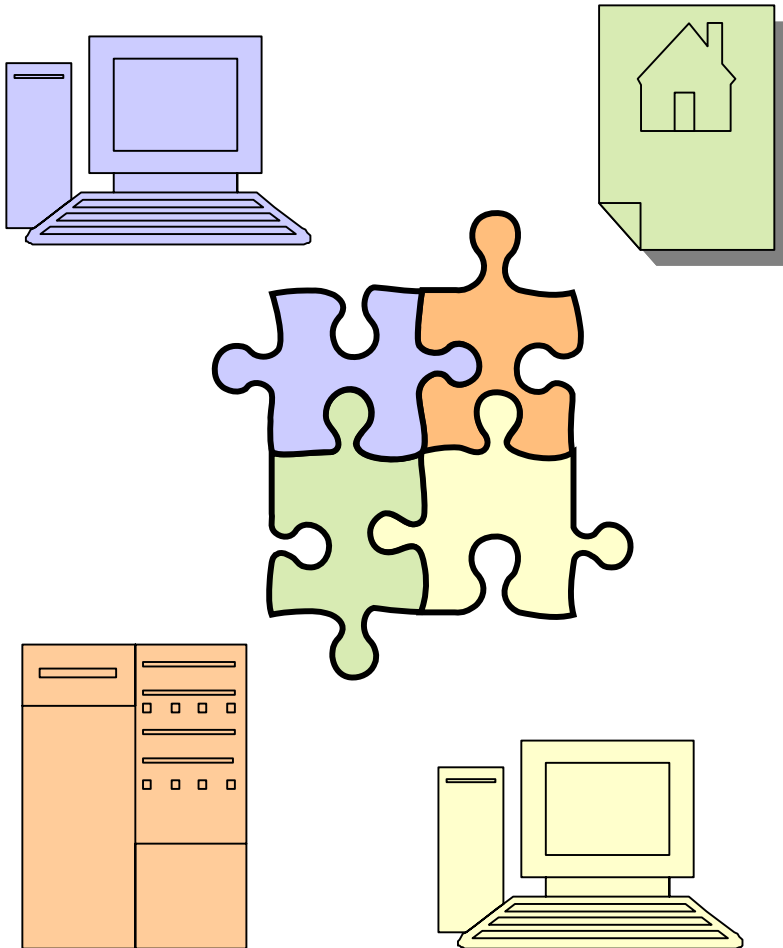
Information Channels in Acute Healthcare



One (1) item equals three (3) numbers

Jim Fitzgerald, Senior Vice President
Contracts and Operations Support
HCA, Nashville TN USA

Information Channels in Acute Healthcare



Data warehouses In hospital:

Product Data

Materials Management Systems

Patient Data

Clinical Information Systems

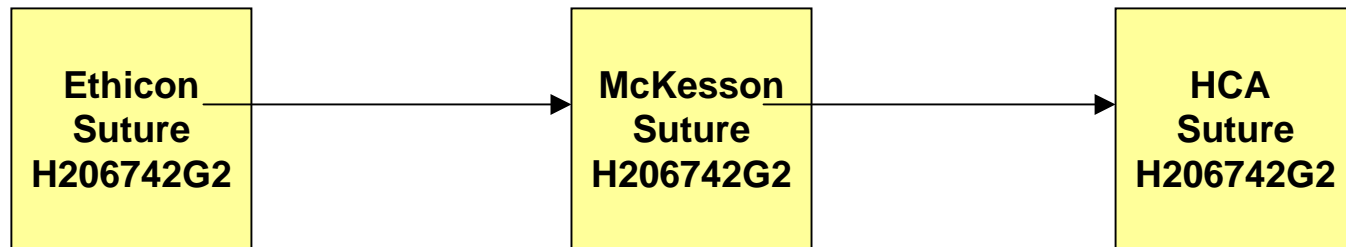
Pharmacy

Electronic Med Admin Records

Specialty Areas

Cath Labs, Biomed Engr, OR

Manufacturer's Perspective



One number across the Supply Chain!

Jim Fitzgerald, Senior Vice President
Contracts and Operations Support
HCA, Nashville TN USA

Clinician's Perspective



“The supply chain now ends at the patient’s bedside”

Alicia Perry PharmD
Director Medication Safety
HCA, Nashville TN USA





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AIDC Variables

Bar Coding

- Symbology e.g. Datamatrix, RSS
- Data Sourcing e.g. NDC, PZN
- Data Standard e.g. GTIN, HIBC, proprietary
- Data position e.g. concatenation

Human Readable

- Format conflict e.g. CE mark date format vs. (AI) 17 format

RFID

- Frequency e.g. 13.56 MHz
- Data Standard e.g. EPC



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Key Country Review - Japan

EAN-13 used for pharmaceuticals.

Japan Federation of Medical Devices Associations,
and DCC Japan (GS1 Japan) mandate UCC.EAN-128
With GTIN, expiry, qty, and lot in prescribed order.
Datamatrix and RSS not accepted.



Key Country Review - China

EAN-13 in use. SDA interested in rule for drugs and devices



SFDA

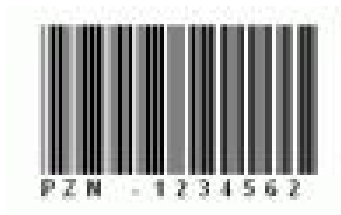




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Key Country Review - Germany

PZN, a 7 digit number in code 39, required for pharmaceuticals and certain medical devices. For retail Products, EAN-13 can be used but PZN in human readable must also be present.





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Key Country Review - Spain

In order to achieve this project, all Autonomous Region Health Systems are incorporating in all new supply contracts (usually, with an annual or bi-annual periodicity) the necessity of including the EAN bar coding system in every packing (being consumption unit or an aggregate of these). The first step of this project consists in informing the EAN/UCC 13 codes (on a numeric level) of the consumption units and of the aggregate presentations (in all of its variations) before next April 30th, 2005. Once this is achieved, it will be mandatory to symbolize with an EAN/UCC 13 bar coding system all consumption units and with an EAN/UCC 128 bar coding system all aggregate presentations (in all of its variations) before next September 30th, 2005.

Letter to manufacturers from Palex Medical S.A.



Key Country Review - United Kingdom

NHS PASA with help from eCentre (GS1 UK) mandates EAN bar codes for medical supplies. Then opens policy to accept HIBCC for “foreseeable future.”

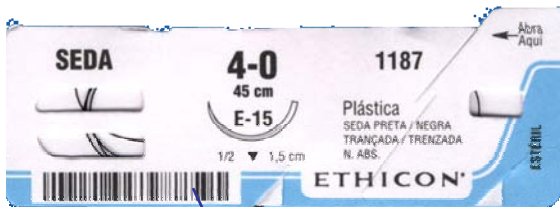




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Key Country Review - Brazil

EAN-13 for pharmaceuticals. UCC.EAN 128 for devices.
GS1 Brazil promoting the use of RSS.



1 789 1338 27040 7

- 1 - Identificador de Embalagem (envelope)
- 789 - Brasil
- 1338 - J&J Prod. Profissionais
- 27040 - Cód. EAN do produto
- 7 - Dígito verificador



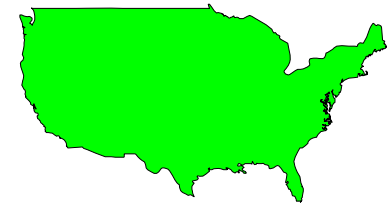
Key Country Review - Australia

EAN-13 for pharmaceuticals. Both EAN and HIBC in use for medical devices.



Key Country Review - United States

FDA mandates linear bar codes for pharmaceuticals. NDC or GTIN with NDC accepted. Bar coding for devices not regulated. Majority of devices use UCC or HIBCC. Some use proprietary bar codes or no bar codes. FDA keen on EPC RFID and implant serialization.





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Member Review

Johnson & Johnson

ASP	HIBCC
BWI	HIBCC
Cardioventions	HIBCC
Codman	HIBCC
Cordis	HIBCC
DePuy	HIBCC
Ethicon	HIBCC
Ethicon Endo	HIBCC
GyneCare	HIBCC
Lifescan	UCC.EAN
Mitek	HIBCC

OCD	HIBCC
Therakos	HIBCC
Rhogam Rx	UCC
Crosseal Rx	UCC
UVADEX Rx	UCC
Canada	UCC
Spain	EAN
Japan	EAN
Brazil	EAN

Current Situation

customer groups : Hospitals + Out Patient Market

<i>Packaging Level</i>	<i>current status</i>	<i>future</i>
Medical Devices basic packaging	< 2% EAN13 space on labels packaging material unsuitable techn. equipment (printer, IT)	RSS or data matrix (if space is an issue) ??? only GTIN → only if absolutely necessary (costs) !!!
shelf packaging	approx. 60% EAN13 + 128 approx. 30% EAN128 GTIN, batch no., expiry-date US = HIBC	100% EAN13 + EAN128 combined bar code rearrangement process ongoing (Europe + Asia)
transport packaging	approx. 60% EAN13 + 128 approx. 30% EAN128 GTIN, batch no., expiry-date US = HIBC	100% EAN13 + EAN128 combined bar code rearrangement process ongoing (Europe + Asia)
Pharmaceuticals basic packaging	< 250ml = no bar code space on labels, production speed techn. equipment (printer, IT) ≥ 250ml = ca. 90% EAN13 US = RSS (NDC, batch no., expiry)	100% RSS or data matrix (if space is an issue) (U.S.: instead of GTIN = UPN/NDC)
transport pack.	approx. 99% EAN13	100% EAN13 (U.S.: instead of GTIN = UPN/NDC)



Current Situation Division 'Aesculap'

market : world-wide

<i>Packaging Level</i>	<i>current status</i>	<i>future</i>
Implants basic packaging transp./shelf pack.	100% EAN128 GTIN, batch no./serial no., expiry-date	keep current situation
Instruments, engines, container basic packaging transp./shelf pack.	100% EAN128 GTIN, batch no./serial no., expiry-date	keep current situation
Surgical products shelf packaging transport pack.	approx. 90% EAN128 EAN, batch no., expiry-date	100% EAN128
Vascular Systems shelf packaging transport pack.	approx. 95% EAN128 GTIN, batch no., expiry-date for US : additional HIBC	100% EAN128

Combined bar code EAN13 + EAN128

medical devices

100 Intrafix[®] Air-matic[®]

D Druck-Infusionsgerät mit automatischer Belüftung.

GB Special IV administration set for pressure infusion with automatic air vent.

F Nécessaire à perfusion par pression avec prise d'air automatique.

E Equipo de infusión intravenosa para infusión a presión con toma de aire automático.

I Set per infusione a pressione con dispositivo per presa d'aria automatico.

P Sistema de administração E.V. para infusão sob pressão, com arejador automático.

S Infusionsaggregat för övertrycksinfusion med automatisk luftning.

CZ Infusní souprava pro přetlakové infuze s automatickým přívodem vzduchu.

SK Přetlaková infuzná souprava s automatickým odvodu vzdušným.

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B. Braun Melsungen AG
D-34209 Melsungen
Made in Germany

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B. Braun Medical sro., 148 00 Praha 11, IČO: 485 86 285
172-4323 12.02

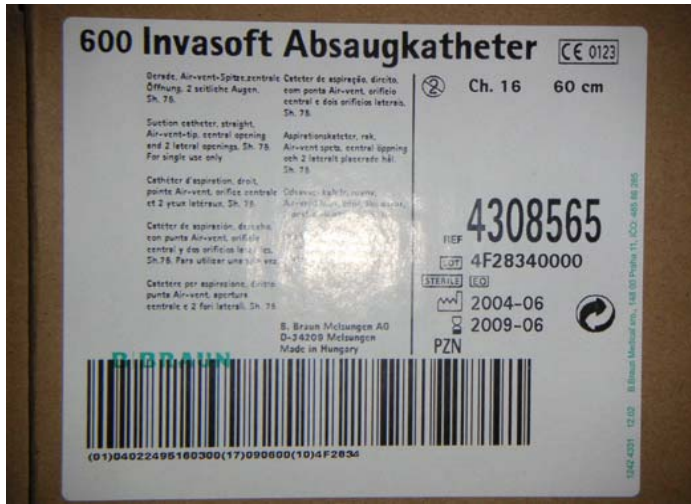
EAN13 content :
13-digit EAN, without application identifier (01)

EAN128 content :
(17) = expiry date
(10) = lot no.



Examples

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Gap Analysis

More Member Data

- Share best practices
- Determine usage of symbologies and data
- Determine areas of improvement

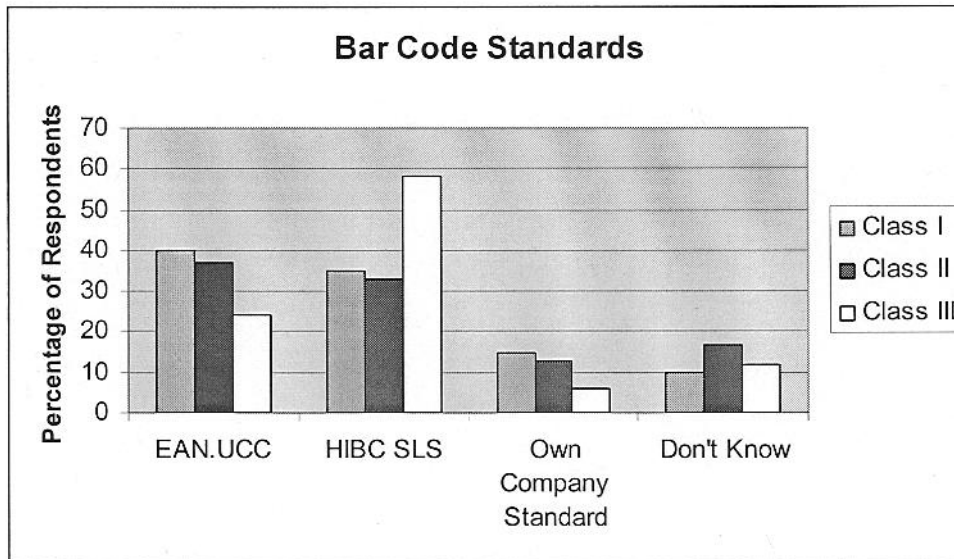


Figure 17

Example
AdvaMed* survey
Class III would be
implants: Cordis,
DePuy, Boston Sci,
Stryker, and Zimmer

*US counterpart to
Eucomed



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Contact details

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