Unique Device Identification (UDI)

Jay Crowley
Senior Advisor for Patient Safety
Food and Drug Administration
jay.crowley@fda.hhs.gov
301-980-1936
History of FDA’s UDI Project

• 2004 FDA Pharmaceutical Barcode Rule
• 2005 and 2006 FDA/FDLI Meeting on UDI
• 2005 FDA Contracted White Papers on UDI
• 2006 Public Meeting and Docket FDA-2006N-0292
• 2007 FDA Amendments Act of 2007
• 2007-2009 – UDI Database Pilots
• 2008 GHTF Ad-Hoc Working Group on UDI
• 2009 UDI Workshop and Docket FDA-2008-N-0661
• 2011 GHTF UDI Guidance published
• 2012 FDASIA provisions added
• 2012 July 10th FDA UDI Proposed Regulation Publishes
• 2012 November 7th – comment period closes
• 2012 November?? FDASIA proposed rule amendment
• 2013 May/July – expect UDI Final Rule
Legislation (FDAAA 07; FDASIA 12)

*Not later than December 31, 2012*, the Secretary shall issue proposed regulations establishing a unique device identification system for medical devices requiring the label of devices to bear a unique identifier, unless the Secretary requires an alternative placement or provides an exception for a particular device or type of device. The unique identifier shall adequately identify the device through distribution and use, and may include information on the lot or serial number. *The Secretary shall finalize the proposed regulations not later than 6 months after the close of the comment period and shall implement the final regulations with respect to devices that are implantable, life-saving, and life sustaining not later than 2 years after the regulations are finalized, taking into account patient access to medical devices and therapies.*
Establishing a UDI System

Combination of 4 distinct steps:

1. Develop a standardized system to develop the unique device identifiers (UDI)
2. Place the UDI in human readable and/or AutoID on a device, its label, or both
3. Create and maintain the UDI Database
4. Adoption and Implementation
1st – Developing the UDI

• Develop UDI code according to ISO 15459 [GS1, HIBCC, ICCBBA]
• Created and maintained by the manufacturer
• Concatenating Device and Production Identifier
• **Device Identifier (DI):** [static] Manufacturer, make, model [i.e., each catalogue number]
• **Production Identifier (PI):** [dynamic] however product is currently controlled – serial, lot number; expiration, manufacturing date
2nd – UDI Application

- Unique UDI applied to “base package” AND higher levels of packaging
- Default location is the label
- Human readable and encoded in a form of automatic identification technology
- No specific technology (technology neutral)
- ALSO Direct Part Marking (DPM) for
  - an implantable device (>30 days)
  - intended to be used more than once, and intended to be sterilized before each use
  - stand-alone software
General Exemptions

- Class I Devices do not need to include Production Identifiers in UDI.
- Devices, other than prescription devices, made available for purchase at a retail establishments… (aka OTC devices, regardless of where distributed).
- GMP-exempt Class I devices
- Individual class I, single-use devices, all of a single version or model, that are distributed together in a single device package, which are not intended for individual sale – the UDI is on the package
- And others…
UDI Application Example

PRESTIGE® Cervical Disc System
CERVICAL DISC, 6X12MM
Size: 6mm x 12mm
Mat'l: TITANIUM CARBIDE COMPOSITE

Sterility assured only when package is undamaged.

Medtronic Sofamor Danek USA, Inc.
1800 Pyramid Place
Memphis, Tennessee 38132
Telephone 800 933 2635 (in
U.S.A.) 901 396 3133 (Outside U.S.A.)
Fax 901 396 0356
Manufactured in WARSAW IN US

(01)00613994493736(17)221111(10)123456789

PRINT_RUN_TYPE(PLANT_NAME):USER_INITIALS002211
UDI Application Example

Finger-Mounted Locking Forceps

Manufacturer
T.A.G. Medical Products
Kibbutz Gaaton 25130 Israel
Tel: 972-4-9858400, Fax: 972-4-9858404

EC REP
EU representative
MEDNET GmbH
Borkstrasse 10 48163 Muenster, Germany
Tel: +49 (251) 32266-0
Fax: +49 (251) 32266-22

Distributor
Ethicon Endo-Surgery Inc
Cincinnati OH 45242-2839 USA

Do not use if package is open or damaged
Single patient use only
Does not contain latex or PVC

STERILE RX Only

REF FMF02
LOT 1Q34
QTY 4

(01) 2 081019001 002 4
(17) 080100(10)1Q34

REF FMF02
UDI Application Example
UDI Application Example

MOSAIC® 305 CINCH® II

**A**

**21 MM**

**UDI Code:**

(01)00643169001763(17)160712(21)21A11F4855

**Product Information:**

**MOSAIC® 305 CINCH® II**

Porcine Bioprostheses Aortic Valve

**Temperature Limitation:**

+5°C to +35°C

**Quantity:**

1

**Additional Information:**

- Sterile LC: Device has been sterilized using liquid chemical sterilants according to EN/ISO 14160.
- Nonpyrogenic
- Do Not Resterilize
- Do Not Use
- Rx only
- For US Audiences Only
- www.medtronic.com/manuals

**Check temperature indicator prior to use**

Manufacturer:

Medtronic, Inc.

710 Medtronic Parkway

Minneapolis, MN 55432

USA

Manufactured at:

Santa Ana, CA USA

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1211531002 Rev. 1B
Combination Products and Kits

• Combination product (PMOA is a device) has its own UDI; each device constituent needs its own UDI.
  • Except a CP that is physically, chemically, or otherwise combined with other parts of the CP such that it is not possible for the device constituent to be used except as part the CP.
• Each kit (devices only) has its own UDI; each device packaged in a convenience kit shall have its own UDI, distinct from the kits.
  • Except – a device is intended for a single use does not need its own UDI
3rd – Global UDI Database

- Device Identifier Type/Code [GTIN, HIBCC]
- Make/model; Brand/Trade Name
- Clinically relevant size
- Device version/model number (or reference number)
- Unit of Measure/Packaging level/quantity
- Controlled by – Lot and/or Serial Number; Exp. Date
- Labeler contact name, phone, email
- GMDN Classification code/term
- Whether packaged sterile
- Contains latex
- FDA premarket authorization (510k, PMA)
- Listing number
UDID Administrative Attributes

- DUNS Number
- Brand Name or Model/Version – Device Family
- Previous DI
- FDA product code (procode)
- Marketing Status/date (currently marketed or not)
- For single-use
- Contain Human Tissue
- Kit Product
- Combo Product
- Higher levels packaging
- Rx - OTC
Higher Levels of Packaging

Unique Device Identification Database (UDID) – Package Illustration

**Base Package**

- **Primary DI** = 001
- **Box of 100 gloves**
- **Device Count** = 100

**Package Configuration Examples**

- **Package DI** = 002
  - **Contains 4 units of Base Package DI 001**
  - **Quantity per package** = 4

- **Package DI** = 003
  - **Contains 10 units of Base Package DI 001**
  - **Quantity per package** = 10

- **Package DI** = 004
  - **Contains 5 units of Base Package DI 003**
  - **Quantity per package** = 5

Package configurations inherit the Base Package device attributes.
The label of Medical Device 123 Size 45:
Device Identifier (Device XYZ123)
Production Identifier (Lot #ABC)
Expiration date (MMDDYYYY)
Sterile; Latex free

Minimum Data Set
For each Device Identifier:
• Manufacturer and model
• GMDN Code
• Other attributes

Manufacturer (Acme)

3rd Parties (GDSN)

Web based tool

Bulk HL7 SPL

FDA’s UDI Database

Business Rules

Public User Interface

FDA Managed

FDA

Distribution
4th – Implementation

• For all devices entering interstate commerce after effective date (not retroactive)
• Based on premarket risk class after publication of final rule:
  • class III – 1 year
  • implants and life-sustaining devices – 2 years
  • the rest of class II – 3 years
  • class I – 5 years
• Phase out national numbering system (NDC/NHRIC)
• Direct part marking requirements are effective 2 years after class effective date