Nothing is more difficult to undertake, more perilous to conduct or more uncertain in its outcome, than to take the lead in introducing a new order of things. For the innovator has for enemies all those who have done well under the old and lukewarm defenders amongst those who may do well under the new.

Niccolo Machiavelli (1523)

Unique Device Identification (UDI) – Transforming the Global Medical Device Landscape

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History of FDA's UDI Project

- 1999 IOM Report – To Err is Human
- 2004 FDA Pharmaceutical Barcode Rule
- 2007 FDA Amendments Act of 2007
- 2012 July 10th - UDI Proposed Regulation Publishes
- 2012 FDASIA provisions added
- 2012 November 7th – comment period closes
- 2012 November 19th – FDASIA amendment (Dec 19)
- 2013 June – 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.*

Public Health Benefits

UDID provides global visibility and supports:

- Medical device recalls
- Adverse event reporting
- Tracking and tracing
- Supply chain security
- Anti-counterfeiting/diversion
- Disaster/terror preparation
- Shortages/substitutions
- Reduction of medical errors (e.g., bedside scanning)
- An easily accessible source of device information for patients and clinicians

Clinical Impact of UDIs

- Scanning devices at facility entry and maintaining UDI in the hospital information system would provide traceability (e.g., recalls)
- Scanning the device when it is used in a patient would provide documentation of use
- Bedside scanning for device verification – e.g., latex allergy, MRI compatibility, recalled devices
- UDI Database provides national catalogue of ALL devices – find appropriate device, find comparable devices in cases of disaster or shortages/substitutions

Date Format

- If label includes a date (expiration, manufacture):
- Presented as Month Day, Year (JAN 1, 2012)
- All dates must include a day (JAN 2012 not allowed)
- The month shown as a three letter abbreviation in capital letters: e.g., JAN, FEB, MAR
- Day is an number from 1-31
- Year is a 4 digit number

Effective 1 year after final rule publication

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

MOSAIC® 305 CINCH® II

A

21 MM

REF Reorder Number → 305C221

Size → 21 MM

Use By → 2016 – 07 – 12

SN Serial Number → 21A11F4855

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

MOSAIC® 305 CINCH® II

Porcine Bioprosthesis Aortic Valve

AOA®

Aortic

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

STERILE LC

Sterile LC: Device has been sterilized using Liquid Chemical Sterilants according to EN/ISO 14160.

PYROGEN

Nonpyrogenic

2 STERILIZE

Do Not Resterilize

Do Not Reuse

: 1

Quantity

+5 °C +41 °F +25 °C +77 °F

Temperature Limitation

! USA Rx only

For US Audiences Only

www.medtronic.com/manuals

Consult Instructions for Use

Check temperature indicator prior to use

Manufacturer:
Medtronic, Inc.
710 Medtronic Parkway
Minneapolis, MN 55432
USA

Manufactured at:
Santa Ana, CA USA

1211533002 Rev. 1B

MOSAIC® 305 CINCH® II

Porcine Bioprosthesis Aortic Valve

AOA®

Aortic

UDI Application Example

ENDOPATH®
dextrus™
Finger-Mounted
Locking Forceps

REF	FMF02	LOT	1Q34
	080100	QTY	4

(01) 2 081019001 002 4

(17)080100(10)1Q34

T.A.G. MEDICAL PRODUCTS
ת.א.ג. מכשירים רפואיים

CE 0344

Manufacturer
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Fax: +49 (251) 32266-22

ETHICON ENDO-SURGERY, INC.
a Johnson & Johnson company

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 R

℞ Only

D150PPLB02 Rev.D

ENDOPATH®
dextrus™
Finger-Mounted
Locking Forceps

REF	FMF02

Combination Products and Kits

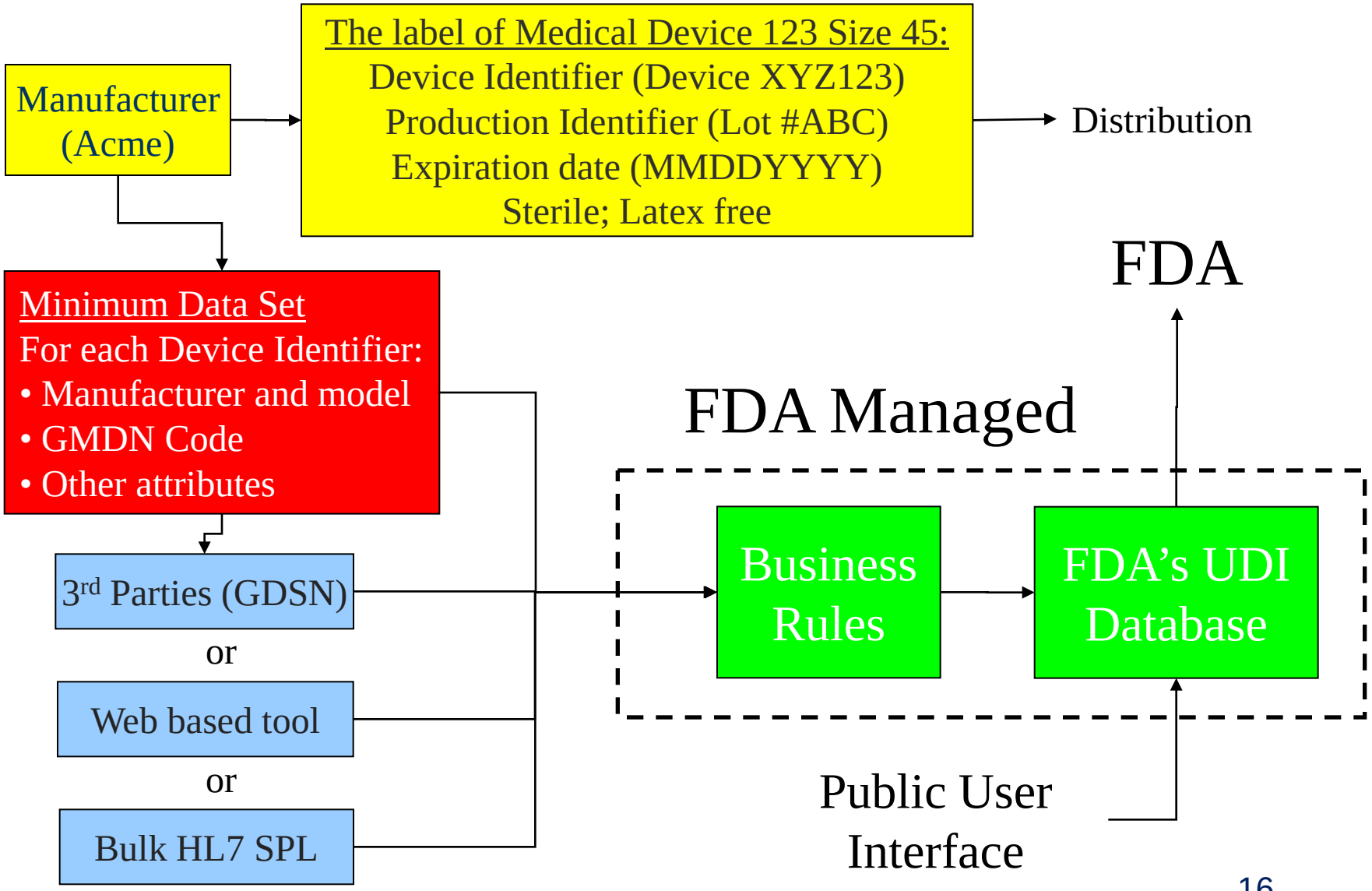
- Combination product (PMOA is a device) has its own UDI; each device constituent needs its own UDI.
  - Except a CP that is physically, chemically, or otherwise combined with other parts of the CP such that it is not possible for the device constituent to be used except as part the CP.
- Each kit (devices 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

For each Device Identifier:

- Manufacturer, Make/model, Brand/Trade Name
- Clinically relevant size
- Contact information
- Sterility information
- Contains latex
- FDA premarket authorization (510k, PMA)
- FDA product code (procode)
- Marketing Status/date
- For single-use
- Higher levels packaging
- Rx - OTC

FDA's Global UDI Database



4th – Implementation

- Based on premarket risk class after publication of final rule:
  - class III – 1 year
  - class II implants and life-supporting/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 (**except FDASIA**)

Limitations of UDI and UDID

- UDI is a foundational element – it unambiguously identifies a specific device (at its unit of use).
- Benefits accrue only if used by all stakeholders.
- UDID contains only “static” identifying and product information.
- UDID does NOT contain production information, such as lot or serial numbers – and is NOT for track/trace or other similar purposes requiring the full UDI.
- UDID provides link to product information- not a replacement for Recalls/Adverse Event Databases.

Unique Device Identification

www.fda.gov/UDI

Email: cdrhudi@fda.hhs.gov