Demystifying the Regulatory Framework for Medical Devices

FDA Small Business
Regulatory Education for Industry (REdI)
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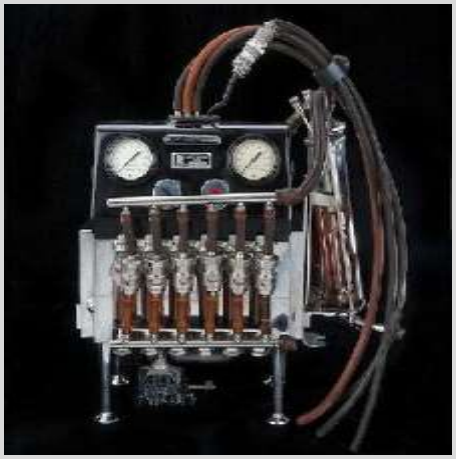
Innovation



Learning Objectives

- Describe recent legislative changes
- Introduce the steps for developing a Premarket Submission
- Understand the qualifications for a Small Business Certification

Recent Legislative Changes

- 21st Century Cures Act **(Cures)**
- Food and Drug Administration Reauthorization Act **(FDARA)**
- Medical Device User Fee Amendments **(MDUFA IV)**

Medical Device Amendments (1976)

- **Expanded** the Food, Drug and Cosmetic Act by a third
  - –Safety and effectiveness of medical devices

Medical Device Amendments (1976)

- **Broadened definition** of a device
- **Classified** medical devices according to their comparative risk into **three classes** (I, II, III)
- Specified **premarket procedures**
- Required evidence of **safety and effectiveness** for premarket approval
- Established mechanisms for **investigational device exemption (IDE)**

21st Century Cures Act (Cures)

- **Purpose:** to **accelerate** medical product development and **bring new innovations and advances** to patients who need them **faster and more efficiently**

Signed into law on December 13, 2016

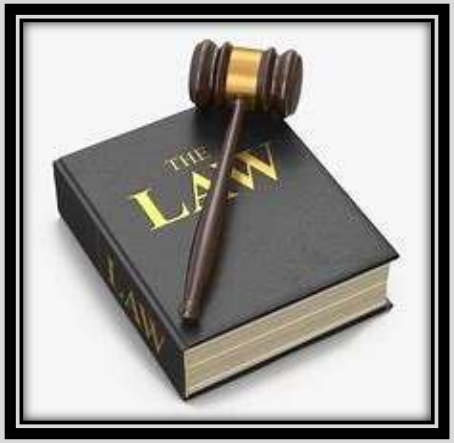
www.congress.gov/114/plaws/publ255/PLAW-114publ255.pdf

Cures

- Incorporate **patient perspectives** into the development and review process
- **Breakthrough** Devices
- **Least Burdensome**
  - Minimum **amount** of information necessary to adequately address a regulatory question or issue through the most **efficient** manner at the **right time**
- Expand the **HUD/HDE** program
  - Population limit increased from 4,000 to 8,000

Food and Drug Administration Reauthorization Act (FDARA)

- Reauthorize various FDA **user fee** programs
- Utilize **patient voice**
- Develop and approve products for **rare diseases and pediatrics**
- Over the counter **heading aids**



Signed into law on August 18, 2017
www.congress.gov/bill/115th-congress/house-bill/2430

Medical Device User Fee Amendments (MDUFA IV)

- Reauthorize Medical Device User Fees
  - Do things **Better**
    - Review times
  - Do things **Differently**
    - Least Burdensome
    - Leverage data

Signed into law on August 18, 2017 as part of FDARA
www.fda.gov/ForIndustry/UserFees/MedicalDeviceUserFee/ucm454039.htm

Submission Process: 4 Steps

1. Determine if the product meets the definition of a **device**
2. Identify Regulatory **Classification** and **Pathway**
3. Develop **Valid Scientific Evidence**
   - Nonclinical
   - Clinical (if applicable)
4. Submit Premarket **Application**

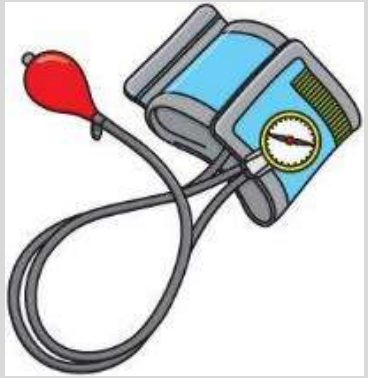
Step 1: Determine if Product meets definition of a Device

- A instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent, or other similar or related article, including a component part, or accessory which is:
  - *Intended for **diagnosis** of disease or other conditions*, or in the **cure, mitigation, treatment, or prevention** of disease

Food, Drug, & Cosmetic Act, Section 201(h)

Medical Device

Does **NOT achieve** its primary intended purposes **through chemical action** or dependent on being **metabolized**



The term "device" does not include software functions excluded pursuant to section 520(o).

Food, Drug, & Cosmetic Act, Section 201(h)

Poll Question:

Which of these is a medical device?

A

B

A. Infant diaper

B. Adult protective garment

C. Neither

D. Both

Protective Garment for Incontinence

Protect an incontinent patient's garment from the patient's excreta

21 CFR 876.5920

A baby is not sick and does not have a medical condition

Step 2: Identify Classification & Regulatory Pathway

- Identify regulatory **classification**
- Classification will generally indicate **regulatory pathway** (marketing submission type) for that device type

Regulatory Classification

- Based on **Device Description and Intended Use**
- Classified and regulated according to their **degree of risk** to the public
- Regulatory Control increases from Class I to III
- Product Codes (ProCodes)
  - Three-letter code

Regulatory Controls

- Provide **consistent requirements**
- Appropriate **level** of regulatory oversight
- Based on the level of **risk**
- **General**, **Special** and **PMA** Controls

General Controls

- Apply to all medical devices, unless exempted by regulation
- Consist of:
  - Prohibition against **adulterated or misbranded** devices
  - **Registration** of manufacturing facilities
  - **Listing** of device types
  - **Good Manufacturing Practices (GMPs)**
  - **Labeling**
  - Premarket notification **510(k)**

Special Controls

- Apply when General controls are insufficient
- Examples:
  - Special **labeling** requirements
  - Mandatory **performance standards**
  - **Postmarket** surveillance
  - Patient **registries**
  - Premarket **data** requirements

Classes of Medical Devices

Class	Risk	Potential Harm	Controls	Submission Type(s)	Percent Devices in Class
I	Lowest 	Present minimal potential for harm	General	510(k) 510(k) Exempt * 93% are exempt from 510(k) submission	35%
II	Moderate 	Higher risk than Class I devices	General and Special (if available)	510(k) 510(k) Exempt	53%
III	Highest 	Sustain or support life, are implanted, or present potential unreasonable risk of illness or injury	General and PMA	PMA	9%

3% devices are Unclassified

Step 3: Develop Valid Scientific Evidence

- **Non-clinical**
  - Animal studies
  - Biocompatibility
  - In vitro Bench Testing

- **Clinical**
  - Well/partially-controlled clinical studies
  - Real-world evidence
  - Patient preference
  - Post-market data

21 CFR Part 860.7(C)(2)

Step 4:
Submit Premarket Application

- **De Novo**
  - De Novo Classification Request
- **510(k)**
  - Premarket Notification
- **PMA (Premarket Approval)**
  - Traditional or Modular PMA
  - Product Development Protocol (PDP)
- **Humanitarian Device Exemption (HDE)**

Each submission type has own sets of processes, regulations (except De Novo), review times, evidence burden

Humanitarian Device Exemption

- Marketing application for an Humanitarian Use Device
- Rare diseases or conditions
  - **Affects or is manifested** in not more than **8,000** individuals in the United States per year
- Similar to PMA
  - **Exempt** from the **effectiveness requirements**
  - Based on **probable benefit**

Food, Drug & Cosmetic Act Section 520(m)


SMALL
BUSINESS

Poll Question:

Did your company make less than $100M in gross sales/receipts in the past year?

A. Yes

B. No

C. I don't know, but after hearing about the SBD program I will find out!

What is a Small Business?

- A business that reported:
  - **$100 million or less** of **gross receipts or sales** in its most recent Federal Income Tax Return for a taxable year
  - Including **all affiliates**

Benefit

- **Reduced fee**
  - 510(k)
  - Original PMA/BLA
  - PMA/BLA Supplements
    - PMA Supplements: Panel-track, 180-day, & Real-time
    - 30-day Notices
    - Periodic Reports (the annual fee)
  - Premarket Report (PMR)
  - 513(g)
  - De Novo

Benefit

- **Fee Waiver** for first PMA /BLA or Premarket Report (PMR)
  - Less than **$30 million gross sales/receipts**

Resources

- **Guidance**
  - FY 2018 Medical Device User Fee Small Business Qualification and Certification

- **Device Advice**:
  - Reduced Medical Device User Fees: Small Business Determination (SBD) Program

FY 18 User Fees (in U.S. Dollars)

Application Type	Standard Fee	Small Business Fee
510(k)	$10,566	$2,642
513(g)	$4,195	$2,098
De Novo Classification	$93,229	$23,307
PMA, PDP, PMR, BLA	$310,764	$77,691◆
Panel-track Supplement	$233,073	$58,268
180-day Supplement	$46,615	$11,654
Real-time Supplement	$21,753	$5,438
BLA Efficacy Supplement	$310,764	$77,691
PMA Annual Report	$10,877	$2,719
30-day Notice	$4,972	$2,486

◆Fee Waiver - Less than 30 million gross sales/receipts

Obtain Your SBD Certification BEFORE You Submit a Premarket Application

Questions

Your Call to Action


FDA
U.S. FOOD & DRUG
ADMINISTRATION