

# **Introduction to the Quality System Regulation**

**FDA Small Business  
Regulatory Education for Industry (REdI)  
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# Learning Objectives

- Introduce the Quality System (QS) Regulation and Background
- Review Definitions
- Introduce the 7 Major Subsystems Approach for QS
- Review Records, Documents and Change Controls Requirement, Including Required Records

## Poll Question

**For how many years have you been involved in the Quality System regulation (21 CFR 820) that applies to medical devices?**

- a) More than 15 years**
- b) Between 5-15 years**
- c) Less than 5 years**
- d) None**

# Quality System Background

The Quality System Regulation: [21 CFR 820](#)

## ➤ Safe Medical Device Act (SMDA)

- Effective June 1, 1997
- Replaces the 1978 GMP Regulation for medical devices

## ➤ Preamble to 1996 QS Regulation

- VERY Important
- [Medical Device Quality System Regulation and Preamble](#)

# Quality System Regulation

- Requirements are not prescriptive
- Provides framework of basic requirements for manufacturers
- Harmonized with ISO 13485: Medical Devices - Quality Management Systems - Requirements for Regulatory Purposes
- Regulation is flexible

# Definition

## Manufacturer

Any person who designs, manufactures, fabricates, assembles, or processes a finished device..... includes.... contract sterilization, installation, relabeling, remanufacturing, repackaging, or specification development, and initial distributors of foreign entities performing these functions.

[§ 820.3 \(o\)](#)



# Definitions

## Finished device

... any device or accessory to any device that is suitable for use or capable of functioning, whether or not it is packaged, labeled, or sterilized

[§ 820.3 \(I\)](#)

## Component

... any raw material, substance, piece, part, software, firmware, labeling, or assembly which is intended to be included as part of the finished, packaged, and labeled device.

[§ 820.3 \(c\)](#)

# Quiz

**This wheelchair tire is manufactured by a third party. Is it a finished device or a component?**

- a. Finished Device**
- b. Component**
- c. It depends**
- d. None of the above**





# Definitions Continued

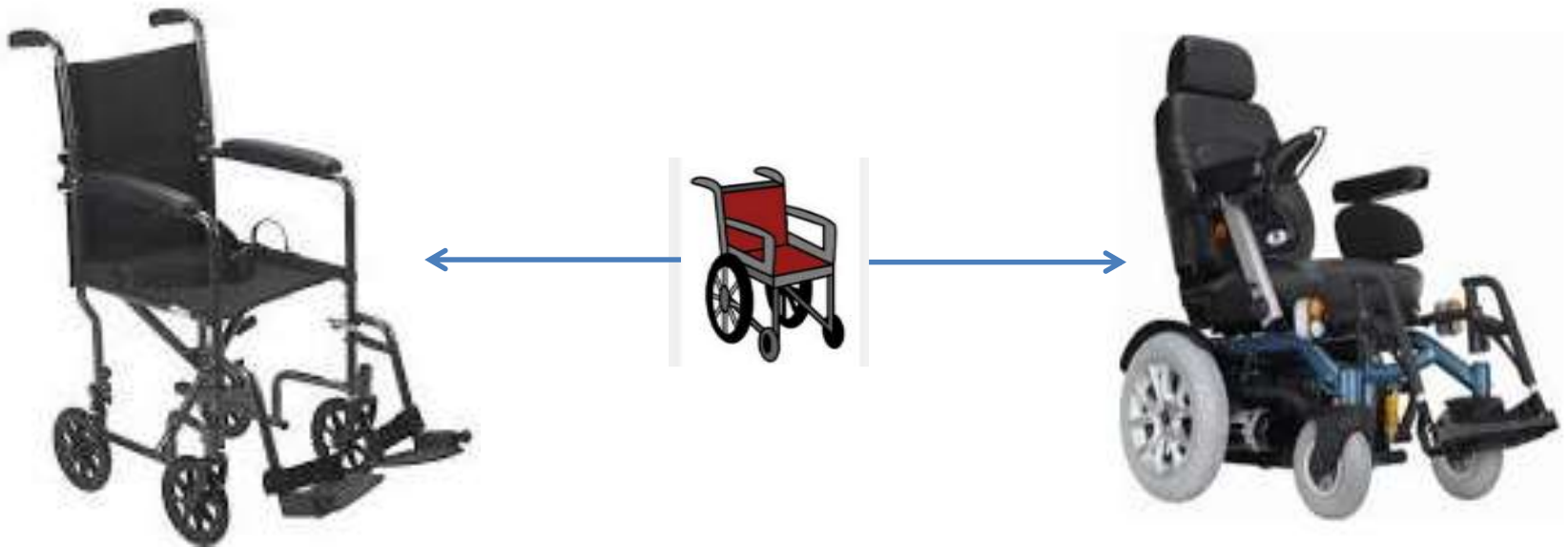
## **Quality**

Totality of features and characteristics that bear on the ability of a device to satisfy fitness-for-use, including safety and performance

## **Quality System**

Design and manufacture quality into products

# Quality is not a “one size fits all concept”



# Definitions Continued

## Establish

- ✓ **D**efine
- ✓ **D**ocument (in writing or electronically)
- ✓ Implement (**Do**)

[§ 820.3 \(o\)](#)



# Bottom line: It's Your Quality System!

**A manufacturer must develop a Quality System (QS) consistent with:**

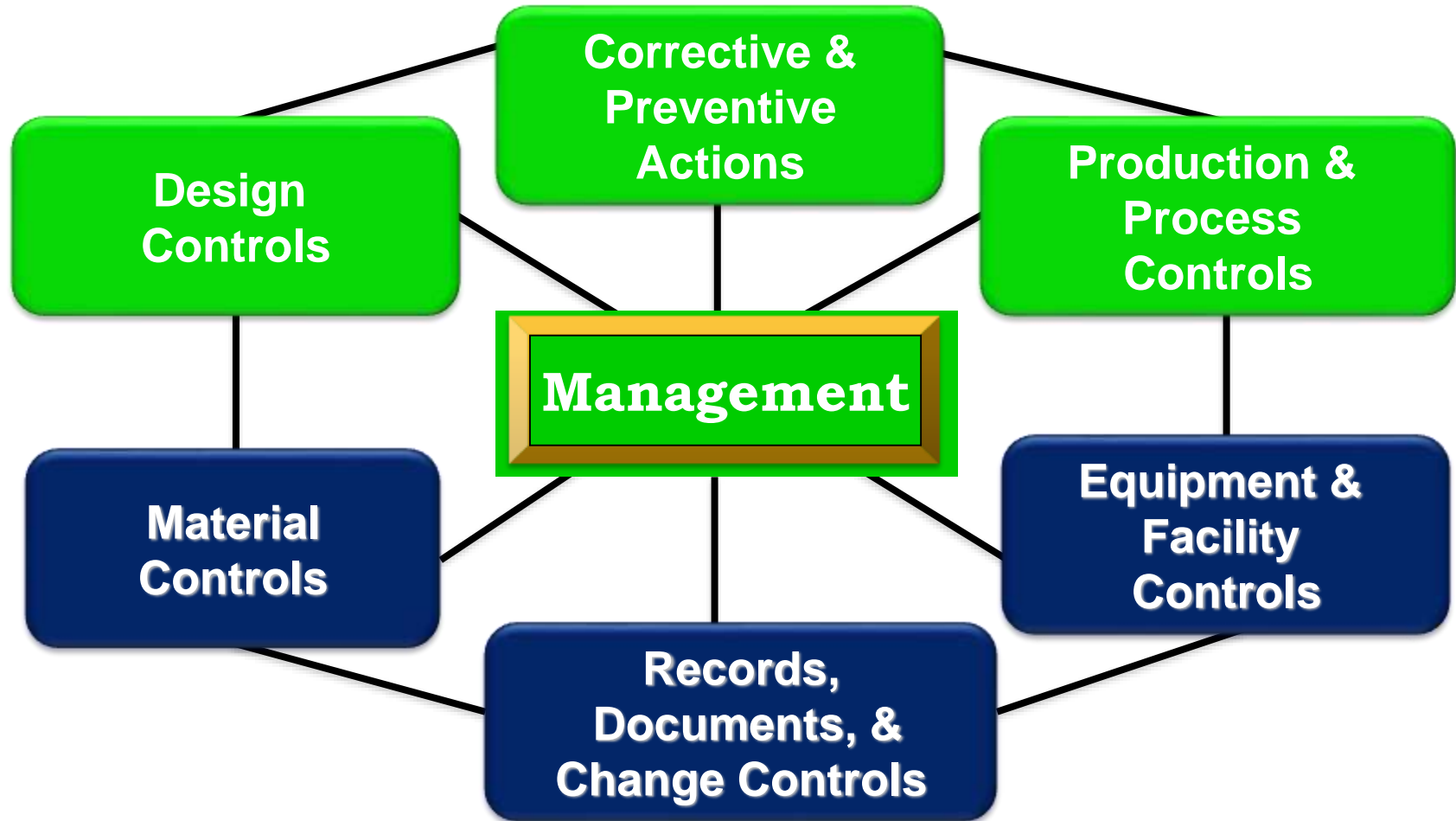
- Risk presented by the device
- Complexity of device and manufacturing processes
- Size and complexity of manufacturing facility

# The 7 Subsystems of a Quality System



[Guide to Inspections of QS: Quality System Inspection Technique](#)

# The 4 Major Subsystems



[www.fda.gov](http://www.fda.gov) Guide to Inspections of QS: Quality System Inspection Technique

# Documents, Records & Change Controls

**Purpose** - to assure:

- Only current documents used
- Changes are reviewed, approved and incorporated

[§ 820.40](#)

# Documents, Records & Change Controls continued

Establish and maintain procedures to control all documents required by Part 820

Procedures shall provide for:

- 1. Document approval and distribution***
- 2. Document changes***

[§ 820.40 \(b\)](#)



# Documents, Records & Change Controls continued

- Distribution: Documents shall be available at all locations for which they are designated, used, or otherwise necessary.
- Remove all obsolete documents promptly or otherwise prevent their unintended use!

[§ 820.40\(a\)](#)

# Documents, Records & Change Controls continued

- Make required records readily available for review and copying
- Records shall be legible and stored to prevent loss
- Maintain for the required length of time
  - = **Expected life of the device or at least 2 years** from the date of release for commercial distribution

# Required QS Records

- Design History File (DHF)
- Device Master Record (DMR)
- Device History Record (DHR)
- Quality System Record (QSR)

# Design History File (DHF)

*A compilation of records which describe the design history of a finished device.*

- Establish and maintain a DHF for each type of device
- Include or reference records information

# Device Master Record (DMR)

*A compilation of records containing the procedures and specifications for a finished device.*

Includes:

- ☐ Device specifications
- ☐ Production process specifications
- ☐ Quality assurance procedures and specifications
- ☐ Packaging and labeling specifications
- ☐ Installation, maintenance and servicing procedures and methods

# Device History Record (DHR)

*A compilation of records containing the production history of a finished device.*

Includes:

- ☐ Dates of manufacture
- ☐ Quantity manufactured
- ☐ Quantity released for distribution
- ☐ Acceptance records which demonstrate the device is manufactured in accordance with DMR

# Quality System Record (QSR)

- Maintain QSR
- Prepare and approve per 21 CFR 820.40
- Includes or refers to location of:
  - Procedures and documentation of activities
    - required by Part 820
    - not specific to a particular type of device
  - Records required by 21 CFR 820.20

[§ 820.186](#)

# Resources

- Medical Device Quality System Regulation and Preamble (**Device Advice**)
  - [www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/PostmarketRequirements/QualitySystemsRegulations/ucm230127.htm](http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/PostmarketRequirements/QualitySystemsRegulations/ucm230127.htm)
- Quality System Website (**Device Advice**)
  - [www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/PostmarketRequirements/QualitySystemsRegulations/default.htm](http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/PostmarketRequirements/QualitySystemsRegulations/default.htm)
- Guide to Inspections of QS: QS Inspection Technique/QSIT.
  - [www.fda.gov/downloads/ICECI/Inspections/UCM142981.pdf](http://www.fda.gov/downloads/ICECI/Inspections/UCM142981.pdf)
- **CDRH Learn** training modules under the Postmarket Activities section
  - [www.fda.gov/Training/CDRHLearn](http://www.fda.gov/Training/CDRHLearn)



# Summary

- Introduced the QS Regulation, including background and definitions
- Discussed the Quality System 7 Major Subsystems Approach
- Reviewed requirements for Records, Documents and Change Controls

# Questions

Please complete the session survey:  
**[surveymonkey.com/r/DEV-D2S02](https://surveymonkey.com/r/DEV-D2S02)**

# Call to Action

- It's your Quality System: Own it!
- Have established procedures and documentation for all of your QS processes.
- Account for all documents and records required by 21 CFR Part 820.
- Use FDA resources for additional QS training.

