# Clinical Evidence – 510(k) and Beyond

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# FDA Vision

- **Public Health Focus**: Activities and outcomes that protect and promote public health.
- **Our People**: most critical resource; individual excellence, teamwork, and personal and professional diversity.
- **Science-Based Decisions**: decisions based on sound science using the best available data, methods, information, and tools. We value and take into account differing internal and external perspectives.
- **Innovation**: Challenge status quo and ourselves to foster positive change. Harness the creativity of our staff and stakeholders. Rapidly test and adopt new approaches to more effectively and efficiently accomplish our mission.
- **Transparency**: Foster public trust and predictability by providing meaningful and timely information about products we regulate and the decisions we make.
- **Honesty and Integrity**: Maintain public trust by acting with integrity and honesty. Our actions adhere to the highest ethical standards and the law.
- **Accountability**: Hold ourselves accountable for actions we do and do not take. Acknowledge our errors and learn from them.

# CDRH 2014 – 2015 Strategic Priorities

- #1 – Strengthen the Clinical Trial Enterprise
- #2 – Right Balance Between Pre/Post market Data Collection
- #3 – Provide Excellent Customer Service
  - Measurable Outcomes

# Strengthen Clinical Trial Enterprise

- October 1, 2013 – Guidance Document:  IDEs for Early Feasibility Medical Device Clinical Studies, Including Certain First in Human (FIH) Studies
  - Risk mitigating strategies to protect human subjects
  - Pilot Program
- August 19, 2014 – Guidance Document:  FDA Decisions for IDE Clinical Investigations
  - Approval with Conditions
  - Staged Approval
  - Communication of issues related to study design and future considerations
  - Limiting disapproval authority

# Early Results Program Goals

- IDE Applications cleared within two review cycles:
  - FY 2011 – 46%
  - FY 2013 – 77%
- Median Time to full study approval:
  - FY 2011 – 435 days
  - FY2013 – 174 days
- Goals:
  - By 9/30/2014 reduce %of IDEs with > 2 cycles by 25% (compared to FY2013)
  - By 9/30/2014 offer sponsors of disapproved IDEs teleconference or meeting within 10 days of IDE decision
  - By 6/30/2015 reduce overall median time to full IDE approval to 30 days.

# Early Feasibility (EF)/FIH IDE Studies

- By 6/30/2015 increase number of EF/FIH studies to each Division compared to FY 2013 performance
- Implementation:
  - Establish premarket clinical trials program in ODE
  - Incorporate benefit-risk framework
  - Establish process to resolve application-specific issues
  - Education and training for CDRH review staff
  - Develop real-time metrics to track CDRH and Industry clinical trial performance

# Pre-/Post- Market Data Collection

- Life-cycle approach to understanding benefit-risk profile of medical devices
  - FDA considerations in assessing benefit-risk profile of device (2012 Guidance Document)
    - Patient early access benefits vs. risks of use
    - Assessment of alternatives to proposed treatment
  - Least Burdensome provisions of the federal law
- National Medical Device Postmarket Surveillance System
- Case for Quality Initiative
  - Help manufacturers identify and deploy quality-related design and production practices
- International Harmonization
  - International Medical Device Regulators Forum
  - Single audit program

# Pre/Post Marketing Balance – Goals

- By 12/31/2014 – review of 50% of device types subject to PMA and determine
  - Balance of Pre/Post marketing data
  - Down-classification
- By 6/30/2015 – review 75% of device types (as above)
- By 12/31/2015 – review 100% of device types (as Above)
- FDA Actions:
  - Collect public comments
  - Perform review as above
  - Implement a mechanism for creating Pre/Post marketing balance
  - Incorporate features of the Innovation Pathway

# Excellent Customer Service

- Understanding and addressing stakeholders' and colleagues' needs through
  - Active listening
  - Problem solving
  - Seeking out ideas
  - Explaining rationale for decisions and requests for information
  - Learning from mistakes
  - 'Doing our best'
- Goal – to encourage device makers to choose US first when bringing their products to market
- Allow US providers gain access to innovative technologies

# Customer Satisfaction Goals

- By 12/31/2014: ≥ 70% satisfaction
- By 6/30/2015: ≥ 80% satisfaction
- By 12/31/2015: ≥ 90% satisfaction

- Implementation:
  - Customer Service Standards
  - Use standardized surveys
  - Establish program to monitor and address feedback, including CAPA processes

# 2014 Milestones in FDA Regulation of Clinical Trials

- February – Requests for Feedback: Pre-Sub Program and Meetings with FDA
- March – Information Sheet Guidance – Clinical Investigator Administrative Actions – Disqualification
- May – Transferring Clinical Investigation Oversight to Another IRB
- July – Informed Consent Information Sheet
- August – Guidance Document – FDA Decisions for IDE Clinical Investigations

# FDA Update – The Big Picture (12/11/2014)

- Bill Maisel, Deputy Director of Science at CDRH
  - 75% reduction in IDE processing time:
    - In 2011 – average > 400 days
    - In 2014 – average = 101 days
  - Consider 'Down Classification' of Class III Devices
    - 50% of products reviewed
    - Results will be published beginning of 2015
  - 'Expedited Access PMA (aka 'Fast Track'):
    - High risk devices
    - Areas of high need
    - Analogous to accelerated approval process for new drugs
  - User Satisfaction
    - Goal – 70% satisfaction
    - Survey – 84% satisfied

# New Guidance Document (8/2014)

- Intended to allow trial launch even when there are outstanding issues*
  - Approval with Conditions
  - Staged Approval
  - Study Design Considerations
  - Future Considerations
- FDA cannot disapprove a study because:
  - Investigation may not support SE or *de novo* or approval
  - Investigation may not meet requirement relating to approval, or
  - Additional/different investigation needed for clearance

- * – Under certain circumstances
-

# HHS Notice of Proposed Rulemaking (Nov. 19, 2014)

- Implementation reporting requirement for clinical trials included in FDA Amendments Act of 2007 (FDAAA)
- Developed in collaboration between FDA and NIH
- Generally not applicable to Phase I trials of "drugs and biological products and small feasibility studies of devices"
- www.Clinicaltrials.gov
  - Clinical Researchers – Clarifications of registration requirement
  - **Major expansion – trials of unapproved, unlicensed and uncleared products**
  - **Submission of summary trial results**
- Rationale
  - Prevent repeated trials of unsafe/ineffective devices
  - Maximize use/information dissemination from participation of patients
- Specifies how
  - Data needs to be submitted
- Does not affect
  - Study design
  - Data to be collected (what, how)

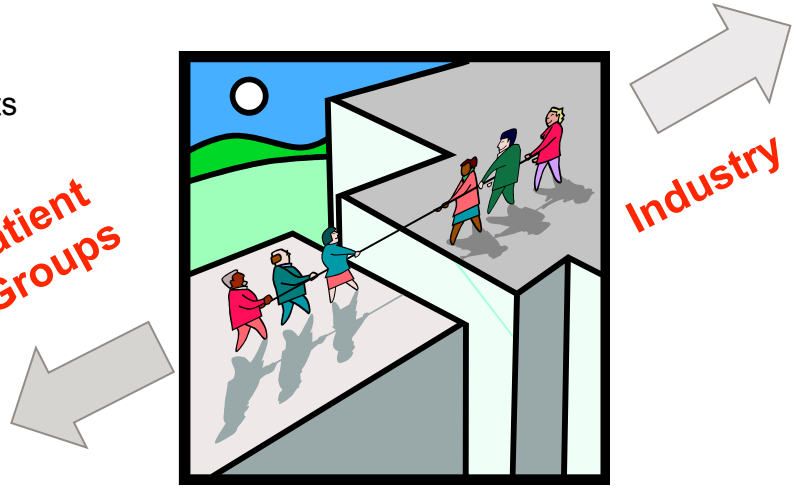
178,000 studies on clinicaltrials.gov
15,000 studies posted summaries

# Notable Changes from Current Requirements

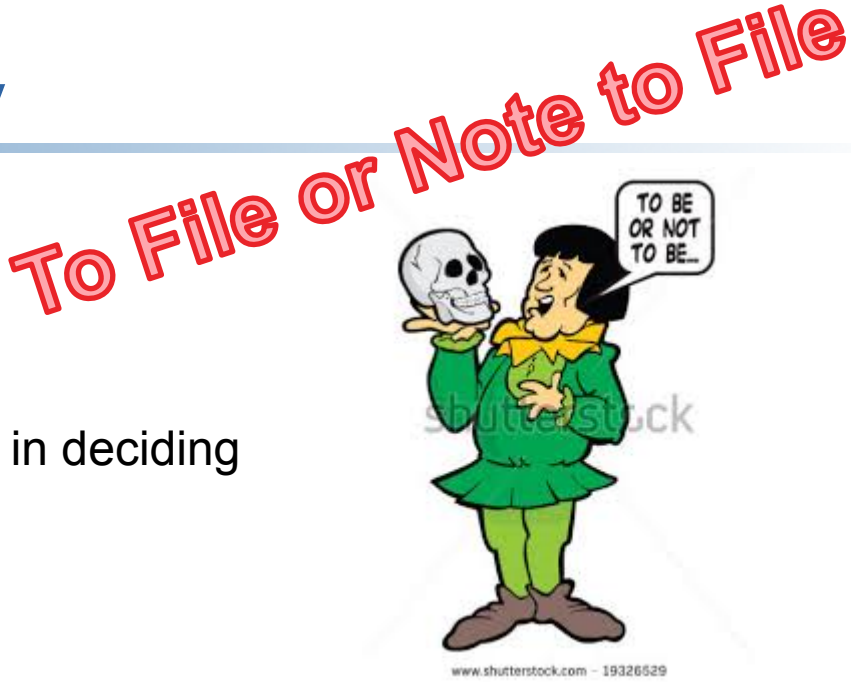
- A streamlined approach for determining:
  - Trials subject to proposed regulations and
  - Individual responsible for submitting required information
- Expansion of trials subject to summary results reporting to unapproved products.
- Additional registration requirements and results submission
- Procedures for delaying results submission when studying an unapproved, unlicensed, or uncleared product or a new use of a previously approved, licensed, or cleared product and
- More rapid updating of several data
- Procedures for timely corrections to any errors

# FDASIA Report to Congress – 510(k)

- FDASIA – FDA Safety and Innovation Act (July 9, 2012)
- Requirement – within 18 months submit report to Congress:
  - Requirements for regulatory submission for modified device cleared under 510(k)
    - Pressures on FDA
      - Patient groups:
        - Greater regulatory control
        - FDA should require periodic reports
      - Manufacturers
        - Keep current policy (1997)



# FDA Plans for 1997 Policy




- Leave 1997 policy intact
- Targeted revisions
  - Use of quality system processes in deciding submission/note to file
- Updated:
  - Flowchart
  - Examples
  - Proper documentation of rationale and decision-making process
- Device-specific Guidance Documents
  - Address specific changes
- Specific guidance on 510(k) submissions for changes to device software

# Next Steps

- Implementation of ongoing initiatives to improve the unpredictable, inefficient, and expensive regulatory processes
- Independent assessment of FDA device review process management
  - Phase 1: March 31, 2013 – September 30, 2014
  - Phase 2: October 1, 2014 – February 29, 2016
- Electronic submissions
  - January 28, 2015 – new standard for clinical trial data format
- International collaboration
  - Inspections
  - Clearances
- 510(k) – Closer to the end?

# Thank You!

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# Disqualification of Clinical Investigators (3/2014)

- Revision of policy by Office of Good Clinical Practice, May 2010
- Results from inspections of clinical investigators involved in investigations of FDA-regulated clinical products.
- Trigger – Inspectors identify pattern of **repeated or deliberate violations or potential repeated or deliberate violations:**
  - Subjects exposed to unreasonable and significant risk of illness or injury
  - Subjects rights seriously harmed
- NIDPOE – Notice of Disqualification Proceedings and Opportunity to Exaplain

# Strengthen Clinical Trial Enterprise

- Goal – improve US patient access to new devices
- Method – earlier clinical studies in US
- Steps taken:
  - Guidance Document (10/2013) – IDEs for Early Feasibility Medical Device Clinical Studies, Including Certain First in Human (FIH) Studies
  - Guidance Document (8/2014) – FDA Decisions for IDE Clinical Investigations
  - Process Changes (FDASIA)
  - Risk-Mitigation Strategy – for protection of human subjects