Summary of Implementation of 510(k) and Science Recommendations

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Outline of Initiatives and Action Items

- 510(k) Modifications Guidance
- Clinical Trials Guidance
- *De Novo* Guidance
- Standards Guidance
- Appeals Guidance
- 510(k) Program Guidance
- Pre-submission Interactions Guidance
- Product Code Guidance

Outline of Initiatives and Action Items

- Establish Center Science Council (CSC)
- Assess Center Staffing Needs
- Enhance Training
- Leverage External Experts (Network of Experts)
- Continue Integration and Knowledge Management
- “Assurance Case” Pilot Program
- Improve Collection and Analysis of Post-market Information
- Notice to Industry Letters

Outline of Initiatives and Action Items

- Improve the IDE Process
- Unique Device Identification (UDI) System
- Multiple Predicate Analysis
- 3rd Party Review
- Guidance and Regulation Development Process
- 510(k) Transfer of Ownership Regulation
- Improve Medical Device Labeling

510(k) Modifications Guidance

510(k) Modifications Guidance

- ***Purpose***: Update 1997 guidance with current policy to include clarifications regarding new technology, labeling changes, manufacturing changes, technology or performance specification changes, and to coordinate with emerging software policies.
- ***Status***: Draft guidance distributed for public comment July 27, 2011. Comments under review.
- ***Timeline***: Issue second draft guidance pending review of comments and legislation.

Clinical Trials Guidance

Clinical Trials Guidance

- ***Purpose***: Improve the quality and performance of pivotal clinical trials used to satisfy premarket clinical data requirements with recommendations regarding study design. Includes application of least burdensome principle.
- ***Status***: Draft guidance issued for public comment on August 15, 2011. Comment period closed.
- ***Timeline***: Issue final guidance, pending review of comments and final internal review

Clinical Trials Guidance

Unchanged

- No changes to IDE regulations or policies
- No changes to regulatory framework for
  - level of evidence
  - study design
  - statutory standard for PMA approval
  - valid scientific evidence
  - Risk/benefit assessment

New

- Description and recommendation of principles for the design of pivotal clinical trials:
  - Subject selection
  - Endpoints
  - Controls
  - Device performance variability and bias
  - Regulatory considerations

Draft Guidance: *De Novo* Classification Process (Evaluation of Automatic Class III Designation)

De Novo Guidance

- ***Purpose***: Provide updated recommendations for interacting with FDA regarding devices potentially suitable for *de novo*. Clarify the FDA review process for *de novo* submissions. Describe the recommended content of *de novo* submissions.
- ***Status***: Draft guidance issued for public comment on October 3, 2011. Comment period closed January 4, 2012.
- ***Timeline***: Issue guidance, pending review of comments and pending legislation

What's New?

- Pre-De Novo Submissions (PDS)
  - Alternate pathway for *de novo* review
    - PDS -> Concurrent 510(k)/*De Novo* petition
    - Traditional 510(k) -> NSE -> *De Novo* petition still acceptable
  - Submit preliminary information in a PDS to determine:
    - Whether FDA believes the device is suitable for *de novo*
    - Likely data requirements and special controls (if applicable)
  - If suitable per a PDS, allows subsequent concurrent submission of 510(k) and *de novo* petition

What's Different?

- Description of FDA review process and timelines for *de novo* submissions
  - Attachments 1 and 2 provide flowcharts of FDA review process
  - PDS's and Petitions are reviewed in 60 day cycles
  - Initial review of concurrent 510(k)/*de novo* petition submissions completed within 120 days

What's Different? (cont.)

- Description of recommended *de novo* submission content
  - Attachment 3 provides specificity on the information that should be included in *de novo* submissions

510(k) Program Guidance

510(k) Program Guidance

- ***Purpose***: Provide an underlying process framework to ensure consistency across the office with respect to each of the critical decision points in the SE evaluation of 510(k) submissions.
- ***Status***: Draft guidance issued for public comment December 27, 2011. Comment period closed April 27, 2012.
- ***Timeline***: Finalize guidance, pending receipt of comments and final internal review

510(k) Program Guidance

Issue: Identify, explain & clarify each of the critical decision points in the SE evaluation of 510(k) submissions, specifically:

1. Appropriate use of multiple predicates & reference devices
2. General principles for the determination of new intended use
3. Process for the determination of "different questions of safety and effectiveness" due to different technological characteristics
4. Requests for performance data, with special emphasis on clinical data
5. Verified 510(k) Summary Information
6. Special 510(k) Program & which modifications not appropriate for Special program

Unchanged

- Standard for determination of SE per Section 513(i)
- Categories of NSE determinations, *although clarification provided*
- Recommended content for 510(k) submissions

New

- Decision-making flowchart: Modified to match Act & simplified structure
- Clarification on 510(k) decision-making process:
  - Appropriate use of multiple predicates & reference devices
  - Intended Use & technological characteristics
  - use of performance data to demonstrate SE
- Specifics to include in 510(k) Summary (807.92)
- Clarifications on Special 510(k) Program

Pre-Submission Interactions Guidance

Pre-Submission Interactions Guidance

- ***Purpose***: To supplement available guidance on pre-IDE meetings and enhance the quality of pre-submission interactions between Industry and Center staff. Formally expand existing Pre-IDE guidance to include all pre-submissions. Covers not only the submission, but meetings with the Agency as well.
- ***Status***: Incorporating MDUFA discussions
- ***Timeline:*** Issue draft for public comment

Leverage External Experts

Leverage External Experts

- ***Purpose***: Develop a network of external experts to appropriately and efficiently leverage external scientific expertise. Also, to assess best practices and develop SOPs for staff engagement with external experts.
- ***Status:*** Pilot program of the Network of Experts initiated September 13, 2011. Draft SOP posted to public FDA web site for public comment on October 4, 2011.

  Website updated January 30, 2012 identifying participants (ACC, AIMBE, STS)

  http://www.fda.gov/AboutFDA/CentersOffices/OfficeofMedicalProductsandTobacco/CDRH/ucm289534.htm
- ***Timeline:*** The pilot will run through the end of the calendar year, at which point it will be evaluated for full implementation.

Additional Actions and Initiatives

Outline of Additional Actions and Initiatives

- Making Benefit-Risk Determinations in Medical Device Pre-market Review
- Corrective and Preventive Action (CAPA) System
- Early Feasibility Medical Device Clinical Studies Guidance
- Change in Reviewer SOP
- IDE Decisions Guidance
- Innovation Pathway

Additional Action #1

Making Benefit-Risk Determinations in Medical Device Premarket Review Guidance

Benefit-Risk Guidance

- ***Purpose***: To provide greater clarity regarding the factors FDA considers when making benefit-risk determinations during the PMA review process. Include types of valid scientific evidence, measures of safety/effectiveness, and a worksheet for outlining and summarizing all relevant factors in benefit-risk determination.
- ***Status***: Final guidance issued March 28, 2012

Benefit-Risk Guidance

- This guidance clarifies this process for industry, which will provide manufacturers with greater predictability, consistency and transparency in FDA decision-making while allowing manufacturers and the FDA to use a common framework for benefit-risk determinations

Applies to:

- **Premarket approval applications (PMAs)**
- ***De Novo* applications**

Additional Action #2

Corrective and Preventive Action (CAPA) System

CAPA System

- ***Purpose***: To assure identification and resolution of pre-market review issues in ODE. Corrective actions and, where appropriate, preventive actions, needed to correct identified issue and prevent recurrence of the problem will be recorded in a CAPA system.

- ***Status***: Pilot program initiated in October 2011.

- ***Timeline***: Program will be evaluated for full implementation by the end of 2012.

Additional Action #3

Early Feasibility Medical Device Clinical Studies Guidance

Early Feasibility Studies Guidance

- ***Purpose***: To provide greater clarity regarding the development and review of Investigational Device Exemptions (IDE) applications for early feasibility studies of significant risk devices, including first-in-human studies. Include distinction between early and traditional feasibility studies and the criteria used for approving early feasibility studies.
- ***Status***: Draft guidance issued for public comment November 10, 2011. Comment period closes February 10, 2012.
- ***Timeline***: Issue final guidance, pending review of comments and final internal review

Additional Action #4

Change in Reviewer SOP

Change in Reviewer SOP

- ***Purpose***: To establish procedures to assure greater consistency in the review of pre-market documents (e.g., IDEs, PMAs, 510(k)s) when review staff change during the review. Also provide mechanisms for communicating to FDA staff and industry any change in reviewer or changes in data requests during review process. Supersedes Blue Book Memo #I90-2 "Assignment of Review Documents," dated August 24, 1990.
- ***Status***: Final SOP published on public FDA web site December 27, 2011.

Additional Action #5

IDE Decision Making Process Guidance

IDE Decision Making Process Guidance

- ***Purpose***: To provide clarification regarding the types of decisions FDA may make to approve an IDE and to provide a general explanation of the reasoning and implications of those decisions. To provide an SOP that clarifies the level of sign off or concurrence required for requesting additional data for pre-market reviews.
- ***Status***: Draft guidance issued for public comment on November 10, 2011. Comment period closes February 10, 2012.
- ***Timeline***: Issue final guidance, pending review of comments and final internal review

MDUFA Update and Current Performance

Status

- Agreement reached between FDA and Industry has been transmitted to Congress

- Must be passed into law, additional legislation is being contemplated – Stay Tuned!

Key Points of MDUFA III

- Shared Outcome Goal – Total Time
- 1 Tier System
- No Submission Left Behind
- Refuse to Accept policy
- Substantive Interaction goals
- PMAs separated: panel vs no panel

Key Points of MDUFA III

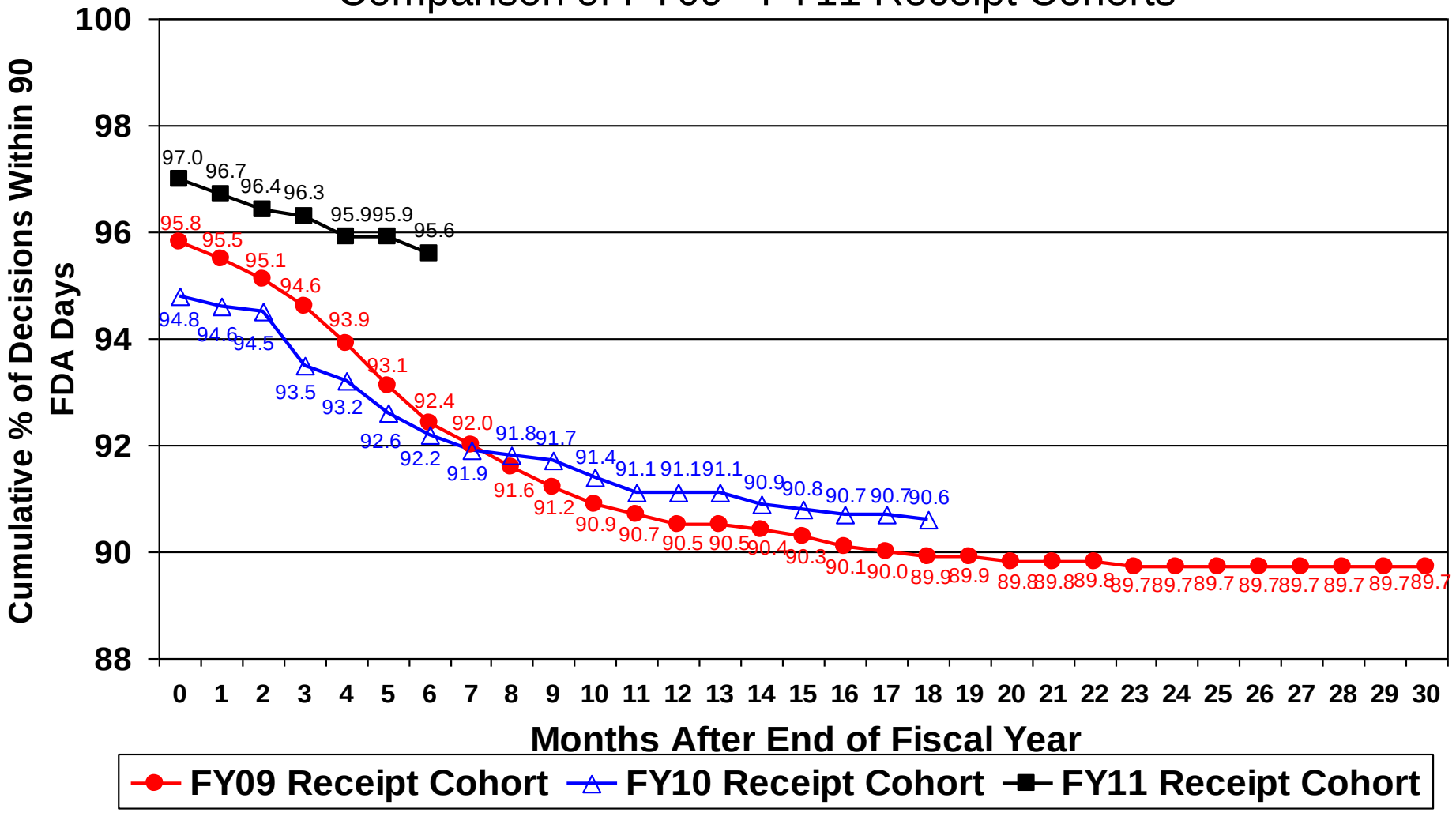
- Resources allocated to support a reorganization

- Commitment letter posted

  http://www.fda.gov/downloads/MedicalDevices/NewsEvents/WorkshopsConferences/UCM295454.pdf

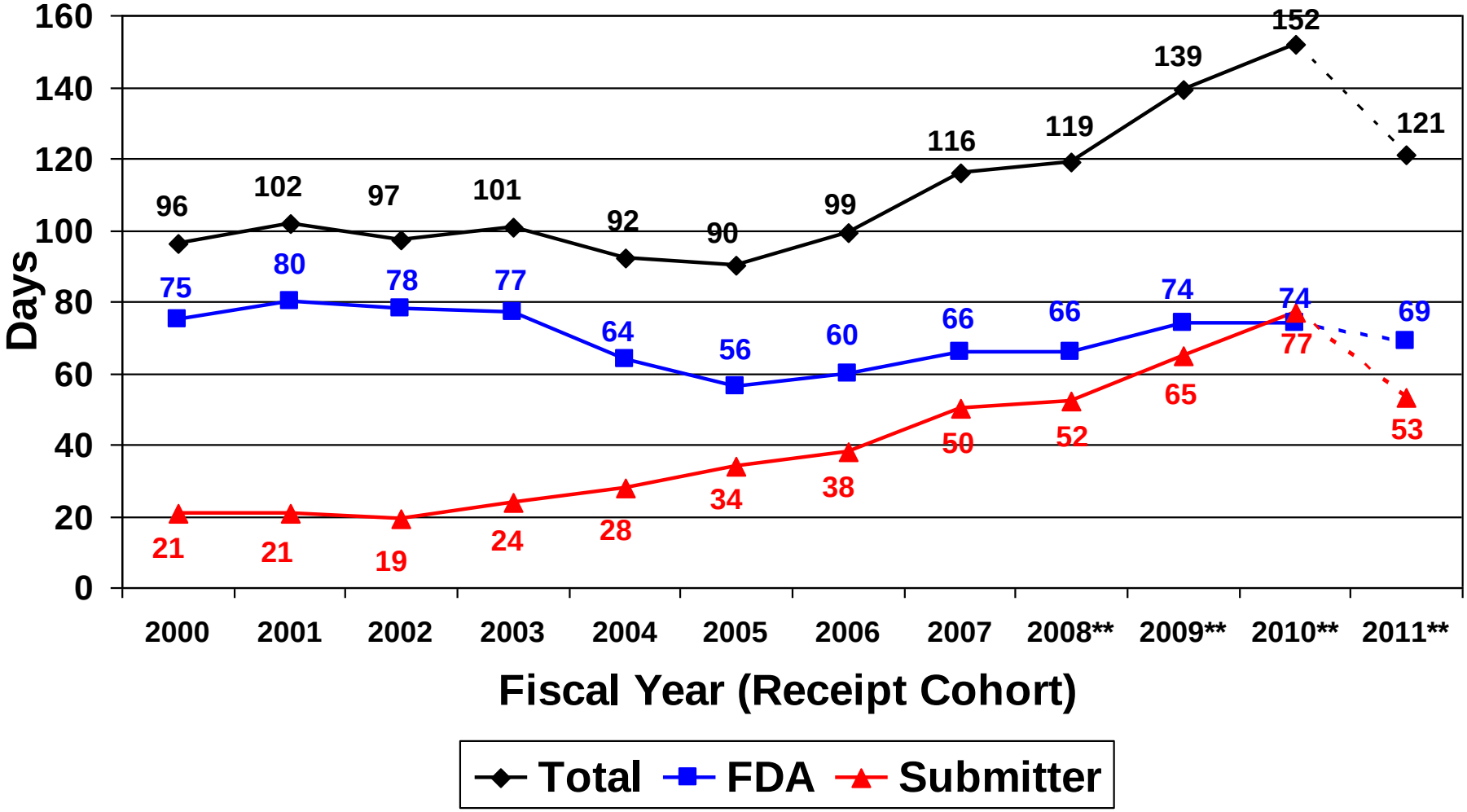
Trend in 510(k) Tier 1 Goal Performance

- Comparison of FY09 - FY11 Receipt Cohorts -



Average Time to Decision: 510(k)s*

(Receipt Cohorts as of March 11, 2012)

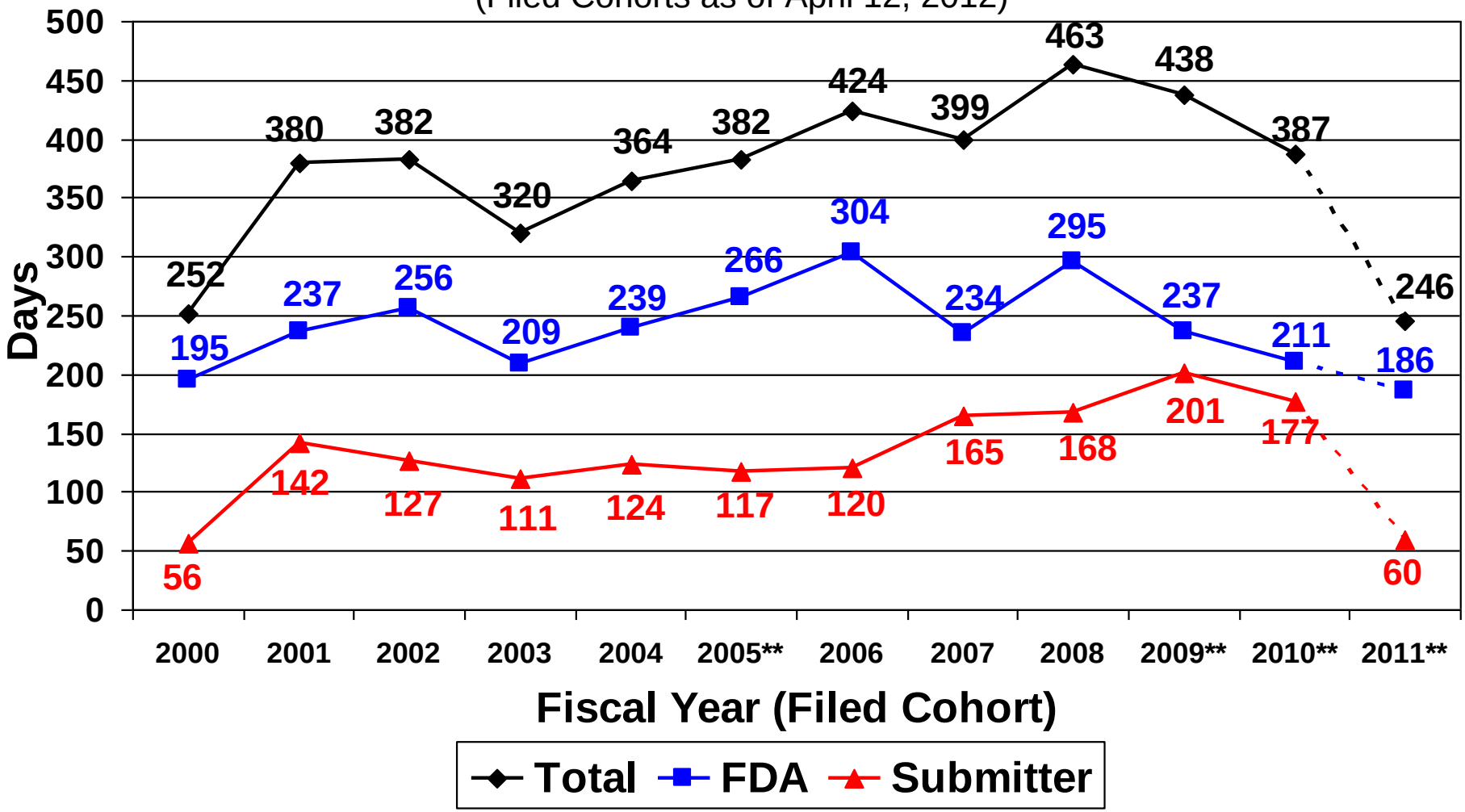


*SE and NSE decisions only; times may not add to total due to rounding

**Cohorts still open; FY 2011 cohort is only 85% closed and average times will increase

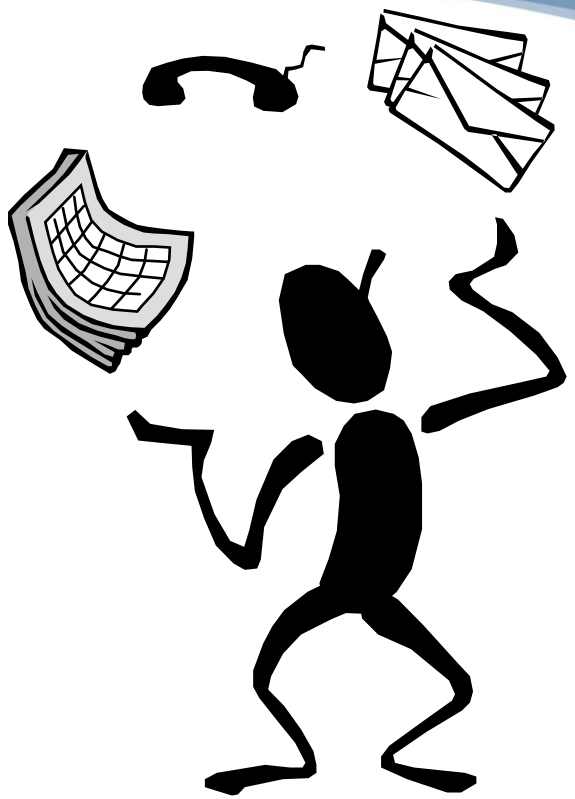
Average Time to MDUFA Decision: PMAs*

(Filed Cohorts as of April 12, 2012)



*Includes all filed original PMAs; times may not add to total due to rounding

**Cohorts still open, average times will increase; percent of cohort with MDUFA decision: FY05 = 98% (46/47); FY09 = 97% (31/32); FY10 = 95% (41/43); FY11 = 67% (29/43)



When in doubt, just ask:

Email or phone

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