Special and Abbreviated 510(k)s & Add-to files

510(k) Workshop
April 20 – 21, 2010

Doug Rheinheimer
Division of Chemistry and Toxicology Devices
Office of In Vitro Diagnostic Device Evaluation and Safety

Topics

- What to do when modifying an existing device
- What is a special 510(k) and when can it be used?
  - What to submit for a special 510(k)
- What is an abbreviated 510(k)?
  - What to submit for an abbreviated 510(k)
- What are some advantages/disadvantages of each
- When to use add-to file submission (hint – **NOT** to inform FDA of a change to your device)

What to do when modifying an existing device

Device in commercial distribution but a modification may significantly affect safety or effectiveness.

Guidance - Deciding When to Submit a 510(k) for a Change to an Existing Device (K97-1)

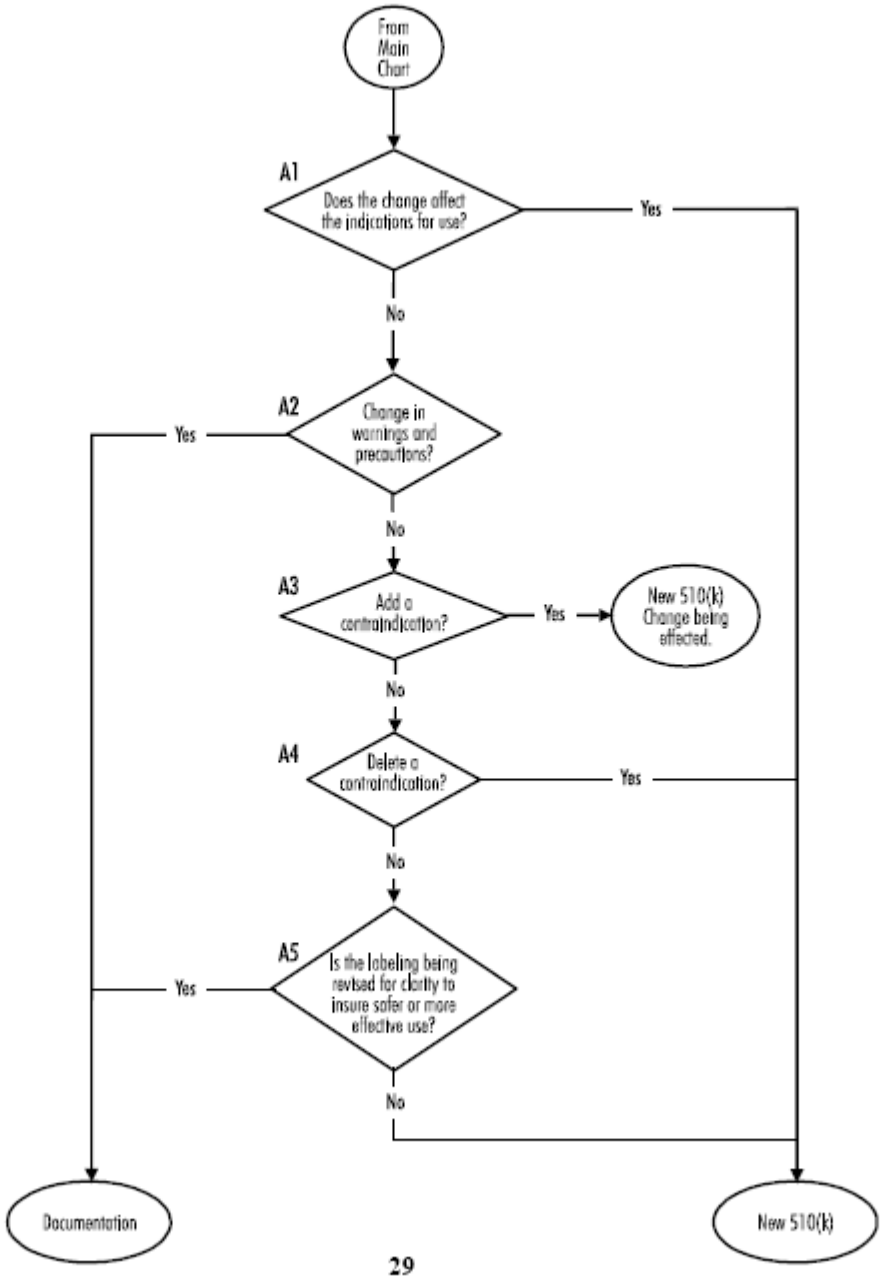
Flowchart model that can be used by manufacturers in their decision-making to analyze how changes in devices may affect safety or effectiveness and if a new 510(k) is required

Flowcharts

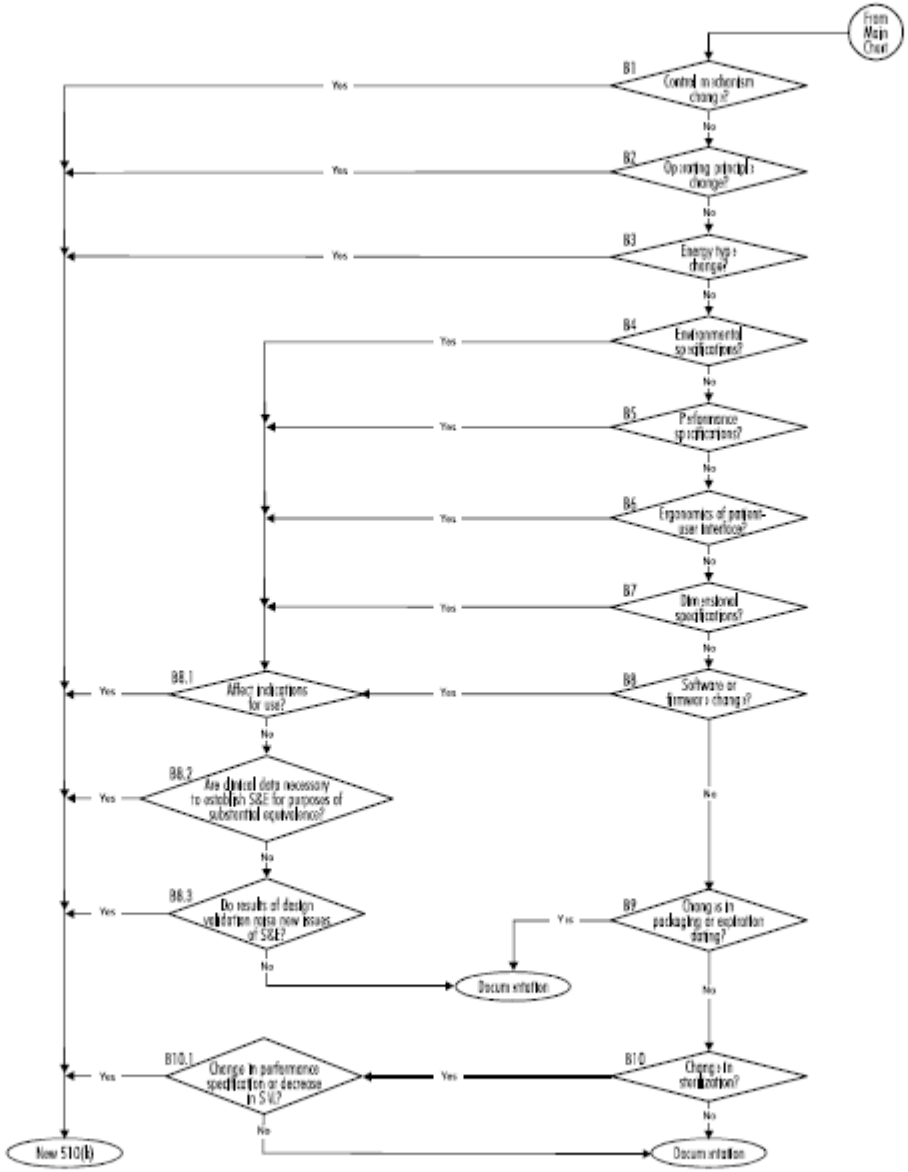
Main Flowchart

- Flowchart A - labeling changes
- Flowchart B - technology or performance specifications changes
- Flowchart C - materials changes
- Flowchart D - materials changes for *in vitro* devices (IVDs)

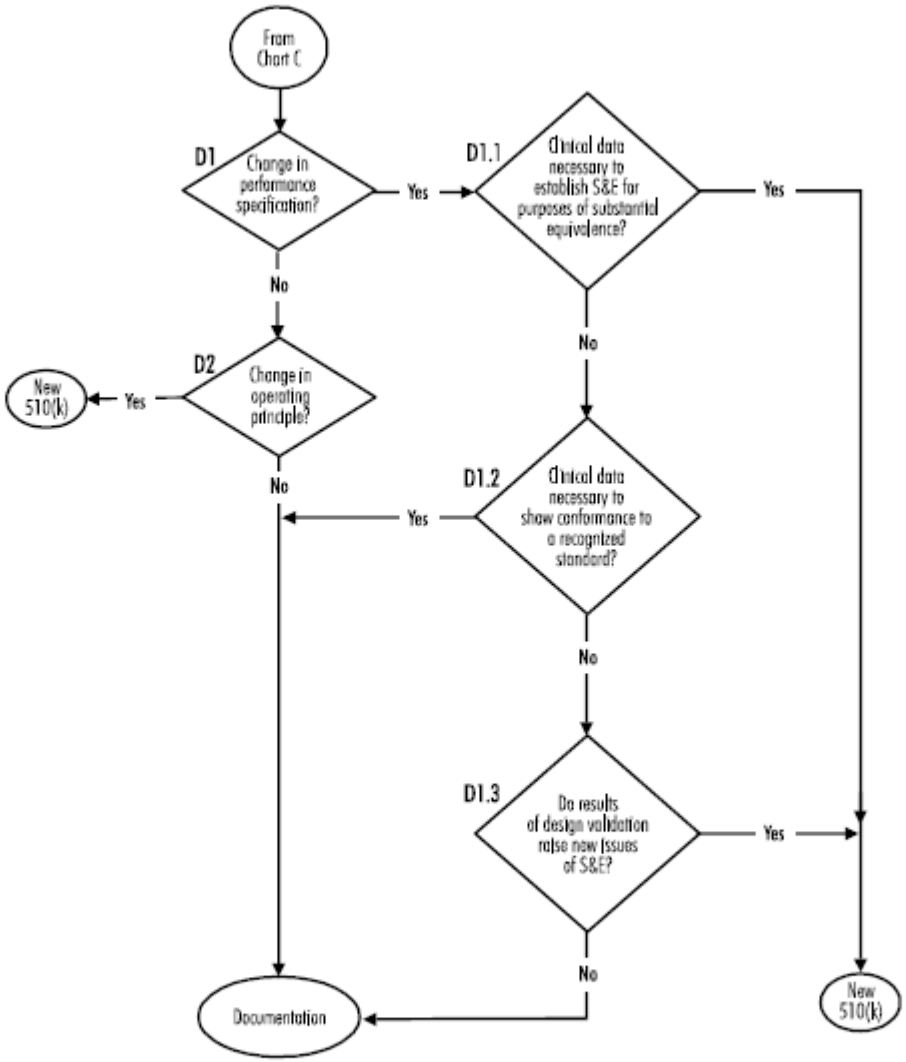
FLOWCHART A – IS IT A LABELING CHANGE?



FLOWCHART B - IS IT A TECHNOLOGY OR PERFORMANCE CHANGE?



FLOWCHART D - MATERIALS CHANGE FOR AN IVD



New 510(k)? 5 Questions from Flowchart D (material change for IVDs)

D1	Change in performance specifications? (cutoff, expected values, precision, interferences)
D1.1	Is new clinical data (clinical samples) necessary to establish safety and effectiveness?
D.1.2	Is new clinical data necessary to show continuing conformance of the device to a recognized standard? (CRMLN, NGSP)

New 510(k)? 5 Questions

D.1.3 Results of the design validation performed as a result of change in materials raise new issues of safety and effectiveness?

D2 Change in material alter the operating principle of the IVD?

New 510(k)?

If no:

- Any modifications must be made in accordance with the Quality System regulation, 21 CFR 820, and recorded in the device master record and change control records. Data available for FDA inspection.
- Keep justification for (not) submitting a new 510(k) in the change control records.
- **Do Not** Send "Add-to file" saying you made changes (more on this later)

New 510(k)?

- If yes, then the next question is: Special, traditional or abbreviated 510(k)?

There's a guidance for that – "The New 510(k) Paradigm - Alternate Approaches to Demonstrating Substantial Equivalence in Premarket Notifications

http://www.fda.gov/downloads/MedicalDevices/DeviceRegulationandGuidance/GuidanceDocuments/ucm080187.pdf

What is a special 510(k)?

- Utilizes the design control requirement of the Quality System Regulation (21 CFR 820)
- Application submitted for a modification to a device that has been cleared under the 510(k) process
- Allows the manufacturer to declare conformance to design controls without providing the raw data

Design Control Requirements

- Require the manufacturer to conduct verification and validation studies of a type that traditionally may have been included in 510(k) submissions
- May be appropriate to forgo a detailed review of the underlying data normally required in a traditional 510(k).

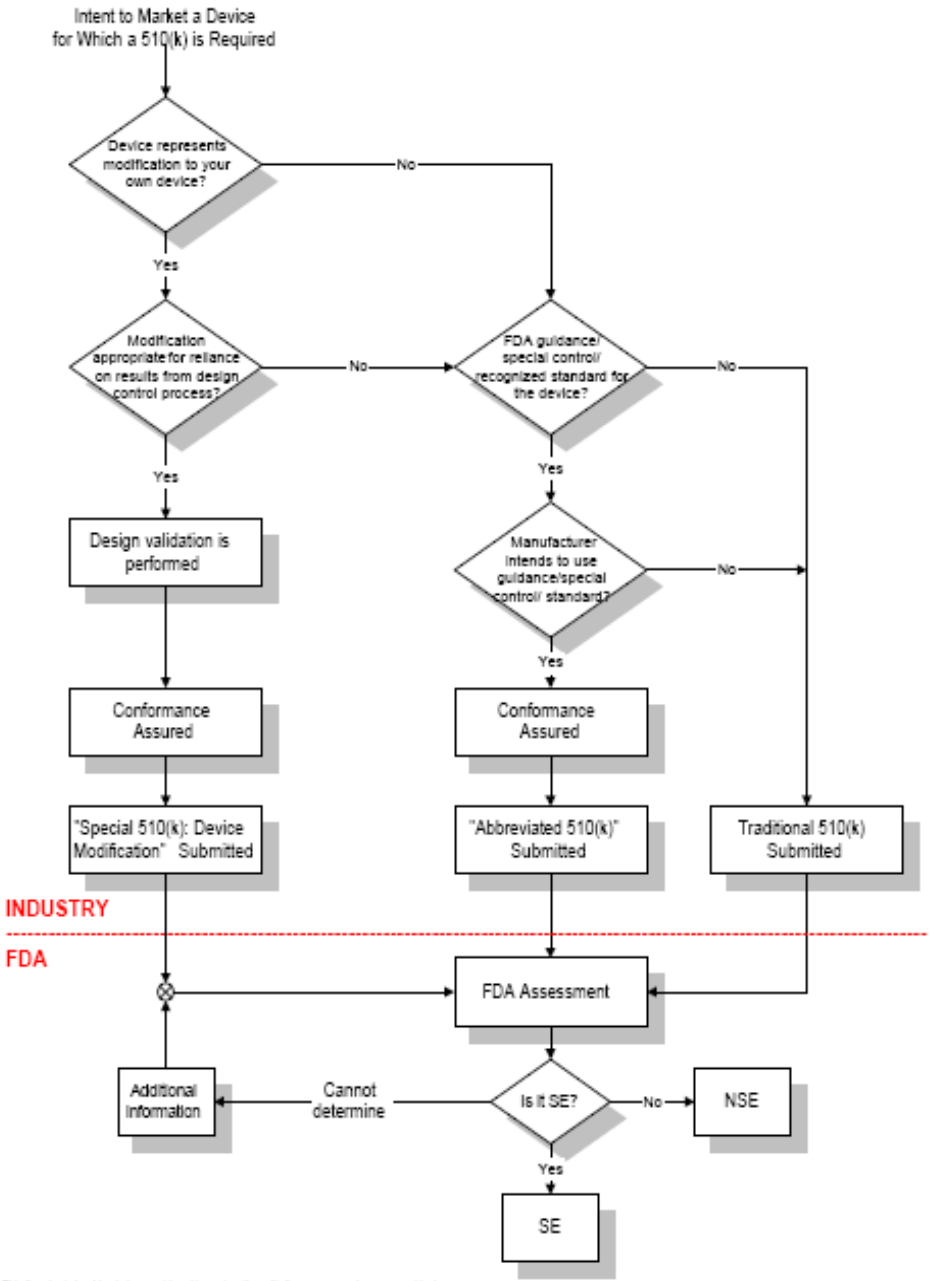
Three questions to address

- Change in intended use/indications for use or any labeling change that affects intended use?
- Change in fundamental scientific technology?
- Change requiring clinical study to evaluate patient safety and effectiveness?

  - If all are no = may be eligible for a special
  - If any are yes = traditional or abbreviated 510(k)

Attachment 1

The New 510(k) Paradigm



This flowchart should only be considered in conjunction with the accompanying proposed text.

Changes typically eligible for a special 510(k)

- Change in reagent (dry to liquid)
- Change in ergonomics of patient user interface
- Change in expiration dating
- Change in manufacturing to produce reagents that do not need calibration by user
- Adding another anticoagulant as an acceptable sample

Not Eligible for a Special 510(k)

- Change in intended/indications for use
- Change from prescription use to OTC
- Change in derivation of algorithm
- Change in major reactive ingredient that affects patient safety and effectiveness

Not Eligible for a Special 510(k)

- Change in cut-off that needs a clinical study to assess patient safety and effectiveness
- Combining two cleared devices to make new

What to submit for special 510(k)

http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/HowtoMarketYourDevice/PremarketSubmissions/PremarketNotification510k/ucm134573.htm

What to submit for special 510(k)

Administratively, there are 11 items:

- Medical Device User Fee Cover Sheet (Form FDA 3601)
- CDRH Premarket Review Submission Cover Sheet (Form FDA 3514)
- Certification of Compliance with ClinicalTrials.gov Data Bank (Form FDA 3674)

What to submit for special 510(k)

- Cover Letter, identifying the application as a "Special 510(k)." Include 510(k) holder name, address, and facility registration number, if available.
- Table of Contents
- 510(k) Screening Checklist (recommended)
- Statement of Indications for Use (OIVD form)

What to submit for special 510(k)

- 510(k) Summary [21 CFR 807.92] or 510(k) Statement [21 CFR 807.93]
- Standards Data Report for 510(k)s – Form FDA 3654. Submit this form if your 510(k) references a national or international standard.
- Truthful and Accuracy Statement
- Declaration of Conformity

What to submit for special 510(k)

- Detailed description of modified device
- Comparison to cleared device
- State that there is no change in fundamental technology and no change in intended use
- State the intended use of modified and cleared
- Proposed labels and labeling with all changes highlighted or prominently identified
- Summary of design control activities

Summary of Design Control Activities

- State risk analysis method used to assess the impact of the modification
- Provide all verification/validations tests that were performed, *as required by the risk analysis*
- List pre-determined acceptance criteria
- Provide a summary of results showing pre-determined acceptance criteria were met
- State that pre-determined acceptance criteria were met

Signed Declaration of Conformity with design control requirements

- All verification activities, as required by the risk analysis, for the modification were performed by the designated individual(s) and the results demonstrated that the predetermined acceptance criteria were met
- The manufacturing facility, *[Company Name]* is in conformance with the design control requirements as specified in 21 CFR 820. 30 and the records are available for review.

FDA Reviewer's Expectations for a Special 510(k)

- Required administrative info for 510(k) – 11 items
- Detailed description of any and all changes to the modified device
- Labeling is marked/highlighted with changes
- Intended use/indications for use of modified device and unmodified device

FDA Reviewer's Expectations for a Special 510(k)

- Statement of no change in fundamental technology
- Validation/verification activities similar to those in traditional 510(k) method comparison assay range studied, interference studies, etc.
- Pre-determined acceptance criteria appropriate for the clinical needs of assay
- Graphs and/or charts of data analyses clearly showing acceptance criteria were met and verification/validation activities are complete

Advantages of a Special 510(k)

- 30 days for decision by FDA
- Declare conformance to design control – should be easier to prepare

Potential Problems with Special 510(k)s

Most misunderstood type of submission

- May not be clearly presented
- FDA does not understand the modifications
- Acceptance criteria not clinically relevant or are not met
- Risk analysis and/or verification & validation activities are not relevant to the modification

What is an Abbreviated 510(k)

Device manufacturers may choose to submit an Abbreviated 510(k) when:

- There is a device-specific guidance document
- A special control has been established
- FDA has recognized a relevant consensus standard

What is an Abbreviated 510(k)

Need a summary report -

- Describes adherence to the relevant guidance or special control and how they were used during device development and testing
- Declaration of conformity if using standard

Challenges of Abbreviated 510(k)s

- One size does not fit all –
- Relatively few guidance documents to cover all aspects of IVD device performance
- No time advantage over traditional (90 FDA days)

Advantages of Abbreviated 510(k)s

- Suitable for submissions for calibrator or control materials
- Potentially easier to prepare

What to Submit for an Abbreviated 510(k) – Guidance Documents

- All the administrative information required for a traditional 510(k)
- A summary report describing adherence to the relevant guidance document and how the document was used during device development and testing, including the manufacturer's efforts to conform with the guidance document and any deviations
- A summary report that describes how the guidance document was used to address the risks associated with the particular device type
- Data/information to address issues not covered by guidance documents, special controls, and/or recognized standards
- Information on sterilization, biocompatibility, expiration date, etc., if applicable.

What to Submit for an Abbreviated 510(k) – Special Controls

- All the administrative information required for a traditional 510(k)
- A summary report that describes adherence to the special control and how the special control(s) was used during device development and testing, including to address a specific risk or issue with the device. The report should include the manufacturer's efforts to conform with the special control and any deviations
- Data/information to address issues not covered by guidance documents, special controls, and/or recognized standards
- Information on sterilization, biocompatibility, expiration date, etc., if applicable.

What to Submit for an Abbreviated 510(k) – FDA Recognized Standards

- All the administrative information required for a traditional 510(k)
- An Abbreviated 510(k) that relies on a recognized standard must include a Declaration of Conformity to the Recognized Standard.
- Data/information to address issues not covered by guidance documents, special controls, and/or recognized standards
- Information on sterilization, biocompatibility, expiration date, etc., if applicable.

When to use an add-to file

- Requesting CLIA categorization after using FDA guidance “Guidance for Industry and FDA Staff; Replacement Reagent and Instrument Family Policy”
- Submitting info for CLIA waiver
- **Not** for informing FDA about changes made to your device

Helpful Websites

How to prepare an abbreviated 510(k):

http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/HowtoMarketYourDevice/PremarketSubmissions/PremarketNotification510k/ucm134574.htm

FDA standards program:

http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/Standards/default.htm

Helpful Guidance Documents

Deciding When to Submit a 510(k) for a Change to an Existing Device (K97-1):

http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/GuidanceDocuments/ucm080235.htm

Frequently Asked Questions on the New 510(k) Paradigm – October 02, 1998

http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/GuidanceDocuments/ucm073946.htm

Helpful Guidance Documents

Design Control Guidance For Medical Device Manufacturers

http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/GuidanceDocuments/ucm070627.htm

Guidance for Industry and FDA Staff; Replacement Reagent and Instrument Family Policy

http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/GuidanceDocuments/ucm079185.htm

Thank you!

douglas.rheinheimer@fda.hhs.gov