General Chapters Overview

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General Chapters can be

- Required (numbered below <1000>)
- Informational (numbered <1xxx>)
- Specific for dietary supplements (numbered <2XXX>)
Required Chapters (Below <1000>)

- When referenced in monographs, are procedures used by the FDA to demonstrate compliance to a specification
- Typically are procedures referenced in multiple monographs
  - Chapter status avoids duplication and simplifies updating
- Typically consist of method and procedure
  - Acceptance criteria – in the General Chapter or the monograph
- Can apply to monographs even if not specifically called out in the monograph
- Tests need to be verified by users for their applications
Informational Chapters (<1xxx>)

- Provide information or guidance
- Are not intended to be required by regulatory agencies
  - Some countries enforce the entire *USP–NF*
  - FDA reserves the right to require at their discretion
- Should be devoid of acceptance criteria to minimize misunderstandings
- May become required if referenced without disclaimer in a monograph or General Chapter numbered below <1000> (very rare)
Reference materials are in a minority of General Chapters.

Typically used to confirm identity or instrument performance verification

When they occur, they are often high impact
– <711> Dissolution (Prednisone tablets)
– <467> Residual Solvents
– <90> Bovine Serum – Quality Attributes
– <130> Protein A Quality Attributes

May be proposed by staff, committee, panel, or an external source

Evaluated via testing protocols similarly to reference materials in monographs

Developed in parallel with documentary standard
Impact of General Chapters

- General Chapters have broad industry impact
  - Some are required testing in monographs
  - Some provide guidelines that are enforced outside the U.S. or are broadly applied in the U.S. even if not required

- Broad-based input is typically needed and provided

- For chapters with high impact, training may be needed
  - Pharmacopeial education courses
  - FAQs
  - Guidebooks

- Much of this material is developed through the appropriate Expert Committees
General Notices contain requirements applicable throughout *USP–NF* unless superseded by a chapter or monograph.

General Chapters contain requirements applicable to monographs to which they apply.
- General Chapter requirements supersede General Notice requirements in case of conflict.

Monograph requirements are specific to the monograph in which they appear.
- Monograph requirements supersede General Notice and General Chapter requirements in case of conflict.
New Chapters or Major Revisions

- Proposal for new General Chapter or major revision comes from staff, committee member, or external source

- Committee, sub-committee, or panel evaluates idea and develops a *Pharmacopeia Forum (PF)* proposal

- Public comment solicited
  - Stimuli Article (common for new General Chapter) or draft chapter published in *PF*
  - “Design phase” of workshop or other public meeting scheduled for “high-impact” chapters (required chapters with broad industry impact)

- Comments collected from public forums and shared with committee/panel
General Chapter Development

New Chapters or Major Revisions

- Committee/panel develops updated proposal
  - Another Stimuli Article in *PF*
  - Draft General Chapter in *PF*
  - Final General Chapter in *USP–NF* with commentary addressing comments

- Timing
  - From inception to first *PF* publication often 12–18 months
  - Timing for final implementation of informational chapters typically shorter than for required chapters
  - For a high-impact chapter, timing from inception to final chapter can be five years or more (e.g., elemental impurities)
General Chapters – Current Status

- Chapters have been
  - Written and updated over many years
  - Under the auspices of many Expert Committees
  - Updated without vision for style and content

- Styles, formats, and information content depend on
  - Committee and USP norms at the time
  - Maturity of technology at time of updating
Vision for General Chapters

- **Required chapters**
  - Current technology
  - Easy to read, understand, execute
  - Clear acceptance criteria – latitude for procedural changes

- **Informative chapters**
  - Current guidance, no acceptance criteria
  - Context for enforceable chapters
  - Forward looking
  - Relevant to real-world pharmaceutical issues

- All look and read as if edited by one person

- Summarized in *PF 35(5)* Sept/Oct 2009 Stimuli Article
Why is This Important?

- Should represent standard industry practice
  - Current technology and acceptance criteria
  - Meaningfully assess quality attributes

- Used across the globe
  - Clear
  - Concise
  - Well-defined acceptance criteria

- Some countries enforce the whole book
  - Some informational chapters contain enforceable sections
  - Confusion, missed expectations, approval delays

- Harmonization – Clear, concise wording is critical
Objective for the 2010-2015 Cycle

- Review the approximately 240 current chapters for content and format
- Prioritize the updating of those that need it using the appropriate committee, subcommittee or panel
- Develop and write new chapters as determined by each committee
- Collect broad-based stakeholder input for high-impact chapters
Official General Chapters in 2010-2015 CoE Cycle

- In Revision: 74 chapters (31%)
- In Review: 64 chapters (27%)
- To be Reviewed: 48 chapters (20%)
- Completed: 53 chapters (22%)
New & Official General Chapters, 2010-2015 CoE Cycle

- New in Development (108 chapters) - 31%
- Completed (53 chapters) - 15%
- In Revision (74 chapters) - 21%
- In Review (64 chapters) - 18%
- To be Reviewed (48 chapters) - 14%
Thank You