27th MedDRA SOC and impact on your pharmacovigilance systems

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Overview

- Creation of 27th System Organ Class (SOC) in MedDRA
  - Background and purpose
  - Contents and structure
  - Implementation

- Impact on pharmacovigilance systems
  - MSSO tools
  - IT systems
  - Documents and processes
27th System Organ Class

- MedDRA Management Board endorsed creation of an additional (27th) SOC
- To accommodate non-clinical/non-patient concepts covering issues related to medical products
  - Important because they may affect patient safety
- Will include product quality and quality system issues
- Planned implementation date March 2016 (MedDRA Version 19.0)
27th SOC Web Page

Updates, presentations, information

Communication Document

• Purpose, timing, potential impact of new SOC
In the context of MedDRA, "product" can refer to various types of products intended for human use such as drugs (prescription and over the counter), biologics, vaccines, combination products, devices, nutraceuticals, dietary supplements, etc.
Product quality issues are abnormalities that may be introduced during the manufacturing/labeling, packaging, shipping, handling or storage of the products.
FDA proposed a set of product quality terms
- Use single terminology for quality issues and AEs

Approved by MedDRA Management Board for inclusion in MedDRA v12.0, March 2009
- HLGT *Product quality issues in SOC General disorders and administration site conditions*
  - 5 HLTs with total of 163 PTs and LLTs

MedDRA v18.0, March 2015
- Same HLGT, 5 HLTs with 190 PTs and LLTs
In 2012, FDA proposed additional set of ~80 manufacturing and quality control terms.

Blue Ribbon Panel meeting on scope of MedDRA on 29 April 2014:
- Recommended addition of manufacturing product quality terms
- 27th SOC was favored option for non-clinical/non-patient concepts

Recommendation endorsed by MedDRA Management Board.
Pharmaceutical Quality Systems

- FDA Guidance for Industry.
  Pharmaceutical Current Good Manufacturing Process Regulations September 2004
  - Quality system and five manufacturing systems
- ICH Quality Guidelines including Q10
  Pharmaceutical Quality System
27th SOC Contents

- Move existing product quality issue terms from General disorders SOC
- Add new terms specifically related to manufacturing process
- Add new terms for distribution, transport, delivery issues
- Exact structure and contents to be determined
27th SOC Features

Same structure and characteristics of other SOCs

- Five level hierarchy (SOC, HLGT, HLT, PT, LLT)
- 100 character limit for terms
- 8 digit MedDRA codes
- Multi-axial links to aid in retrieval and preserve links to patient safety
  - PT *Transmission of an infectious agent via product* (primary link to SOC *Infections and infestations*)
27th SOC Considerations

- Terms must be unambiguous at all levels
  - Temperature too high??
- Clear concept descriptions where necessary
- No general need to distinguish between issues occurring during manufacturing vs. post-distribution phase
- Important distinction between concepts
  - Quality system issue/deviation - may or may not lead to:
  - Product quality issue – may or may not lead to:
  - Adverse event
What’s in a Name?

- SOC name must describe contents/purpose but not restrict addition of other non-clinical/non-patient topics in future

- Some suggestions to start
  - Product issues
  - Medical product issues
  - Product related issues
  - Medical product related issues
  - Product and quality system issues
  - Product and production system issues

- Do you have any ideas?
Implementation Timeline

- March 2015: Webconference with MedDRA and quality experts
  - Ideas for name of new SOC
  - Organization of HLGTs and HLTs
- July 2015: Complex change proposals posted for comment
- Following approval: Users submit simple change requests (PTs and LLTs) in WebCR tool for further population of hierarchy
- Ongoing: Continued growth of new SOC
ICSRs and Product Quality Issues

EudraVigilance
May 2014

- 3,574,690 spontaneous cases (Reaction B. 2.1.1.B)
- 16,696 cases from HLGT
  Product quality issues (0.47%)
MedDRA Files

MedDRA files distributed with each release

- Detail of SOC file displayed

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>10005329</td>
<td>Blood and lymphatic system disorders</td>
<td>Blood</td>
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<tr>
<td>10007541</td>
<td>Cardiac disorders</td>
<td>Card</td>
</tr>
<tr>
<td>10010331</td>
<td>Congenital, familial and genetic disorders</td>
<td>Cong</td>
</tr>
<tr>
<td>10013993</td>
<td>Ear and labyrinth disorders</td>
<td>Ear</td>
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<tr>
<td>10014698</td>
<td>Endocrine disorders</td>
<td>Endo</td>
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<tr>
<td>10015919</td>
<td>Eye disorders</td>
<td>Eye</td>
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<tr>
<td>10017947</td>
<td>Gastrointestinal disorders</td>
<td>Gastr</td>
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<tr>
<td>10018065</td>
<td>General disorders and administration site conditions</td>
<td>Genrl</td>
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<tr>
<td>10019805</td>
<td>Hepatobiliary disorders</td>
<td>Hepat</td>
</tr>
<tr>
<td>10021428</td>
<td>Immune system disorders</td>
<td>Immun</td>
</tr>
<tr>
<td>10021881</td>
<td>Infections and infestations</td>
<td>Infec</td>
</tr>
<tr>
<td>10022117</td>
<td>Injury, poisoning and procedural complications</td>
<td>Inj&amp;P</td>
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<tr>
<td>10022891</td>
<td>Investigations</td>
<td>Inv</td>
</tr>
<tr>
<td>10027433</td>
<td>Metabolism and nutrition disorders</td>
<td>Metab</td>
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<tr>
<td>10028395</td>
<td>Musculoskeletal and connective tissue disorders</td>
<td>Musc</td>
</tr>
<tr>
<td>10029104</td>
<td>Neoplasms benign, malignant and unspecified (incl cysts and polyps)</td>
<td>Neopl</td>
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<tr>
<td>10029205</td>
<td>Nervous system disorders</td>
<td>Nerv</td>
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<tr>
<td>10036585</td>
<td>Pregnancy, puerperium and perinatal conditions</td>
<td>Preg</td>
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<td>10037175</td>
<td>Psychiatric disorders</td>
<td>Psych</td>
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<tr>
<td>10038359</td>
<td>Renal and urinary disorders</td>
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<td>10038604</td>
<td>Reproductive system and breast disorders</td>
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<td>10038738</td>
<td>Respiratory, thoracic and mediastinal disorders</td>
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<td>10040785</td>
<td>Skin and subcutaneous tissue disorders</td>
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<tr>
<td>10041244</td>
<td>Social circumstances</td>
<td>SocCi</td>
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<td>10042613</td>
<td>Surgical and medical procedures</td>
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</tr>
<tr>
<td>10047065</td>
<td>Vascular disorders</td>
<td>Vasc</td>
</tr>
</tbody>
</table>

New # | New SOC Name | Abbrev
Impact on Data Summaries

- No major impact on AE data summaries or subsequent conclusions
  - If no terms are reported, SOC is not displayed, e.g., SOC _Social circumstances_
  - Versioning impact (pre- to post-27\textsuperscript{th} SOC) similar to primary SOC changes
  - Programming of standard tables/listings

- Impact on International Order of SOCs
  - Recommend to add as last on list

- Minimal impact on organizations not involved in product quality
Two Levels of IT Systems

Commercial systems
- Clinical, Safety, and Electronic Data Capture
- Validated by developer and end user organization
- MedDRA loading based on contents of MedDRA files

Locally developed
- Varying levels of validation
- MedDRA loading could be “hard coded”
- Some developers less familiar with MedDRA and not receiving MedDRA information
- End-users will need to be made aware of new SOC

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MSSO Tools

- No impact on Desktop Browser, Web-Based Browser, MVAT, WebCR
- Mock files successfully loaded and tested
Anticipated IT Impact of 27th SOC

- Commercial systems
  - Very low (if any)
  - Initial discussions with vendors confirm
  - Loading based on content of files, not a fixed number
  - Revisions to IT SOPs and other documentation possible
    - Related to the use of the new SOC

- Local systems
  - Higher impact
  - Too many to reach individually

- No formal IT system
  - Low (using spreadsheets, simple databases, MSSO tools)

- Mitigation of impact
  - Communication in multiple forums
  - Communication Document on 27th SOC web page
  - Developer webinar
Impact on Documentation and Processes

- MSSO documents, e.g., Introductory Guide
- SOPs, procedures documentation
- In-house coding and retrieval guidelines
- Points to Consider documents
- Regulatory data standards, guidances, and rules
Communication and Collaboration

- **Communication with users**
  - Webinars, MedDRA website, broadcast emails, What’s New, User Group meetings, training sessions, videocasts, etc.

- **Collaborative effort**
  - MedDRA experts
  - Quality experts

- **Feedback is welcome**
Ask