MedDRA Overview

ICH M Initiatives Training, Beijing, 25-26 October 2012

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Test Your Knowledge

- MedDRA is
  - 1. A list of drug names
  - 2. A list of adverse events
  - 3. A classification for a wide range of clinical information
  - 4. I have no idea

Test Your Knowledge (cont)

- All MedDRA users pay for their MedDRA subscription.
  - 1. True
  - 2. False
Test Your Knowledge (cont)

- MedDRA is a product of
  1. MSSO (Maintenance and Support Services Organization)
  2. JMO (Japanese Maintenance Organization)
  3. ICH
  4. Regulatory authorities

Topics

- What is MedDRA?
- Advantages of using MedDRA
- How do I plan for the transition to MedDRA?
- How do I get access to MedDRA?
- Whom do I contact for MedDRA questions?
- MedDRA information on the web
What is MedDRA?

- Medical Dictionary for Regulatory Activities
- An ICH standard product
- A classification for a wide range of clinical information
  - Diseases, signs, symptoms, laboratory, procedures, medication errors, product quality issues...
- Support for multiple regulated product areas
  - Drugs, vaccines, biologics, food, cosmetics ...

Advantages Of Using MedDRA

- To speak the same language in product safety
  - Before ICH – back track 20+ years

<table>
<thead>
<tr>
<th>Country/Region</th>
<th>Examples of Terminology</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Union</td>
<td>Clinical trial: ICD-9</td>
</tr>
<tr>
<td></td>
<td>Post-marketing: WHO-ART</td>
</tr>
<tr>
<td>Japan</td>
<td>Clinical trial: MEDIS</td>
</tr>
<tr>
<td></td>
<td>Post-marketing: J-ART</td>
</tr>
<tr>
<td>United States</td>
<td>Clinical trial: ICD-9-CM</td>
</tr>
<tr>
<td></td>
<td>Post-marketing: COSTART</td>
</tr>
<tr>
<td>Canada</td>
<td>Post-marketing: WHO-ART</td>
</tr>
</tbody>
</table>

Many homegrown terminologies
Advantages Of Using MedDRA (cont)

- To speak the same language in product safety
  - “based on recent experiences from eight different companies and showed that ten months were needed to convert a US/NDA into an EU/MAA” – Françoise Augier de Crémières “THE BIRTH OF ICH E3 AND HOW IT LED TO THE CTD”, DIA Global Forum April 2011
  - There must be a better way to communicate within and cross country/region in order to protect patient safety

<table>
<thead>
<tr>
<th>Country/Region</th>
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<th>Post-marketing</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Union*</td>
<td>MedDRA</td>
<td>MedDRA</td>
</tr>
<tr>
<td>Japan*</td>
<td>MedDRA</td>
<td>MedDRA</td>
</tr>
<tr>
<td>United States</td>
<td>MedDRA</td>
<td>MedDRA</td>
</tr>
<tr>
<td>Canada</td>
<td>MedDRA</td>
<td>MedDRA</td>
</tr>
</tbody>
</table>

*MedDRA is mandated
Advantages Of Using MedDRA (cont)

• To speak the same language in product safety –
  global MedDRA users

Argentina  Australia  Austria  Belgium  Brazil  Bulgaria  Canada  Chile  China  Chinese Taipei  Croatia  Cyprus  Czech Republic  Denmark  Dominican Republic  Estonia  Ethiopia  Finland  France  Germany  Greece  Hong Kong  Hungary  Iceland  India  Ireland  Israel  Italy  Japan  Latvia  Lithuania  Luxembourg  Malaysia  Malta  Mauritius  Mexico  Montenegro  Netherlands  New Zealand  Norway  Philippines  Poland  Portugal  Romania  Russian Federation  Saudi Arabia  Serbia  Singapore  Slovakia  Slovenia  South Africa  South Korea  Spain  Sweden  Switzerland  Thailand  Ukraine  United Arab Emirate  United Kingdom  United States

MedDRA Overview

Advantages Of Using MedDRA (cont)

• To speak the same language in product safety –
  numerous regulatory authorities using MedDRA
  including
  o EMA and National Competent Authorities (EU)
  o FDA (United States)
  o Health Canada (Canada)
  o MHLW (Japan)
  o TGA (Australia)
  o SFDA (Saudi Arabia)
  o HSA (Singapore)
Advantages Of Using MedDRA (cont)

- To speak the same language in product safety – Multilingual

- Designed and developed by ICH M1 Expert Working Group for
  - Adverse event coding and reporting (free text to controlled vocabulary)
    - Wide range of granularity to meet the needs of clinical trial study and post-marketing report
    - Work with E2B and eCTD
  - To facilitate signal detection and pharmacovigilance – 系统综合归纳信息
    - MedDRA hierarchy
    - Standardised MedDRA Queries

- Single terminology used through a product life cycle
Advantages Of Using MedDRA (cont)

- OMOP recent study on ICD-9-CM, SNOMED CT, and MedDRA – “We found that MedDRA is a good compromise between size and coverage”
  
  C Reich, et al, Evaluation of alternative standardized terminologies for medical conditions within a network of observational healthcare databases, J. Biomedical Informatics, June 2012

- OMOP is a project under US FDA Sentinel Initiative

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Advantages Of Using MedDRA (cont)

• Practical example (1):

  Basaria, S et al. Adverse events associated with testosterone administration

  In this study of elderly men with limited mobility and low serum testosterone, subjects were randomly assigned to receive placebo or testosterone for 6 months. Adverse events were categorized using MedDRA. Based on analysis of specific groups of cardiovascular event MedDRA terms, the data and safety monitoring board for this study recommended that the trial be discontinued early because of a higher rate of adverse cardiovascular events in the testosterone group than in the placebo group.

Advantages Of Using MedDRA (cont)

• Practical example (2):

In this study, reports to the vaccine adverse event reporting system (VAERS), a US spontaneous reporting system, were reviewed to identify potential rare events or unusual adverse event (AE) patterns after 2009-H1N1 vaccination. These AE reports are coded using MedDRA. Analysis of these MedDRA-coded data showed that the adverse event profile after 2009-H1N1 vaccine in VAERS (over 10,000 reports) was consistent with that of seasonal influenza vaccines, although the reporting rate was higher after 2009-H1N1 than seasonal influenza vaccines.

Vaccine 2010 Oct 21;28(45):7248-55

Advantages Of Using MedDRA (cont)

• Actively maintained – centralized and governed
  o ICH has established an ICH MedDRA Management Board to:
    - Oversee financial and technical operations of the MSSO
    - Ensure the continued development and viability of MedDRA
    - Ensure that MedDRA is easy to use and accessible to all
    - Ensure MSSO is meeting the needs of users
Advantages Of Using MedDRA (cont)

• Actively maintained to meet user needs
  - Actively maintained to meet user needs
  - Centralized and governed
    - Centralized maintenance organization – MSSO partnered with JMO
      - One international standard
        • No country or regional modification of MedDRA
        • No company modification of MedDRA
    - Governed maintenance by the ICH MedDRA Management Board
Advantages Of Using MedDRA (cont)

• Actively maintained – Governance structure

- MedDRA Management Board (Six ICH parties, Canada, UK MHRA & WHO as Observer)
- ICH Steering Committee
- MSSO Development Implementation Communication
- JMO (MedDRA Japanese)
- User Communities
  - Regulatory Authorities
    - WHO
  - Regulated Industries
    - Others
- Others (Future)

Advantages Of Using MedDRA (cont)

• Increase efficiency

Paper Reporting
Advantages Of Using MedDRA (cont)

- Increase efficiency – MedDRA support electronic submission (从手工劳动中解脱出来)

MedDRA Overview

Advantages Of Using MedDRA (cont)

- MedDRA – an integral part of ICH e-submission standards
  - E2B - MedDRA LLT code is used for (E2B R3)

| B.1.7.1.r.a.2 | Structured Medical History Information (disease / surgical procedure / etc.) | MedDRA |
| B.1.8.r.f.2  | Indication                                                              | MedDRA |
| B.1.8.r.g.2  | Reaction                                                                 | MedDRA |
| B.1.8.4.b1   | Reported Causes(s) of Death (MedDRA code)                               | MedDRA |
| B.1.9.4.r.b1 | Autopsy-determined Causes(s) of Death (MedDRA code)                    | MedDRA |
| B.1.10.7.1.r.a.2 | Structured Information (disease / surgical procedure / etc.) | MedDRA |
Advantages Of Using MedDRA (cont)

- MedDRA – an integral part of ICH e-submission standards
  - E2B - MedDRA LLT code is used for (E2B R3)

<table>
<thead>
<tr>
<th>B.1.10.8.r.f.2</th>
<th>Indication</th>
<th>MedDRA</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.1.10.8.r.g.2</td>
<td>Reactions (if any and known)</td>
<td>MedDRA</td>
</tr>
<tr>
<td>B.2.l.1.b</td>
<td>Reactions / Event in MedDRA Terminology</td>
<td>MedDRA</td>
</tr>
<tr>
<td>B.3.r.c2</td>
<td>Test Name (MedDRA code)</td>
<td>MedDRA</td>
</tr>
<tr>
<td>B.4.k.7.r.2a</td>
<td>Indication in MedDRA Terminology (LLT code)</td>
<td>MedDRA</td>
</tr>
<tr>
<td>B.5.3.r.2</td>
<td>Sender’s Diagnosis / Syndrome and / or Reclassification of Reaction / Event</td>
<td>MedDRA</td>
</tr>
</tbody>
</table>

Advantages Of Using MedDRA (cont)

- MedDRA – an integral part of ICH e-submission standards
  - eCTD – Module 5: Clinical Study Reports Folder
  - M4E Guideline: MedDRA is recommended in adverse event summary tables
Advantages Of Using MedDRA - Summary

- Use of MedDRA provides standardization in coding, retrieval and communication of safety data
- This has the benefit of
  - Consistency
  - Accuracy
  - Efficiency
  - Transparency

How Do I Plan For The Transition To MedDRA?

- A transition plan and a team to execute the plan
- Legacy data conversion: strategy, conventions
  - WHO-ART to MedDRA mapping
  - Software tools
- IT infrastructure
  - Hardware – such as server
  - Software – such as application, database
    - MedDRA Browsers
    - How to better design safety database, e.g.,
      - To minimize the impact of MedDRA versioning
      - To facilitate analysis: term, code, primary link, secondary link
      - To define fields coded in MedDRA – E2B guidance
How Do I Plan For The Transition To MedDRA? (cont)

- **Policy and guidance**
  - Overall Workflow process
    - Coding process
    - Medical review process – quality control
    - Decision making process
  - Regulatory authorities: policy and guidance for industry

- **Coding processes and conventions based on ICH Point to Consider (PTC) guidance**
  - MedDRA Term Selection: PTC
  - MedDRA Data Retrieval and Presentation: PTC
  - Creation and maintenance of in house conventions – consistent with PTC guide

- **Staffing**
  - Coder, QA, data management team, safety reviewer…

- **Training needs**
  - Type of course
  - Who should attend? – coder, reviewer, data manager, statistician, QA

How Do I Plan For The Transition To MedDRA? (cont)

- **Communication, communication, and communication**
  - Communication transition to internal organizations, partners, regulated industry…
    - Timeline
    - Implications to relevant parties
  - Ongoing communication: versioning dates
  - Communication of other changes over time e.g. changes to coding guidelines

- **Whom to contact for help**
  - ICH Secretariat: [http://www.ich.org/](http://www.ich.org/), Email: admin@ich.org
  - MSSO: [http://www.meddrasso.com/](http://www.meddrasso.com/), Email: mssohelp@mssotools.com
How Do I Get Access To MedDRA?

• Becoming a MedDRA subscriber
  o Regulatory authority – free
  o Non-profit organization – free
    - Healthcare provider, research institute, academia
  o Pharmaceutical company, CRO – paid
    - Sliding scale subscription rates for commercial organizations
  o System developer – paid
  o Special license
    - To further facilitate MedDRA’s use, the ICH MedDRA Board has also granted a number of Special Licenses – example: EudraVigilance
      • Allows a Regulator to make MedDRA available to low revenue companies in an electronic reporting tool
      • Allows companies to meet their reporting requirements without taking a MedDRA subscription – free of charge

How Do I Get Access To MedDRA?

• Download MedDRA files from the MSSO web site: http://www.meddramsso.com/subscriber_download.asp
Whom Do I Contact for MedDRA Questions?

• MSSO Help Desk: mssohelp@mssotools.com
  o Accepting English and Chinese inquiries
  o How to subscribe?
  o Who is my company MedDRA point of contact?
    - One subscription for the entire organization
  o Forgot my company’s userID and password
  o What type of training should I take?
  o How do I register for MSSO MedDRA User Group meeting?
  o How to register for the free training course?

MedDRA Information On The Web

• MedDRA documentation
  o MedDRA library on MSSO web:
    http://www.meddramsso.com/subscriber_library.asp

MedDRA Documentation Library
Some of these documents require Adobe Acrobat Reader®.

Publications

- Introductory Guide for MedDRA Version 15.0
- Introduction Guide for Standardised MedDRA Queries (SMQs) Version 15.0
- Points to Consider (Updated 2 Apr 2012)
- MedDRA Newsletter
- Email to Subscribers
- MedDRA Literature Articles (Updated 5 Dec 2011)
- Annual Report

MedDRA Best Practices

- Primary System Organ Class (SOC) Allocation in MedDRA (pdf)
- MedDRA Implementation and Versioning for Clinical Trials (pdf)
- Single Case Reporting Using Semi-annual Version Control (pdf)
- Implementation of MedDRA Supplemental Terms (pdf)
MedDRA Information On The Web (cont)

• MedDRA training
  - Course description and slides:

MedDRA MSSO Videocasts

MedDRA MSSO videocasts are available in Windows Media Format (wmv) for streaming to your computer or downloading. They are also available on MedDRA MSSO’s YouTube channel.

<table>
<thead>
<tr>
<th>Course Title</th>
<th>English</th>
<th>Chinese</th>
<th>French</th>
<th>German</th>
<th>Spanish</th>
</tr>
</thead>
<tbody>
<tr>
<td>MedDRA Information On The Web</td>
<td>Download</td>
<td>Download</td>
<td>Download</td>
<td></td>
<td></td>
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<tr>
<td>MedDRA Training Videos</td>
<td>Streaming</td>
<td>Streaming</td>
<td>Streaming</td>
<td></td>
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</tbody>
</table>

What’s New with MedDRA Version 15.1 (Recorded Webinar):
- MedDRA Version Analysis Tool (IPVAT) (Download zip file)
- MedDRA Version Analysis Tool (IPVAT) (Streaming Video - wmv format)
- Primary System Organ Class (SOC) Allocation in MedDRA (Download zip file)
- Primary System Organ Class (SOC) Allocation in MedDRA (Streaming Video - wmv format)

MedDRA Desktop Browser: Research Brit and Export Functions (Download zip file)
MedDRA Desktop Browser: Research Brit and Export Functions (Streaming Video - wmv format)
MedDRA Information On The Web (cont)

• MedDRA User Group meetings
  o http://www.meddramsso.com/subscriber_events_usergroup.asp

MedDRA User Group Meetings

The objective of the User Group meetings is to achieve effective two-way communication concerning the use of MedDRA, provide a forum for the exchange of best practices and lessons learned, provide feedback for the quality and effectiveness of MSSO services, and identify new services that might be necessary to help in the business. In addition, the User Group meetings provide an opportunity for individuals to network with other professionals in the pharmaceutical community.

The MSSO hosts two User Group meetings per year—one in Europe and one in the United States. The MedDRA Japanese Maintenance Organization (JMO) holds the JMO User Group Meeting in Japan. For detailed information, please contact the JMO at helpdesk.mjo@pmj.jp.

MedDRA User Group Meeting - Philadelphia USA

Philadelphia Convention Center
Philadelphia, PA USA
28 June 2012
Room 108A

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MedDRA Overview

MedDRA Information On The Web (cont)

• MedDRA Tools
  o http://www.meddramsso.com/subscriber_download.asp

MedDRA Software Tools
  • MedDRA Desktop Browser
  • MedDRAU Browser (.zip)
  • MedDRA Web-Based Browser
  • MedDRA Version Analysis Tool (MVAT)
  • Third-Party Browsing and Coding Tools
MedDRA Information On The Web (cont)

• Frequent asked questions

Frequently Asked Questions

This web page provides quick reference to questions most frequently asked of the MedDRA US SO Team. It is divided by subject area; therefore, some questions & answers may be repeated in the different sections.

- MedDRA
- Change Requests
- MedDRA US SO
- US SO Events/Meetings
- MedDRA Subscription
- US SO Training
- MedDRA Desktop Browser
- MedDRA Web-Based Browser
- MedDRA Version Analysis Tool (ViAT)
- Standardised MedDRA Queries (SMQs)
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSTART</td>
<td>Coding Symbols for a Thesaurus of Adverse Reactions Terms</td>
</tr>
<tr>
<td>CTD</td>
<td>Common Technical Document</td>
</tr>
<tr>
<td>CRO</td>
<td>Contract Research Organization</td>
</tr>
<tr>
<td>EMA</td>
<td>European Medicines Agency</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>FDA</td>
<td>Food and Drug Administration (United States)</td>
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<tr>
<td>HSA</td>
<td>Health Sciences Authority</td>
</tr>
<tr>
<td>ICD-9</td>
<td>International Classification of Diseases - 9th Revision</td>
</tr>
<tr>
<td>ICD-9-CM</td>
<td>International Classification of Diseases - 9th Revision Clinical Modification</td>
</tr>
<tr>
<td>ICH</td>
<td>International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use</td>
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<tr>
<td>J-ART</td>
<td>Japanese Adverse Reaction Terminology</td>
</tr>
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<td>MEDical Information System</td>
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<tr>
<td>MHLW</td>
<td>Ministry of Health, Labour and Welfare</td>
</tr>
<tr>
<td>MSSO</td>
<td>Maintenance and Support Services Organization</td>
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<tr>
<td>NDA</td>
<td>New Drug Application</td>
</tr>
<tr>
<td>OMOP</td>
<td>Observational Medical Outcomes Partnership</td>
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<tr>
<td>SNOMED CT</td>
<td>Systematized Nomenclature of Medicine--Clinical Terms</td>
</tr>
<tr>
<td>SMQ</td>
<td>Standardised MedDRA Query</td>
</tr>
<tr>
<td>TGA</td>
<td>Therapeutic Goods Administration</td>
</tr>
<tr>
<td>UMC</td>
<td>Uppsala Monitoring Centre</td>
</tr>
<tr>
<td>WHO-ART</td>
<td>World Health Organization Adverse Reaction Terminology</td>
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</tbody>
</table>

谢谢!