



## What is MedDRA and How is it Used?



MedDRA was developed under the auspices of the International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use (ICH). The activities of the MedDRA Maintenance and Support Services Organization (MSSO) are overseen by an ICH MedDRA Management Committee, which is composed of the ICH parties, the Medicines and Healthcare products Regulatory Agency (MHRA) of the UK, Health Canada, and the WHO (as Observer).



MedDRA

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MedDRA

## Course Overview

- Present background information about MedDRA
- Review MedDRA's, scope, structure, and characteristics
- Describe the maintenance of MedDRA
- Describe MedDRA tools (browsers, MVAT)
- Discuss coding with MedDRA
- Introduce the MedDRA Points to Consider documents
- Describe Standardised MedDRA Queries (SMQs)
- Conclude with a question and answer session

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## MedDRA Background

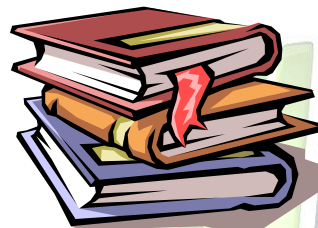
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## What is MedDRA?

Med = Medical  
D = Dictionary for  
R = Regulatory  
A = Activities



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## MedDRA's Purpose

- Facilitate the exchange of clinical information through standardization
- Important tool for product evaluation, monitoring, communication, electronic records exchange, and oversight
- Supports coding (data entry) and retrieval and analysis of clinical information about human medical products including pharmaceuticals, biologics, vaccines, and drug-device combination products

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MedDRA

## MedDRA Definition

MedDRA is a clinically-validated international medical terminology used by regulatory authorities and the regulated biopharmaceutical industry. The terminology is used through the entire regulatory process, from pre-marketing to post-marketing, and for data entry, retrieval, evaluation, and presentation.

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## Governance Structure for MedDRA

- ICH MedDRA Management Committee appointed by the ICH Assembly to provide oversight of MedDRA related activities and the Maintenance and Support Services Organization (MSSO)

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## Management Committee/MSSO Relationship

- ICH owns MedDRA
- ICH MedDRA Management Committee
  - Contracts with MSSO to maintain it
  - Has oversight of all operations of the MSSO
    - Meets regularly with MSSO
    - Sets subscription rates
    - Approves developmental plans and services
  - Membership includes ICH regulatory authorities and industry associations

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## MedDRA and the MSSO

- International support and development of terminology
- Foster use of MedDRA through communications and educational offerings
- “Custodians”, not owners, of the terminology
- JMO (partner organization for Japanese-language MedDRA)
- Governed by a Management Committee (industry, regulators, multi-national, other interested parties)

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## Where MedDRA is Used



Regulatory Authority and Industry Databases  
 Individual Case Safety Reports and Safety Summaries

Clinical Study Reports

Investigators' Brochures

Core Company Safety Information

Marketing Applications


Publications

Prescribing Information

Advertising


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# MedDRA's Scope, Structure, and Characteristics

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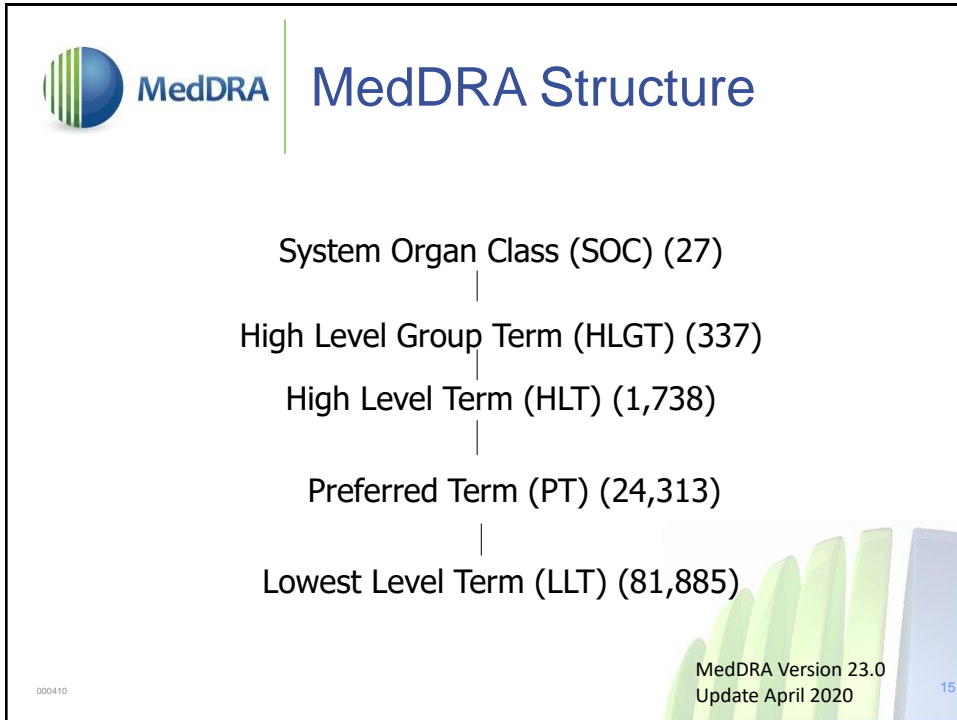
# Scope of MedDRA

**OUT**  
**IN**

- Not a drug dictionary
- Frequency qualifiers
- Patient demographic terms
- Numerical values for results
- Clinical trial study design terms
- Severity descriptors
- Not an equipment, device, diagnostic product dictionary

Medical conditions  
Indications  
Investigations (tests, results)  
Medical and surgical procedures  
Medical, social, family history  
Medication errors  
Product quality issues  
Device-related issues  
Product use issues  
Pharmacogenetic terms  
Toxicologic issues  
Standardized queries

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The screenshot shows the MedDRA website's main page. The header includes the MedDRA logo and the text "Medical Dictionary for Regulatory Activities". A navigation menu contains links for Home, About MedDRA, How to Use, Training, Subscription, News & Events, and a search icon. A search bar is located to the right of the menu. A green arrow points to the search bar. Below the navigation, there is a "Welcome to MedDRA" section with introductory text and a "Multilingual Access" section listing various languages. A "Discover MedDRA" section features a "Help Yourself" banner for the "MedDRA Self-Service Application" with a "Learn more" button. On the right side, there is a "MedDRA 23.0 Update" announcement and a "Help to Shape the MedDRA Terminology" section with a "WebCR" button. The footer includes the ID "000410" and the page number "16".

**MedDRA Main Page Screenshot**

Medical Dictionary for Regulatory Activities

WBB PIC Contact FAQs Downloads

Home About MedDRA How to Use Training Subscription News & Events Search the site

**Welcome to MedDRA**

In the late 1990s, the International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use (ICH) developed MedDRA, a rich and highly specific standardised medical terminology to facilitate sharing of regulatory information internationally for medical products used by humans... (more)

**Multilingual Access** 中文 Čeština Nederlands English Français Deutsch Magyar Italiano 日本語 한국어 Português Português do Brasil Русский Español

**Discover MedDRA**

**Help Yourself**

**MedDRA Self-Service Application**

Learn more

**MedDRA 23.0 Update**

MedDRA 23.0 has been updated to include COVID-19 related terms and revisions. Please go to the COVID-19 page for more information or go to the Downloads page to access the updated release.

**Help to Shape the MedDRA Terminology**

by submitting change requests. Your contribution will then be considered by the MSSO/IMO.

WebCR

Recent News

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MedDRA

## System Organ Classes

- Blood and lymphatic system disorders
- Cardiac disorders
- Congenital, familial and genetic disorders
- Ear and labyrinth disorders
- Endocrine disorders
- Eye disorders
- Gastrointestinal disorders
- General disorders and administration site conditions
- Hepatobiliary disorders
- Immune system disorders
- Infections and infestations
- Injury, poisoning and procedural complications
- Investigations
- Metabolism and nutrition disorders
- Musculoskeletal and connective tissue disorders
- Neoplasms benign, malignant and unspecified (incl cysts and polyps)
- Nervous system disorders
- Pregnancy, puerperium and perinatal conditions
- Product issues
- Psychiatric disorders
- Renal and urinary disorders
- Reproductive system and breast disorders
- Respiratory, thoracic and mediastinal disorders
- Skin and subcutaneous tissue disorders
- Social circumstances
- Surgical and medical procedures
- Vascular disorders

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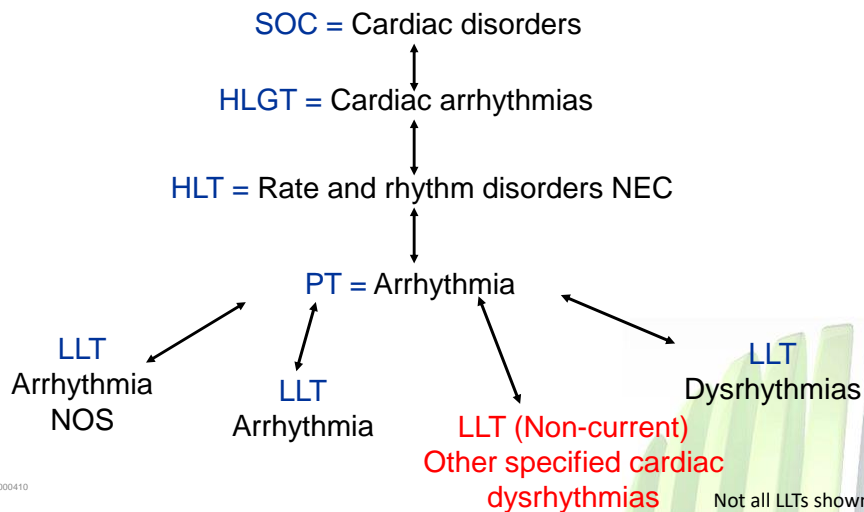
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## Lowest Level Term

Synonyms, lexical variants, sub-elements



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## Non-Current Terms

- Flagged at the LLT level in MedDRA
- Not recommended for continued use
- Retained to preserve historical data for retrieval and analysis
- Terms that are vague, ambiguous, outdated, truncated, or misspelled
- Terms derived from other terminologies that do not fit MedDRA rules

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## MedDRA Codes

- Each MedDRA term assigned an 8-digit numeric code starting with "1"
- The code is non-expressive
- Codes can fulfill a data field in various electronic submission types (e.g., E2B)
- New terms are assigned sequentially

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## MedDRA Codes and Languages

Diagram illustrating the MedDRA code 10019211 and its translations into various languages:

- German:** Kopfschmerz
- Hungarian:** Fejfájás
- Portuguese:** Cefaleia
- Italian:** Cefalea
- Japanese:** 頭痛
- Spanish:** Cefalea
- Russian:** Головная боль
- Korean:** 두통
- Brazilian Portuguese:** Cefaleia
- Dutch:** Hoofdpijn
- English:** Headache
- French:** Céphalée
- Czech:** Bolest hlavy
- Chinese:** 头痛

Electronic Submission

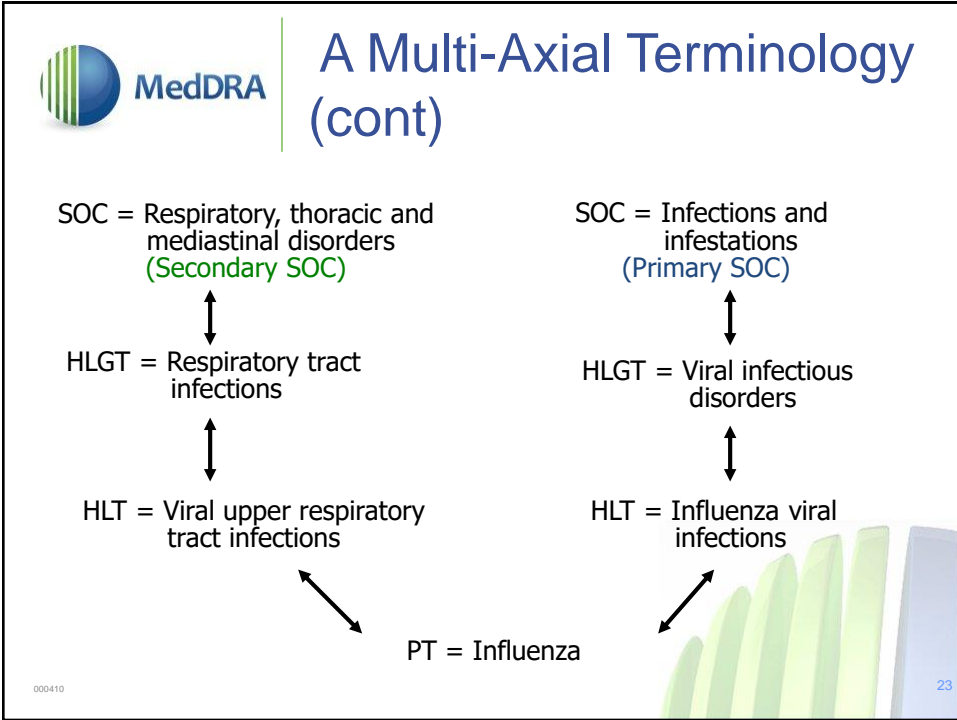
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## MedDRA A Multi-Axial Terminology

- Multi-axial = the representation of a medical concept in multiple SOC
  - Allows grouping by different classifications
  - Allows retrieval and presentation via different data sets
- All PTs assigned a primary SOC
  - Determines which SOC will represent a PT during cumulative data outputs
  - Prevents “double counting”
  - Supports standardized data presentation
  - Pre-defined allocations should not be changed by users

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**MedDRA**

MedDRA Maintenance

The slide features the MedDRA logo in the top left corner. The main text 'MedDRA Maintenance' is centered in a green font. A decorative graphic is visible in the bottom right corner.



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## MedDRA Maintenance

- Users can send change requests (CRs) to MSSO for consideration
  - Organizations allowed 100 CRs/month
  - For simple changes (PT and LLT levels), response within 7-10 working days
  - Complex changes (above PT level) posted for comments mid-year
- Two MedDRA updates/year
  - 1 March X.0 (Complex release)
  - 1 September X.1 (Simple release)

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## WebCR


- Web-based tool for Change Requests (CR)
  - URL: <https://mssotools.com/webcr/>
  - Via the Change Request Information page
- Ability to submit CRs online
  - Requests must be in English
- Immediate confirmation
- Review unsubmitted CRs online
- Ability to query CR history back to v5.1

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# MedDRA Submitting Changes



## WebCR MedDRA Change Request

[MedDRA Documentation](#)

**Login to WebCR**

MedDRA ID:


Password:

Welcome to the MedDRA User Change Request Data Entry Web site.  
 You may submit your MedDRA Change Request to the MSSO here.  
 If you have problems logging in, please contact the MSSO Help Desk at:  
[MSSOhelp@meddra.org](mailto:MSSOhelp@meddra.org) or 1-877-258-8280

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- Online change request submission tool
- Guides the user to enter all needed information

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# MedDRA Submitting Changes (cont)

**Add a New PT**

**Proposed PT (Required)**

**Primary HLT (Optional)**

**Primary SOC (Optional)**

**Secondary HLT (Optional)**

**Secondary SOC (Optional)**

**Justification statement is required**

**Justification**

Please consider including the gradation of chemical burns similar to the gradation of thermal burns under HLT Thermal burns to assist with coding and analysis.

**Attach supporting document (Optional)**

Attachment

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- Sample entry for a new PT in WebCR
- Justification and supporting documentation is important to help MSSO understand the need



## Proactive MedDRA Maintenance

- What is the proactive approach?
  - Corrections/improvements made internally by the MSSO
  - General changes suggested by users
- Submitting ideas
  - Send to MSSO Help Desk. Justification is helpful.
  - Example: Review placement of bruise and contusion terms to facilitate coding and analysis
- Evaluation of proposals
  - Final disposition is not time limited; MSSO may take time to review
  - Proactive approach does not replace usual CR process

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## MedDRA Tools

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## MSSO's MedDRA Browsers

- MedDRA Desktop Browser (MDB)
  - Download MDB and release files from MedDRA website
- MedDRA Web-Based Browser (WBB)
  - <https://tools.meddra.org/wbb/>
- Mobile MedDRA Browser (MMB)
  - <https://mmb.meddra.org>
- Features
  - Each require MedDRA ID and password
  - View/search MedDRA and SMQs
  - Support for all MedDRA languages
  - Language specific interface
  - Ability to export search results and Research Bin to local file system (MDB and WBB only)

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## MDB and WBB Special Features

- Preview upcoming (supplemental) changes in next release\*
- View primary **and** secondary link information
- Upload terms to run against SMQs
- Advanced search options (e.g., NOT, OR)

\*Supplemental view not available on MDB

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## MedDRA Version Analysis Tool (MVAT)

- Web-based (<https://tools.meddra.org/mvat>)
- Free to all users
- Features
  - Version Report Generator (produces exportable report comparing any two versions)
  - Data Impact Report (identifies changes to a specific set of MedDRA terms or codes uploaded to MVAT)
  - Search Term Change (identifies changes to a single MedDRA term or code)

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## MedDRA Version Analysis Tool (MVAT) (cont)

- User interface and report output available in all MedDRA languages
- Ability to run reports on supplemental changes
- Option to run reports on secondary SOC changes

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# MedDRA Version Analysis Tool

MedDRA Version Analysis Tool (MVAT)

Version Report Description

Select Different Versions to Compare

Language: English

Starting Version: MedDRA 21.1 English

Ending Version: MedDRA 23.0 English

Include Secondary SOC Information

Select SOC's to filter (default is all SOC's)

- Blood and lymphatic system disorders
- Cardiac disorders
- Congenital, familial and genetic disorders
- Ear and labyrinth disorders
- Endocrine disorders
- Eye disorders
- Gastrointestinal disorders
- General disorders and administration site conditions
- Hepatobiliary disorders
- Immune system disorders
- Infections and infestations
- Injury, poisoning and procedural complications

Clear Selection

Note: The starting MedDRA version must be older than the ending MedDRA version

Run Version Report

Preferred Language: English

Release/Supplemental View: Release

MVAT Home

Search Term Change

Data Impact Report

Logout

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## Coding with MedDRA

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## Always Select a Lowest Level Term Select Only Current LLTs

- Lowest Level Term that most accurately reflects the reported verbatim information should be selected
- Degree of specificity may be challenging
  - Example: "*Abscess on face*" → select "*Facial abscess*," not simply "*Abscess*"
- Select current LLTs only
  - Non-current terms for legacy conversion/historical purposes

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## Select Terms for All Reported Information

- Select terms for every AR/AE reported, regardless of causal association
- Select terms for device-related events, product quality issues, medication errors, medical and social history, investigations and indications as appropriate

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## MedDRA Browser SOC View

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## MedDRA Points to Consider Documents



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## ICH M1 Points to Consider Working Group (PtC WG)



November 2017, Geneva, Switzerland

- Regulators and industry from EU, US, and Japan
- Health Canada, Canada
- MFDS, Republic of Korea
- ANVISA, Brazil
- NMPA, China
- MSSO
- JMO
- WHO (Observer)

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## PtC Documents

PtC Category	PtC Document	Purpose	Languages	Release Cycle
<b>Term Selection</b>	MedDRA Term Selection: Points to Consider	Promote accurate and consistent coding with MedDRA	English, Japanese, and other selected languages	Updated annually with the March release of MedDRA (starting with MedDRA Version 23.0)
	MedDRA Term Selection: Points to Consider Condensed Version	Shorter version focusing on general coding principles to promote accurate and consistent use of MedDRA worldwide	All MedDRA languages (except English, Japanese, and other languages with an available translation of the full MTS:PTC document)	Update as needed
<b>Data Retrieval and Presentation</b>	MedDRA Data Retrieval and Presentation: Points to Consider	Demonstrate how data retrieval options impact the accuracy and consistency of data output	English, Japanese, and other selected languages	Updated annually with the March release of MedDRA (starting with MedDRA Version 23.0)
	MedDRA Data Retrieval and Presentation: Points to Consider Condensed Version	Shorter version focusing on general retrieval and analysis principles to promote accurate and consistent use of MedDRA worldwide	All MedDRA languages (except English, Japanese, and other languages with an available translation of the full DRP:PTC document)	Update as needed

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## PtC Documents (cont)

PtC Category	PtC Document	Purpose	Languages	Release Cycle
General	MedDRA Points to Consider Companion Document	More detailed information, examples, and guidance on specific topics of regulatory importance. Intended as a "living" document with frequent updates based on users' needs. First edition covers data quality and medication errors. New section on product quality is being drafted.	English and Japanese	Updated as needed

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## MedDRA Term Selection: Points to Consider (MTS:PTC)

### MedDRA® TERM SELECTION: POINTS TO CONSIDER

ICH-Endorsed Guide for MedDRA Users

**Release 4.19**  
**Based on MedDRA Version 23.0**

**1 March 2020**

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- Provides term selection advice for industry and regulatory purposes
- Objective is to promote accurate and consistent term selection to facilitate a common understanding of shared data
- Recommended to be used as basis for individual organization's own coding conventions

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## MedDRA Term Selection: PTC (cont)

- Developed by a working group of the ICH Management Committee
- Updated annually in step with the March release of MedDRA (starting with MedDRA Version 23.0)
- Available on MedDRA and JMO websites
  - English, Japanese, and other selected languages
  - Word (“clean” and “redlined”), PDF, HTML formats
  - “Redlined” document identifies changes made from previous to current release of document

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## What are Coding Conventions?

- Written guidelines for coding with MedDRA in your organization
- Support accuracy and consistency
- Common topics
  - Misspellings, abbreviations and acronyms
  - Combination terms and “due to” concepts
  - “Always query” terms, e.g., “Chest pain”
- Should be consistent with the MedDRA Term Selection: Points to Consider document

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## Why Do We Need Coding Conventions?

- Differences in medical aptitude of coders
- Consistency concerns (many more “choices” to manually code terms in MedDRA compared to older terminologies)
- Even with an autoencoder, may still need manual coding

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## Term Selection Points

- Diagnoses and Provisional Diagnoses with or without Signs and Symptoms
- Death and Other Patient Outcomes
- Suicide and Self-Harm
- Conflicting/Ambiguous/Vague Information
- Combination Terms
- Age vs. Event Specificity
- Body Site vs. Event Specificity
- Location-Specific vs. Microorganism-Specific Information
- Modification of Pre-existing Conditions
- Exposures During Pregnancy and Breast Feeding
- Congenital Terms
- Neoplasms
- Medical and Surgical Procedures
- Investigations

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## Term Selection Points (cont)

- Medication Errors, Accidental Exposures and Occupational Exposures
- Misuse, Abuse and Addiction
- Transmission of Infectious Agent via Product
- Overdose, Toxicity and Poisoning
- Device-related Terms
- Drug Interactions
- No Adverse Effect and "Normal" Terms
- Unexpected Therapeutic Effect
- Modification of Effect
- Social Circumstances
- Medical and Social History
- Indication for Product Use
- Off Label Use
- Product Quality Issues

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## MedDRA Data Retrieval and Presentation: Points to Consider (DRP:PTC)

### MedDRA® DATA RETRIEVAL AND PRESENTATION: POINTS TO CONSIDER ICH-Endorsed Guide for MedDRA Users on Data Output

**Release 3.19**  
**Based on MedDRA Version 23.0**

**1 March 2020**

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- Provides data retrieval and presentation options for industry or regulatory purposes
- Most effective when used in conjunction with MedDRA Term Selection: PTC document
- Recommended to be used as basis for individual organization's own data retrieval conventions



## Standardised MedDRA Queries (SMQs)

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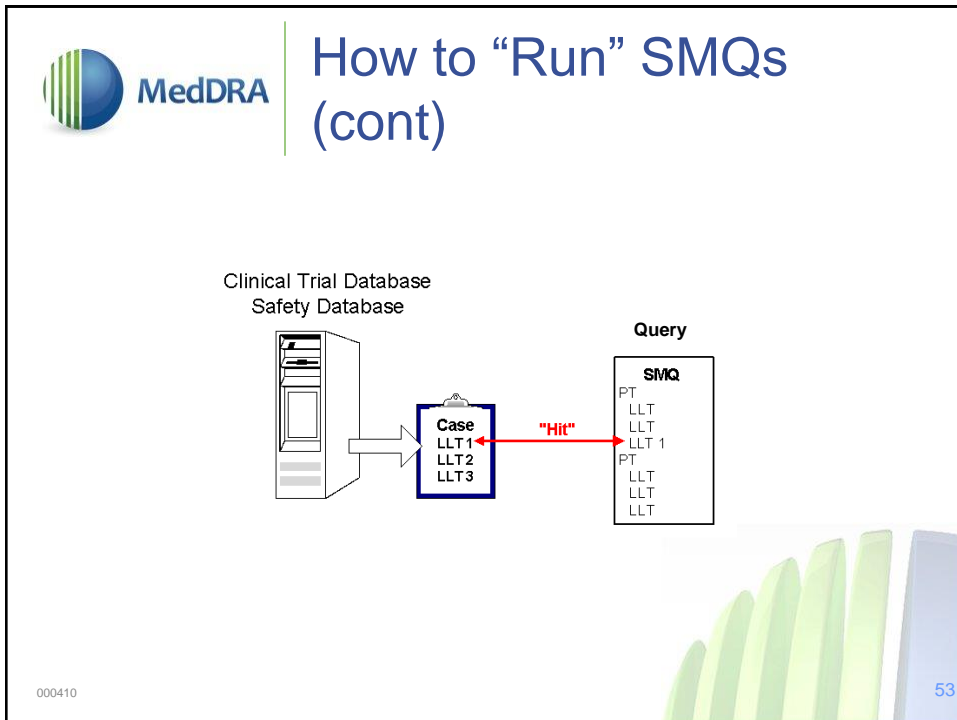


## Standardised MedDRA Queries (SMQs)

- Groupings of terms from one or more MedDRA SOCs related to medical condition or area of interest
- Terms relate to signs/symptoms, diagnoses, syndromes, physical findings, laboratory and other test data, etc.
- Intended to aid in case identification

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## SMQs in Production - Examples

- As of Version 23.0, a total of 106 level 1 SMQs in production
  - Agranulocytosis
  - Anaphylactic reaction
  - Central nervous system vascular disorders
  - Convulsions
  - Depression and suicide/self-injury
  - Hepatic disorders
  - Hypersensitivity
  - Ischaemic heart disease
  - Lack of efficacy/effect
  - Medication errors
  - Osteonecrosis
  - Peripheral neuropathy
  - Pregnancy and neonatal topics
  - Pseudomembranous colitis
  - Rhabdomyolysis/myopathy
  - Severe cutaneous adverse reactions
  - Systemic lupus erythematosus

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## SMQ Benefits and Limitations

- **Benefits**
  - Application across multiple therapeutic areas
  - Validated reusable search logic
  - Standardized communication of safety information
  - Consistent data retrieval
  - Maintenance by MSSO/JMO
- **Limitations**
  - Do not cover all medical topics or safety issues
  - Will evolve and undergo further refinement even though they have been tested during development

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## SMQ Applications

- **Clinical trials**
  - Where safety profile is not fully established, use multiple SMQs on routine basis as screening tool
  - Selected SMQs to evaluate previously identified issue (pre-clinical data or class effect)
- **Post-marketing**
  - Selected SMQs to retrieve cases for suspected or known safety issue
  - Signal detection (multiple SMQs employed)
  - Single case alerts
  - Periodic reporting (aggregate cases for safety and other issues, e.g., lack of efficacy)

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## MedDRA Browser SMQ View

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## Summary

In this course, we:

- Presented background information about MedDRA
- Reviewed MedDRA's scope, structure, and characteristics
- Described the maintenance of MedDRA
- Described MedDRA tools (browsers, MVAT)
- Discussed coding with MedDRA
- Discussed the MedDRA Points to Consider documents
- Described Standardised MedDRA Queries (SMQs)

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## MSSO Contacts

- Website
  - [www.meddra.org](http://www.meddra.org)
- Email
  - [msohelp@meddra.org](mailto:msohelp@meddra.org)
- Frequently Asked Questions
  - [www.meddra.org/faq](http://www.meddra.org/faq)
- MedDRA Browsers
  - <https://www.meddra.org/meddra-desktop-browsers>  
(Desktop Browser)
  - <https://tools.meddra.org/wbb/> (Web-Based Browser)
  - <https://mmb.meddra.org> (Mobile Browser)

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## MSSO Contacts (cont)

- Self-Service Application
  - <https://www.meddra.org/meddra-self-service-application>
- Training Schedule
  - <https://www.meddra.org/training/schedule>
- Change Request Submission
  - <https://www.meddra.org/how-to-use/change-requests>
- MedDRA Support Documentation
  - <https://www.meddra.org/how-to-use/support-documentation>

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# Question and Answer Session

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