WP 1: IDMP-related standards and terminologies
Presentation ICSR

Presenter: Anja van Haren
Acronyms

- ADR = Adverse Drug Reaction
- EDQM = European Directorate for the Quality of Medicines & HealthCare
- EEA = European Economic Area
- EMA = European Medicines Agency
- ICH: ICH = International Council on Harmonisation of Technical Requirements for Pharmaceuticals for Human Use
- ICSR = Individual Case Safety Report
- HCP = Health Care Professional
- MPID = Medicinal Product Identifier
- NCA = National Competent Authority
- PhPID = Pharmaceutical Product Identifier
- PhV = Pharmacovigilance
- WHO-DD = WHO Drug Dictionary
- XEVMPD = Extended EudraVigilance Medicinal Product Dictionary
Pharmacovigilance definition:
Science and activities relating to the detection, assessment, understanding and prevention of adverse effects or any other drug-related problem (WHO)
Pharmacovigilance as driver for developing IDMP

Exchange ICSRs (Individual Case Safety Reports):

‘Format and content for the reporting of one or several suspected adverse reactions to a medicinal product that occur in a single patient at a specific point of time’

Why is IDMP needed for ICSRs:

1: Improve efficiency ICSR processing
2: Improve accuracy of data analysis of ICSRs
Flow of EU ICSRs

WHO Collaborating Centre for International Drug Monitoring

European Medicines Agency

National Competent Authorities & PhV Centres

Pharmaceutical industry

Health Care Professional

Patient/Consumer

This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 875299
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Flow of EU ICSRs and drug dictionaries used

WHO- DD

WHO Collaborating Centre for International Drug Monitoring

NCA Dictionary

Dictionary used in clinical domain

NCA

National Competent Authorities & PhV Centres

Pharmaceutical industry

XEVMPD (art 57)

WHO- DD

Non-EEA authorities

Health Care Professional

Patient/Consumer

WHO- DD

European Medicines Agency

Science Medicines Health
Currently free text; level of specificity depends on what initial reporter (HCP/patient) has stated

Drug brand name may not have same ingredient in another country

Reported medicine: ‘Trexan’ (Brand name)

Substance: naltrexone
Substance: methotrexate
Drug information in ICSR

Paracetamol
Paracetamol hydrochloride
Paracetamol sodium
Acetaminophen
Acetaminophen 500mg tablet
Paracetamol tablet
Paracetamol 500mg tablet
Paracetamol Bigpharma 200mg tablet
Paracetamol 250mg suppository
Paedmol Bigpharma 200mg drink
Paracetamol Worldpharma chewable tablet

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A closer look at the ISO ICSR standard

Front end: ISO standard

back end: HL7 V3
ICH E2B(R3) implementation guide for ISO ICSR

The ICH ICSR

C.1 Identification of the Case Safety Report

C.2-r Primary source(s) of information

C.3 Information on Sender of Case Safety Report

C.4-r Literature Reference(s)

C.5 Study Identification

D Patient characteristics

E.i Reaction(s) / Event(s)

F.r Results of tests and procedures relevant to the Investigation of the Patient

G.k Drug(s) Information

H Narrative Case Summary and Further Information

Legend

1 to Many (1...n) Mandatory

1 to 1 Mandatory

1 to Many (0...n) Optional

1 to 1 (0...1) Optional
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### G - Drug(s) Information

<table>
<thead>
<tr>
<th>G.k</th>
<th>- Characterisation of Drug Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>G.k.2.1.a</td>
<td>- Mloid Version Date / Number</td>
</tr>
<tr>
<td>G.k.2.1.1b</td>
<td>- Medicinal Product Identifier (MPID)</td>
</tr>
<tr>
<td>G.k.2.1.2a</td>
<td>- PhPID Version Date / Number</td>
</tr>
<tr>
<td>G.k.2.1.2b</td>
<td>- Pharmaceutical Product Identifier (PhPID)</td>
</tr>
<tr>
<td>G.k.2.2</td>
<td>- Medicinal Product Name as Reported by the Primary Source</td>
</tr>
<tr>
<td>G.k.2.4</td>
<td>- Identification of the Country Where the Drug was Obtained</td>
</tr>
<tr>
<td>G.k.2.5</td>
<td>- Investigational Product Blinded</td>
</tr>
<tr>
<td>G.k.3.1</td>
<td>- Authorisation / Application Number</td>
</tr>
<tr>
<td>G.k.3.2</td>
<td>- Country of Authorisation / Application</td>
</tr>
<tr>
<td>G.k.3.3</td>
<td>- Name of Holder / Applicant</td>
</tr>
<tr>
<td>G.k.5a</td>
<td>- Cumulative Dose to First Reaction (number)</td>
</tr>
<tr>
<td>G.k.5b</td>
<td>- Cumulative Dose to First Reaction (unit)</td>
</tr>
<tr>
<td>G.k.6a</td>
<td>- Gestation Period at Time of Exposure (number)</td>
</tr>
<tr>
<td>G.k.6b</td>
<td>- Gestation Period at Time of Exposure (unit)</td>
</tr>
<tr>
<td>G.k.8</td>
<td>- Action(s) Taken with Drug</td>
</tr>
<tr>
<td>G.k.11</td>
<td>- Additional Information on Drug (free text)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>G.k.2.3.r</th>
<th>- Substance/Specified Substance Identifier and Strength (repeat as necessary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>G.k.2.3.r.1</td>
<td>- Substance/Specified Substance Name</td>
</tr>
<tr>
<td>G.k.2.3.r.2a</td>
<td>- Substance/Specified Substance TermID Version Date / Number</td>
</tr>
<tr>
<td>G.k.2.3.r.2b</td>
<td>- Substance/Specified Substance TermID</td>
</tr>
<tr>
<td>G.k.2.3.r.3</td>
<td>- Strength (number)</td>
</tr>
<tr>
<td>G.k.2.3.r.4</td>
<td>- Strength (unit)</td>
</tr>
</tbody>
</table>
The EU legislation* requires use of the ISO ICSR 27953-2:2011 message (in ICH E2B(R3) format) and use of standard terminologies within that message:
- terminologies resulting from ISO IDMP standards
- MedDRA

ISO ICSR (in ICH E2B(R3) format) is used by EMA EudraVigilance database since Nov 2017 and many more PhV databases in EU

Will be the only ICSR message accepted in EU from June 2022 (for exchange between NCA-EMA-pharmaceutical industry)

Note:
ISO ICSR message is not legally required for exchange of adverse events between consumer/health care professional and PhV centre/industry

* COMMISSION IMPLEMENTING REGULATION (EU) No 520/2012 of 19 June 2012

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Use of IDMP in the ICSR

• Medicinal product information (MPID/PCID) - ISO 11615
• Pharmaceutical product information (PhPID) - ISO 11616
• Substances (Substance ID/Specified Substance ID) - ISO 11238
• Units of measurement (UCUM) - ISO 11240
• Pharmaceutical dose forms, units of presentation, routes of administration and packaging - ISO 11239

Use of EDQM Dose forms & routes of administration mandatory in EU from June 2022 onwards
Summary

The ISO ICSR standard in ICH E2B(R3) format is widely used by medicines regulators, pharmacovigilance centres and pharmaceutical industry

- will become mandatory in EU in June 2022

- Has placeholders for transmitting IDMP identifiers
  Different levels can be used within the ICSR – depending upon what information on medicine is available

- Use of MPID, PhPID and (Specified)Substance identifiers will improve efficiency of ICSR processing as well as data analysis
Thank you for your attention