



EUROPEAN MEDICINES AGENCY  
SCIENCE MEDICINES HEALTH

# Implementing ISO ICSR/ICH E2B(R3): Key changes for pharmacovigilance

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## **Training Module PhV-M2a**

The impact of the new ISO/ICH E2B(R3) ICSR standard on adverse reaction reporting and the new business rules in EudraVigilance

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An agency of the European Union





# Version 1.0

# Overview Module PhV-M2a



Introduction to this training module

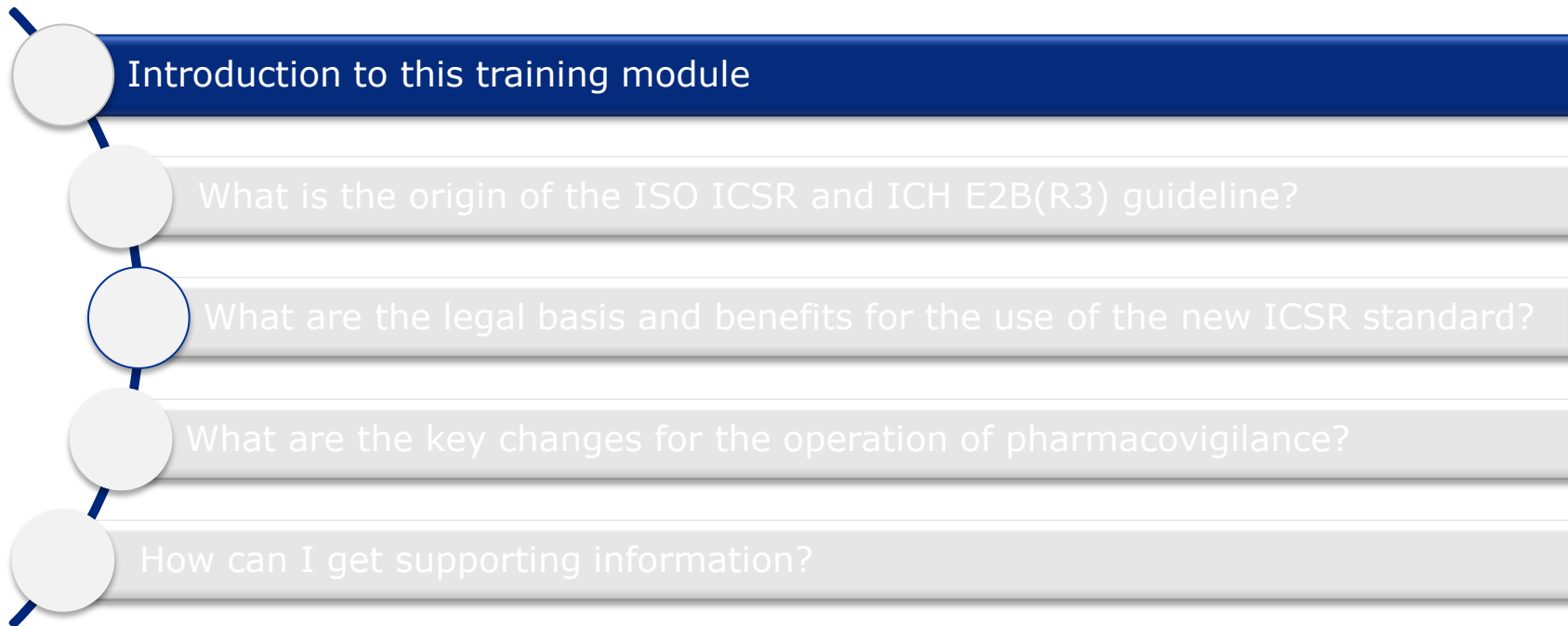
What is the origin of the ISO ICSR and ICH E2B(R3) standard?

What are the legal basis and benefits for the use of the new ICSR standard?

What are the key changes for the operation of pharmacovigilance?

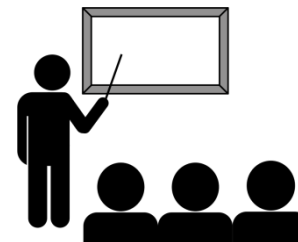
How can I get supporting information?

# Overview Module PhV-M2a



## Introduction: Context PhV-M2a

- Target audience for this training module:
  - National Competent Authorities (NCAs) in the European Economic Area (EEA)
  - Marketing authorisation holders (MAHs)
  - Sponsors of clinical trials (Sponsors)
  - Research institutions/Academia
  - Other interested parties



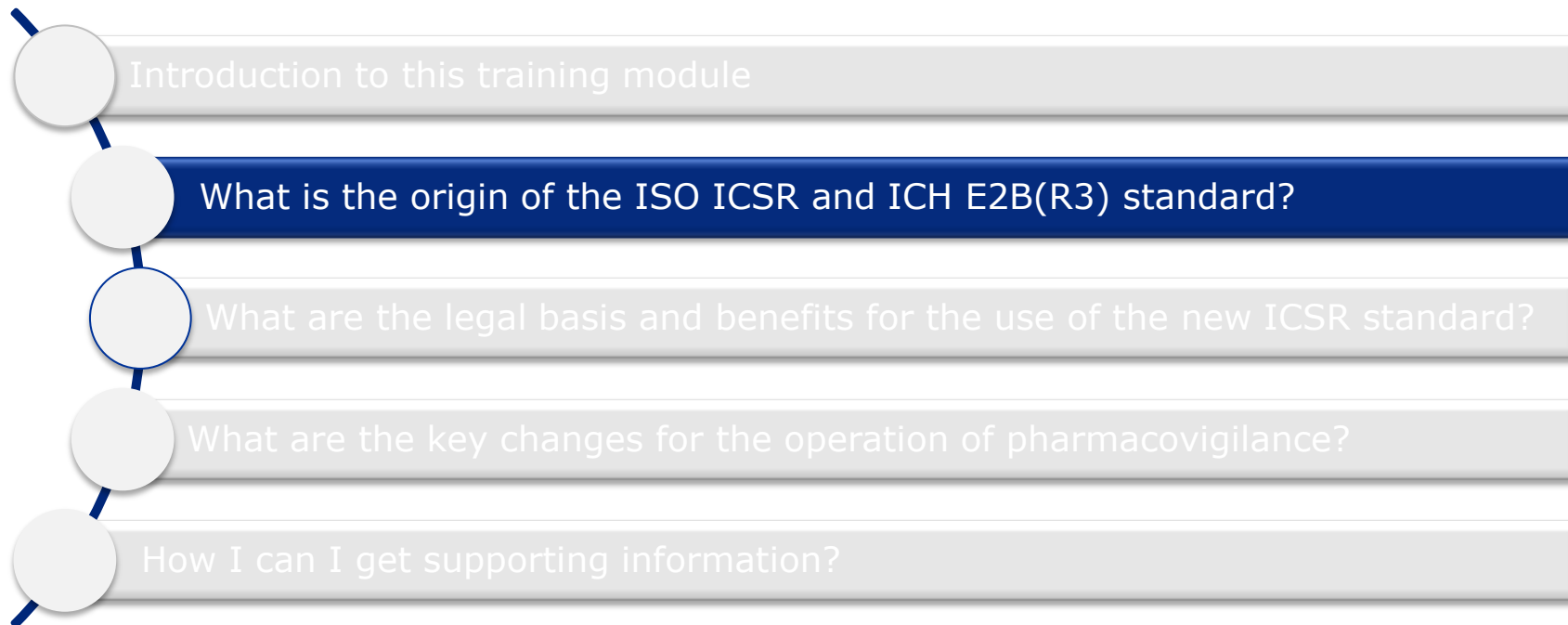
# Introduction: Learning Objectives

- At the end of module PhV-M2a you should be able to:
  - Refer to the origin of the development of the ISO ICSR standard and the ICH E2B(R3) Implementation Guide (IG)
  - Describe the legal basis and the benefits for the use of the ISO ICSR/ICH E2B(R3) guideline
  - Recognise the impact on pharmacovigilance with the move from the ICH E2B(R2) guideline /M2 format to the E2B(R3) guideline/ISO ICSR standard
  - Describe changes to the business rules as outlined in the EU ICSR IG
  - Understand where to obtain supporting information





# Overview Module PhV-M2a





# Session overview: What is the origin of the ISO ICSR and ICH E2B(R3) IG?

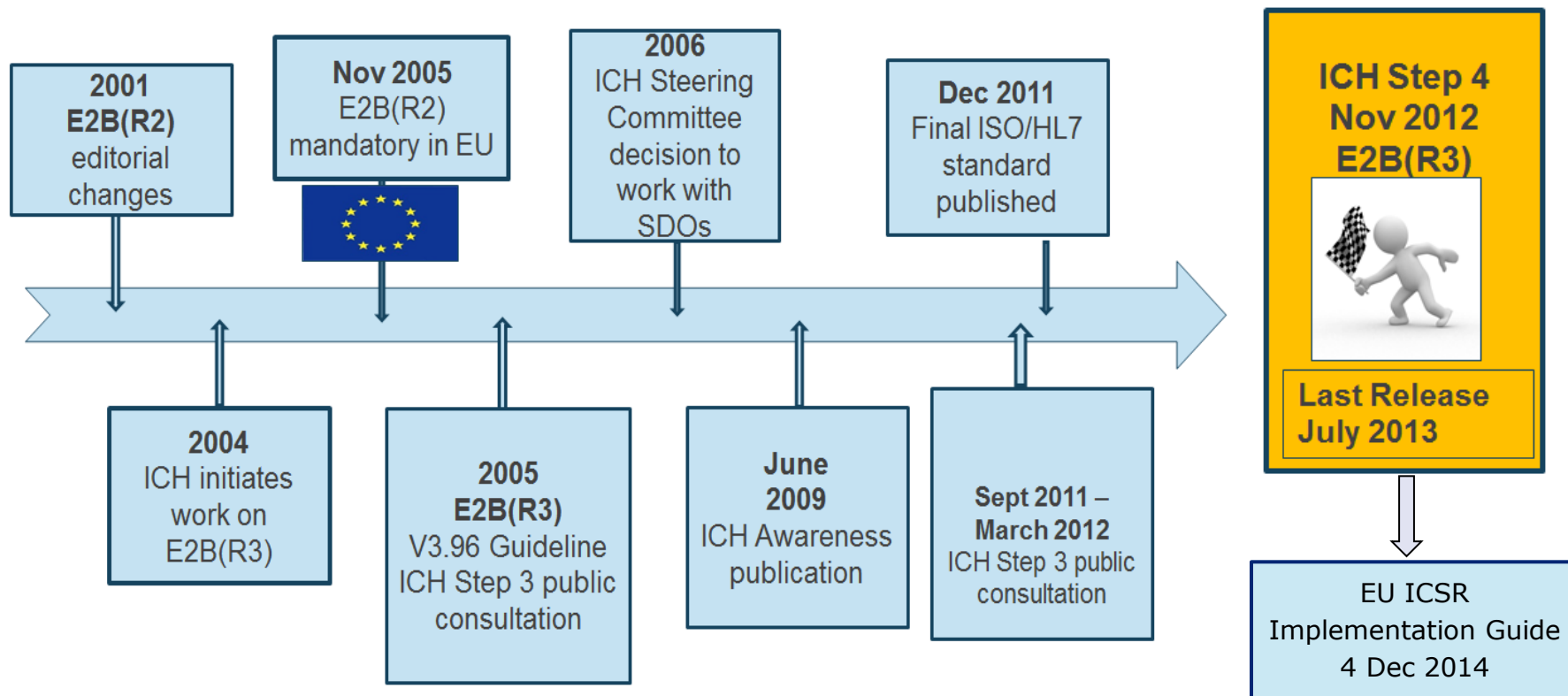
## **In this session you will obtain an understanding of:**

- The origin of the development of the ISO ICSR standard and the ICH E2B(R3) Implementation Guide (IG) that form the basis for the electronic exchange of Individual Case Safety Reports (ICSRs) as part of the enhanced functionalities of EudraVigilance





# Development of new ISO ICSR/ICH E2B(R3) standard (1)





## Development of new ISO ICSR/ICH E2B(R3) standard (2)

- International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use (ICH) adopted and published the guideline “Data Elements For Transmission Of Individual Case Safety Reports” in 1997 followed by minor revisions in 2000 (E2B(R1)) and February 2001 (E2B(R2))
- The electronic message for the ICH E2B(R2) ICSR is defined in the ICH ICSR M2 Version 2.3 Specification Document of February 2001
- Since then, the implementation of the electronic submission of ICSRs based on these guidelines has become widespread in the ICH regions – electronic reporting of ICSRs became mandatory in the EEA in November 2005



## Development of new ISO ICSR/ICH E2B(R3) standard (3)

- A revision of the E2B(R2) guideline was initiated by ICH in 2004
- A revised guideline, E2B(R3), was released for public consultation in May 2005
- A key decision was taken by the ICH Steering Committee in 2006:
  - Technical specifications should be created in collaboration with Standards Development Organisations (SDOs) to enable wider inter-operability across the regulatory and healthcare communities
  - To work with the Joint Initiative on SDO Global Health Informatics Standardization:
    - International Organisation for Standards (ISO)
    - Health Level 7 (HL7)
    - European Committee for Standardization (CEN)
    - Clinical Data Interchange Consortium(CDISC)
    - International Health Terminology Standards Development Organisation (IHTSDO)
    - GS1

## New ISO ICSR standard and the ICH E2B(R3) guideline (4)

- The draft ICH E2B(R3) guideline including the comments received during the May 2005 consultation, was provided to the SDOs to form the **ICH business requirements** for the development of the ISO ICSR standard
- The **created standard** is based upon an HL7 ICSR model that is capable of supporting message exchange for a wide range of product types (e.g. human medicinal products, veterinary products, medical devices etc.):
  - ISO/HL7 27953-1: 2011 Health informatics -- Individual case safety reports (ICSRs) in pharmacovigilance -- Part 1: The framework for adverse event reporting
  - *ISO/HL7 27953-2: 2011 Health informatics -- Individual case safety reports (ICSRs) in pharmacovigilance -- Part 2: **Human pharmaceutical** reporting requirements for ICSR*



## Development of new ISO ICSR/ICH E2B(R3) standard (5)

- The **ISO ICSR standard** is complemented by guidance on how to apply the standard for the purpose of pharmacovigilance for human medicines:
  - The “**ICH E2B(R3) Implementation Guide for Electronic Transmission of Individual Case Safety Reports**” (*referred to as ICH E2B(R3) Implementation Guide (IG)*)
    - Adopted in November 2012 with a minor revision published in July 2013
    - Provides the core set of requirements for the ICH content (data elements) of safety and acknowledgement (ACK) messages
  - The “**EU Individual Case Safety Report (ICSR) Implementation Guide**” (*referred to as EU ICSR IG*)
    - Adopted in December 2014
    - Complements the ICH E2B(R3) IG and defines EU specific requirements e.g. additional data elements, EU specific CVs, business rules



# Session summary: What is the origin of the ISO ICSR and ICH E2B(R3) IG?

## **In this session you learned:**

- About the ICH decision to work with SDOs on the development of technical specifications for the electronic transmission of ICSRs
- How the ISO ICSR standard is complemented by the ICH E2B(R3) Implementation Guide and the EU ICSR Implementation Guide for the use in the EEA

# Overview Module PhV-M2a

Introduction to this training module

What is the origin of the ISO ICSR and ICH E2B(R3) standard?

**What are the legal basis and benefits for the use of the new ICSR standard?**

What are the key changes for the operation of pharmacovigilance?

How I can I get supporting information?



# Session overview: What are the legal basis and benefits for the use of the ICSR standard?

## **In this session you will learn to describe:**

- The legal basis for the use of the ISO ICSR standard in the EEA
- The expected benefits of the use of the ISO ICSR standard



## Legal basis for the use of the ICSR standard (1)

- Commission Implementing Regulation (EU) 520/2012, chapter IV, defines the use of terminology, formats and standards for the purpose of pharmacovigilance
  - Medical Dictionary for Regulatory Activities (MedDRA) (ICH M1)
  - Lists of Standard Terms published by the European Pharmacopoeia Commission
  - ICH E2B(R2) 'Maintenance of the ICH guideline on clinical safety data management: data elements for transmission of Individual Case Safety Reports'
  - ICH M2 standard 'Electronic Transmission of Individual Case Safety Reports Message Specification'
  - EN ISO 27953-2:2011 Health Informatics, Individual case safety reports (ICSRs) in pharmacovigilance — Part 2: Human pharmaceutical reporting requirements for ICSR (ISO 27953-2:2011)



## Legal basis for the use of the ICSR standard (2)

- Use of terminology, formats and standards (continued) – *these standards will be implemented once the associated terminologies are available*
  - ISO 11615:2012, Health Informatics, Identification of Medicinal Products (IDMP) standard, 'Data elements and structures for unique identification and exchange of regulated medicinal product information'
  - ISO 11616:2012, Health Informatics, Identification of Medicinal Products (IDMP) standard 'Data elements and structures for unique identification and exchange of regulated pharmaceutical product information'
  - ISO 11238:2012, Health Informatics, Identification of Medicinal Products (IDMP) standard, 'Data elements and structures for unique identification and exchange of regulated information on substances'



## Legal basis for the use of the ICSR standard (3)

- Use of terminology, formats and standards (continued) – *these standards will be implemented once the associated terminologies are available*
  - ISO 11239:2012, Health Informatics, Identification of Medicinal Products (IDMP) standard, 'Data elements and structures for unique identification and exchange of regulated information on pharmaceutical dose forms, units of presentation and routes of administration'
  - ISO 11240:2012, Health Informatics, Identification of Medicinal Products (IDMP) standard, 'Data elements and structures for unique identification and exchange of units of measurement'

## Expected benefits for the use of the ICSR standard (4)

- Improved ICSR format (~ 10 years of operational experience)
- Better granularity based on additional data elements
- Alignment with new ISO Identification of Medicinal Products (IDMP) standards
- Improved quality of reports
- Interoperability with healthcare systems e.g. electronic health records
- Acceptance beyond ICH regions improving harmonisation of data formats

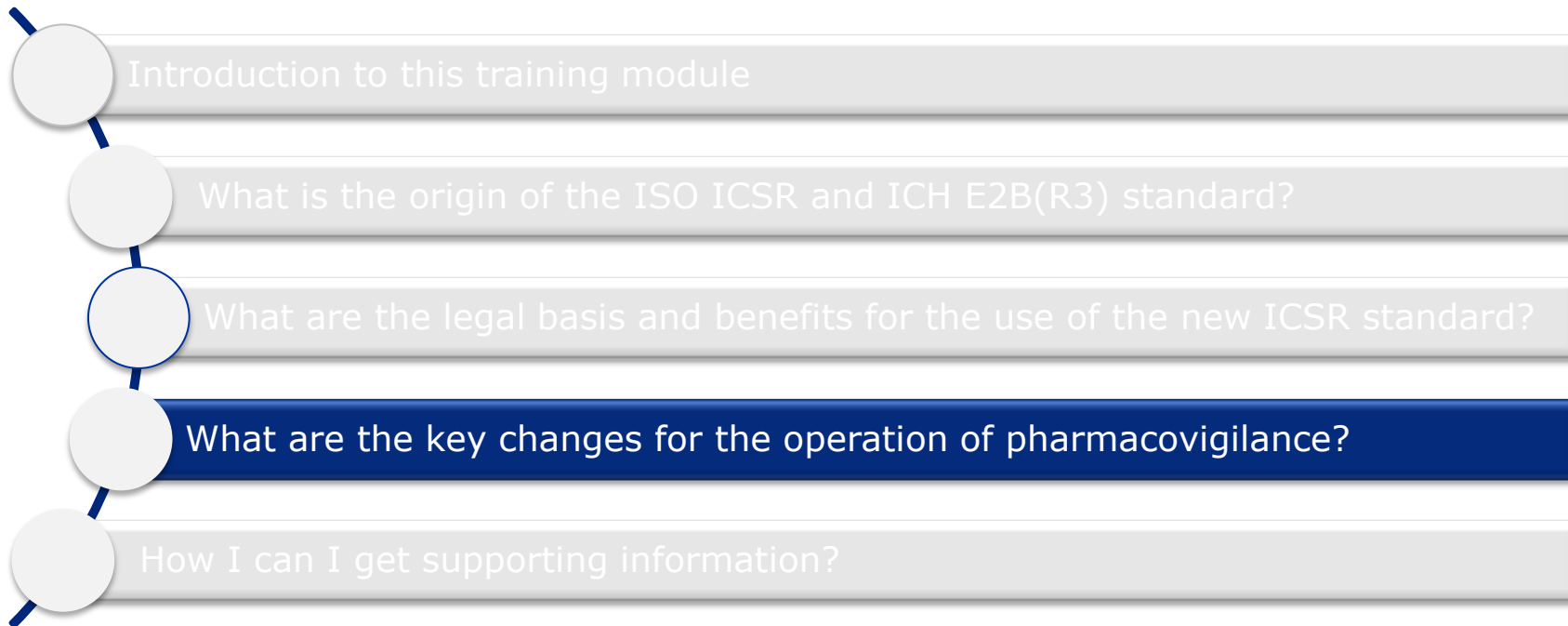


# Session summary: What are the legal basis and benefits for the use of the ICSR standard?

## **In this session you learned to describe:**

- What forms the legal basis for the use of the ISO ICSR standard in the EEA
- The expected benefits of the use of the ISO ICSR standard

# Overview Module PhV-M2a





# Session overview: What are the key changes for the operation of pharmacovigilance?

## In this session you will learn:

- To recognise the key changes that will occur with the use of the ICH E2B(R3)/ISO ICSR standard in comparison with the ICH E2B(R2) guideline /M2 format
- To define the areas where adaptation to your pharmacovigilance system and business processes will be required
- To discuss each ICSR section and modifications that have been introduced as part of the ICH ICSR IG
- To describe the main changes as regards the business rules to be applied for the electronic transmission of ICSRs as set out in the EU ICSR IG



# Session overview: What are the key changes for the operation of pharmacovigilance?

NOTE 1: training module PhV-G2 will describe the main changes that will be introduced as part of revision 2 of the guideline on Good Pharmacovigilance Practices, Module VI, which will provide guidance on how to use the ICH E2B(R3) format for adverse reaction reporting in the EU

NOTE 2: training module IT-M1 will describe the aspects to be taken into account by IT developers for the ISO ICSR standards implementation



# Changes that come with the E2B(R3) ICSR

In ICH E2B(R3) the following is changing compared to E2B(R2):

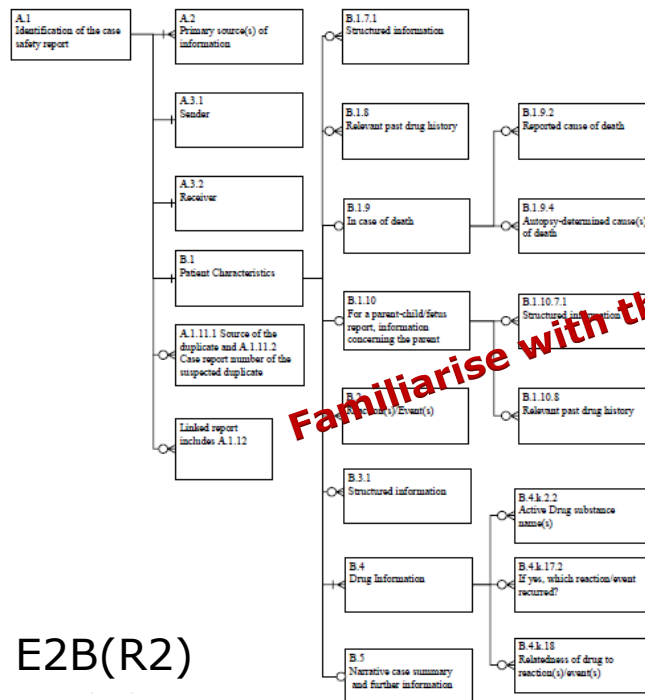
- Data structure
- Numbering of data elements
- New data elements have been added
- Data elements have been removed
- Sections have become repeatable
- Field length amendments
- Improved user guidance
- Use of Object Identifiers and NullFlavors
- Code lists



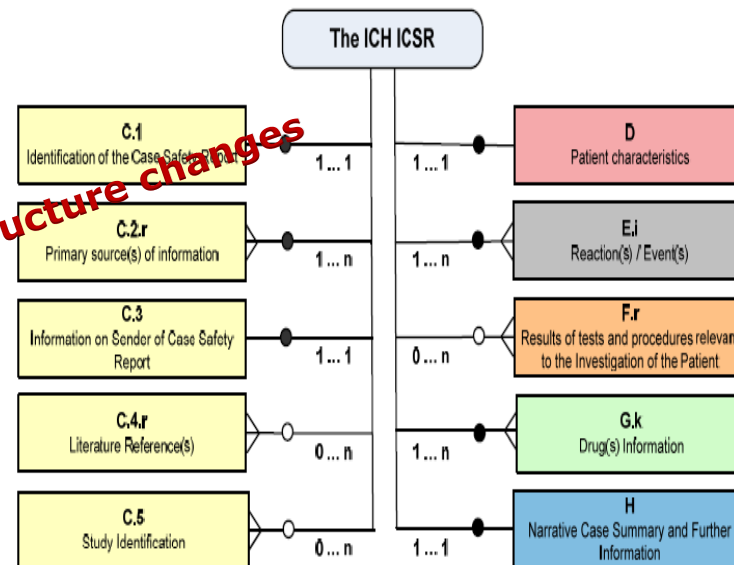
*NOTE: Carefully review the ICH and EU ICSR IGs to familiarise yourself in detail with these changes*



# Changes to the ICSR data structure



ICH E2B(R2)

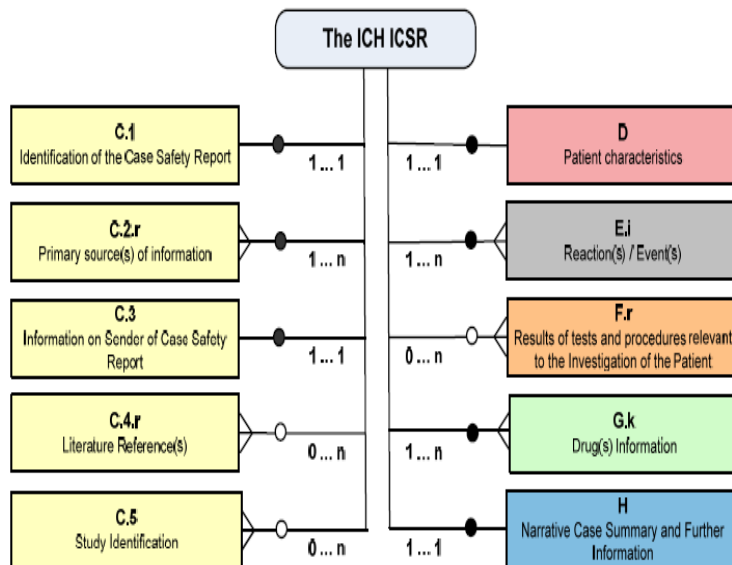


ICH E2B(R3)

**Familiarise with the data structure changes**



# The ICH E2B(R3) ICSR IG



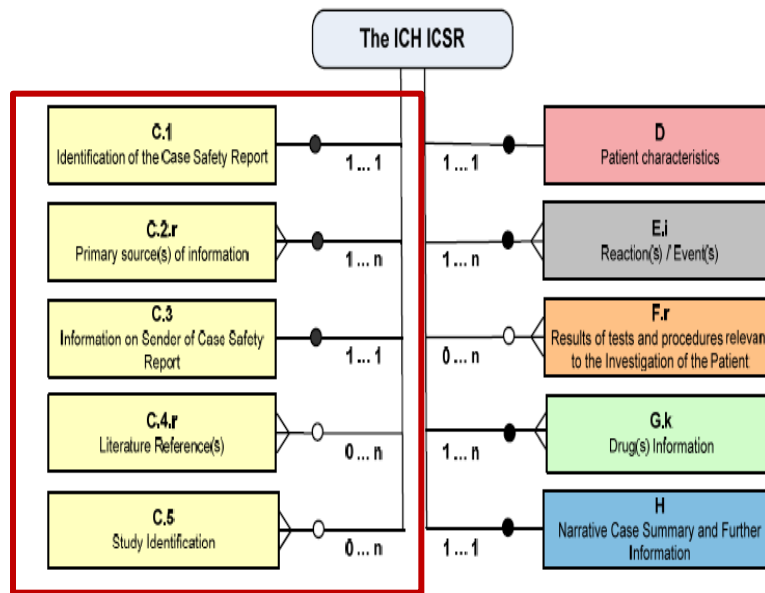
## ICH E2B(R3)

- We are now going to discuss each of the 10 ICH E2B(R3) ICSR Sections
- We will focus on the main changes that will impact on the way how we collect, report and analyse information on suspected adverse reactions related to medicines



For details always refer to the  
**ICH ICSR IG**

# The ICH E2B(R3) ICSR – Sections C1-C.5



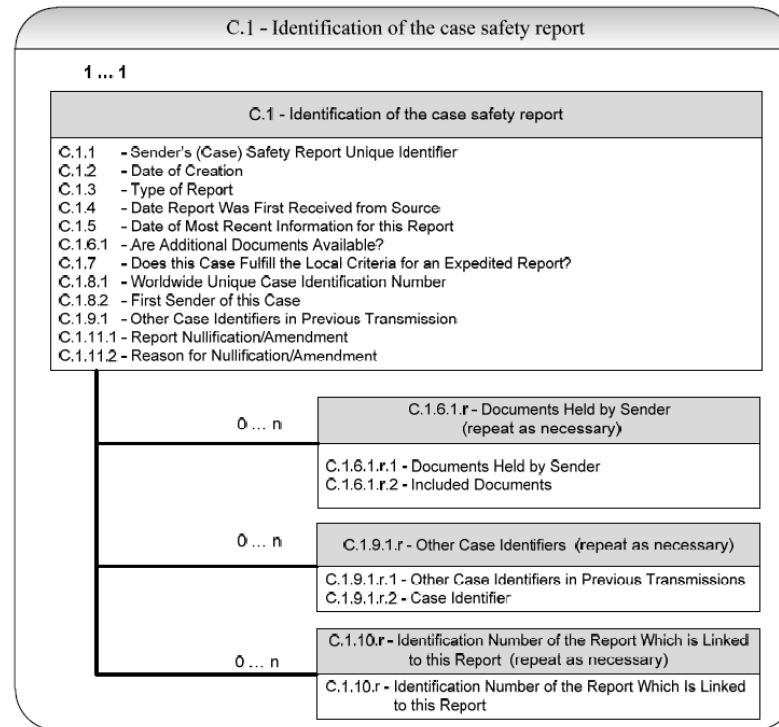
ICH E2B(R3)



# C.1 Identification of Case Safety Report

ICH E2B(R3)  
**C.1.** Identification  
of the case safety  
report

ICH E2B(R2)  
**A.1.** Identification  
of the case safety  
report






# C.1 Identification of Case Safety Report


E2B(R3)	Summary
C.1.2	"Date of Creation" is replacing the safety report version number and provides a timestamp with date and time to the second 'CCYYMMDDhhmmss[+/-ZZzz]'
C1.10.r	"Identification Number of the Report Which is Linked to this Report" The reason for the linkage between ICSRs should be provided in H.4 "Senders Comments"



# C.1 Identification of Case Safety Report

E2B(R3)	Summary
C.1.8.1	<p data-bbox="421 347 1454 390">"Worldwide Unique Case Identification Number"</p> <p data-bbox="421 452 1754 495">C.1.8.1 should always be populated and should never change</p>
<p data-bbox="104 573 262 616">C.1.8.2</p> 	<p data-bbox="421 573 993 616">"First Sender of this Case"</p> <p data-bbox="421 627 1725 721">This data element is used to identify the type of sender that created and transmitted the original electronic ICSR</p> <p data-bbox="421 732 1619 776">There are two values permitted: "Regulator" or "Other"</p> <p data-bbox="421 787 1512 831"><i>This is replacing A.1.10.1 and A.1.10.2 in E2B(R2)</i></p> <p data-bbox="421 885 1754 929">C.1.8.2 should always be populated and should never change</p>



# C.1 Identification of Case Safety Report

E2B(R3)	Summary
C.1.6.1.r.	“Documents held by the Sender” (repeatable)
C.1.6.1.r.1	Description of the documents held by the sender relevant to this ICSR (clinical record, hospital record, autopsy report, ECG strips, chest X-ray, photographs)
C.1.6.1.r.2	 “Included Documents” (attachments) allows to include the actual content if the sender chooses to send the document Media Type: Application/PDF, image/jpeg, application DICOM, text/plain





## C.1 Identification of Case Safety Report

E2B(R3)	Summary
C.1.11	Report Nullification/ <b>Amendment</b>
C1.11.1 	<b>"Report Nullification/Amendment"</b> Used to indicate that a previously transmitted ICSR needs to be amended without the receipt of new significant information (e.g. some items have been corrected) Value = "Amendment"
C1.11.2 	<b>"Reason for Nullification/Amendment"</b> Used to specify the reason for the amendment C.1.5 "Date of most recent information for this report" must remain unchanged for a nullification or amendment report if no new information on the case has been received from a primary source



# C.2.r Primary Source(s) of Information

(repeat as necessary)

ICH E2B(**R3**)  
**C.2.r** Primary  
Source(s) of  
information

ICH E2B(**R2**)  
**A.2.** Primary  
Source(s) of  
information

## C.2 - Primary Source(s) of Information


1 ... n

### C.2.r - Primary Source(s) (repeat as necessary)


C.2.r.1.1 - Reporter's Title  
C.2.r.1.2 - Reporter's Given Name  
C.2.r.1.3 - Reporter's Middle Name  
C.2.r.1.4 - Reporter's Family Name  
C.2.r.2.1 - Reporter's Organisation  
C.2.r.2.2 - Reporter's Department  
C.2.r.2.3 - Reporter's Street Address  
C.2.r.2.4 - Reporter's City  
C.2.r.2.5 - Reporter's State or Province  
C.2.r.2.6 - Reporter's Postcode  
C.2.r.2.7 - Reporter's Telephone  
C.2.r.3 - Reporter's Country Code  
C.2.r.4 - Qualification  
C.2.r.5 - Primary Source for Regulatory Purposes



## C.2.r Primary Source(s) of Information

E2B(R3)	Summary
C.2.r 	"Primary Source(s) of Information" Depending on local legal data privacy requirements, it is possible to <i>mask</i> some of the elements to identify the reporter (see also slide 89)
C.2.r.2.7	"Reporter's Telephone" Captures the reporter's phone number

## C.2.r Primary Source(s) of Information

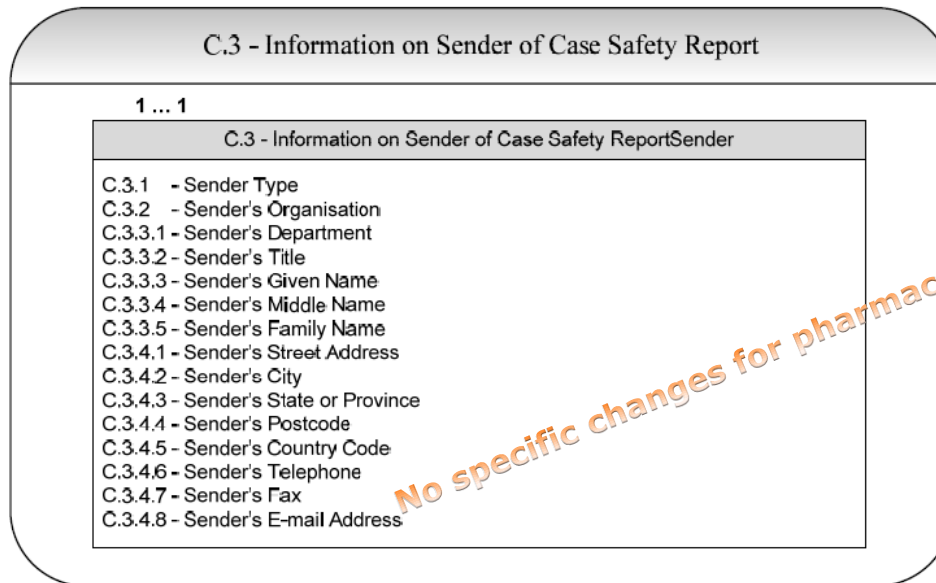
E2B(R3)	Summary
C.2.r.5 	<p>“Primary Source(s) for Regulatory Purposes”</p> <ul style="list-style-type: none"> <li>• This data element identifies, which primary source to use for regulatory purposes and in case of multiple resources, it identifies the source of the World Wide Case Unique Identification number</li> <li>• This source should identify where the case occurred</li> <li>• It is required that one C.2 “Primary Source of Information” is flagged for regulatory purposes</li> <li>• Value = Primary (can only be used once for one C.2 block)</li> </ul>



# C.3 Information on Sender of Case Safety Report

ICH E2B(R3)  
**C.3** Information  
on Sender

ICH E2B(R2)  
**A.3**.Information  
on Sender



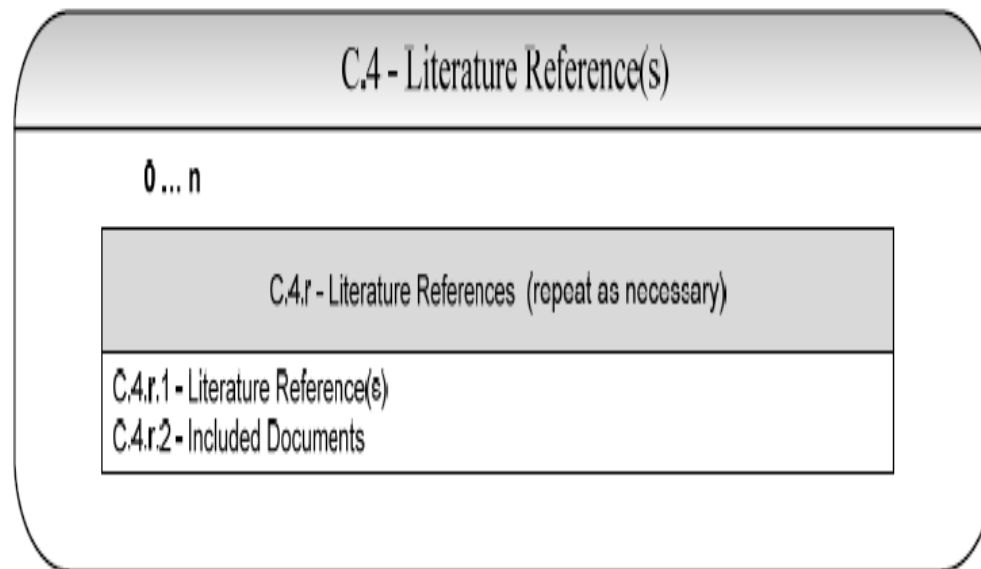


# C.4.r Literature Reference(s)


(repeat as necessary)

ICH E2B(**R3**)  
**C.4** Literature  
Reference(s)

ICH E2B(**R2**)  
**A.2.2.**Literature  
reference



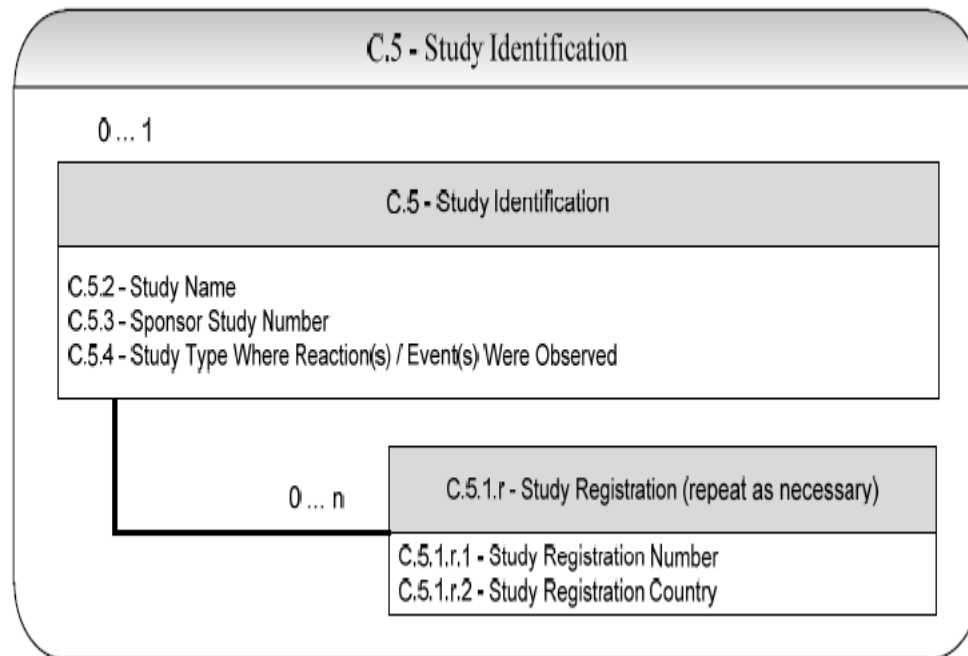
## C.4.r Literature Reference(s)

E2B(R3)	Summary
C.4.r.1	<p>“Literature References”</p> <ul style="list-style-type: none"> <li>•Used for literature articles that describe individual cases with literature references to be provided in Vancouver Style</li> </ul>
 <p>C.4.r.2</p>	<p>“Included Documents” (attachments)</p> <ul style="list-style-type: none"> <li>•This data element contains the actual content referenced in C.4.r.1, when the sender chooses to send a copy of the literature article</li> </ul> <p>Media Type: Application/PDF, image/jpeg, application DICOM, text/plain</p>

# C.5 Study Identification

ICH E2B(**R3**)  
**C.5** Study  
 Identification

ICH E2B(**R2**)  
**A.2.3**.Study  
 Identification







## C.5 Study Identification (1)

E2B(R3)	Summary
C.5.2	<p>“Study Name”</p> <p>As registered in jurisdiction where the ICSR is reported</p>
C.5.3	<p>“Sponsor Study Number”</p> <p>To be completed only if the sender is the study sponsor or has been informed of the study number by the sponsor</p>
C.5.4	<p>“Study Type Where Reaction(s)/Event(s) Were Observed”</p> <p>To be provided if C.1.3 is “Report from study”</p> <p>Value allowed: “Clinical trials”, “Individual patient use” (e.g. ‘compassionate use’ or ‘named patient basis’), “Other studies” (e.g. pharmacoepidemiology, pharmacoeconomics, intensive monitoring)</p>



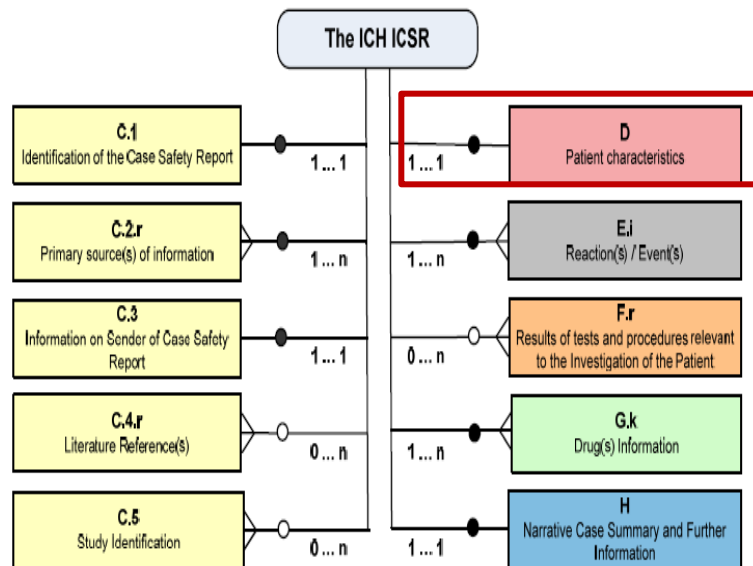
## C.5 Study Identification (2)

E2B(R3)	Summary
C.5.1.	“Study Registration” (repeat as necessary)
C.5.1.r.1	“Study Registration Number” - to be populated with the study registration number as assigned in the reporting region e.g. EudraCT number
C.5.1.r.2	“Study Registration Country” <ul style="list-style-type: none"><li>•Country code for the country that assigned the Study Registration Number presented in C.5.r.1</li><li>•Value = ISO Country Code and EU</li></ul>





# The ICH E2B(R3) ICSR – Section D



ICH E2B(R3)

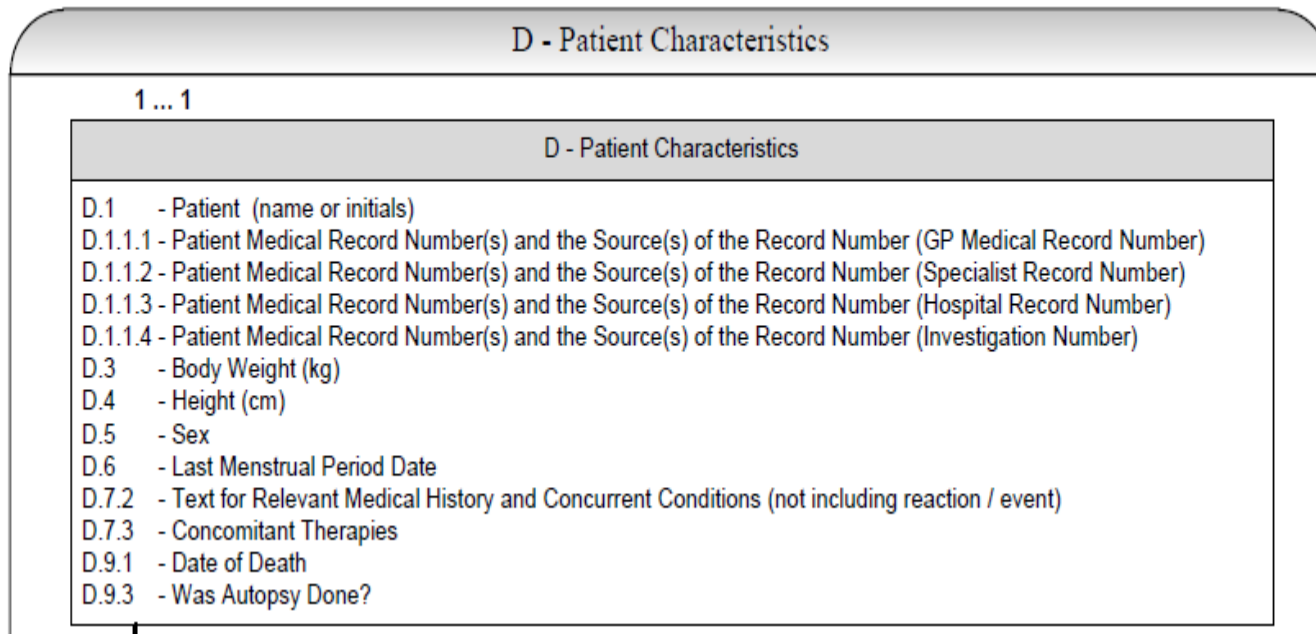
# D Patient Characteristics

ICH E2B(R3)

**D** Patient Characteristics

ICH E2B(R2)

**B.1** Patient Characteristics



## D Patient Characteristics

E2B(R3)	Summary
D.1.1.1	<p>“Patient Medical Record Number and Source(s) of the Record Number” (GP)</p> <ul style="list-style-type: none"><li>•New way to represent medical record number together with the source (E2B(R2) B.1.1.1a)</li></ul>
D.1.1.2	<p>“Patient Medical Record Number and Source(s) of the Record Number” (Specialist)</p> <ul style="list-style-type: none"><li>•New way to represent medical record number together with the source (E2B(R2) B.1.1.1b)</li></ul>



## D Patient Characteristics

E2B(R3)	Summary
D.1.1.3	<p>“Patient Medical Record Number and Source(s) of the Record Number” (Hospital)</p> <ul style="list-style-type: none"><li>•New way to represent medical record number together with the source (E2B(R2) B.1.1.1c)</li></ul>
D.1.1.4	<p>“Patient Medical Record Number and Source(s) of the Record Number” (Investigation)</p> <ul style="list-style-type: none"><li>•New way to represent medical record number together with the source (E2B(R2) B.1.1.1d)</li></ul>

## D Patient Characteristics

E2B(R3)	Summary
D.2.3 	<p>“Patient Age Group (as per reporter)”</p> <ul style="list-style-type: none"> <li>•A new age group has been added: Value = “Foetus”</li> </ul>
D.7.3 	<p>“Concomitant Therapies”</p> <p>This data element indicates at the time of the reaction that there were concomitant therapies such radiotherapy, drug class, dietary supplements or other products not otherwise describable in Section G: Value = True</p> <p>Details should be provided in narrative section H.1</p>



# D Patient Characteristics (continued)

ICH E2B(R3)  
**D** Patient  
 Characteristics

ICH E2B(R2)  
**B.1** Patient  
 Characteristics

D.9.1 - Date of Death D.9.3 - Was Autopsy Done?	
	D.2 - Age Information
0 ... 1	D.2.1 - Date of Birth D.2.2a - Age at Time of Onset of Reaction / Event (number) D.2.2b - Age at Time of Onset of Reaction / Event (unit) D.2.2.1a - Gestation Period When Reaction / Event Was Observed in the Foetus (number) D.2.2.1b - Gestation Period When Reaction / Event Was Observed in the Foetus (unit) D.2.3 - Patient Age Group (as per reporter)
	D.7.1.r - Structured Information on Relevant Medical History (repeat as necessary)
0 ... n	D.7.1.r.1a - MedDRA Version for Medical History D.7.1.r.1b - Medical history (disease / surgical procedure / etc.) (MedDRA code) D.7.1.r.2 - Start Date D.7.1.r.3 - Continuing D.7.1.r.4 - End Date D.7.1.r.5 - Comments D.7.1.r.6 - Family History



## D Patient Characteristics

E2B(R3)	Summary
D.7.1.r	<b>“Structured Information on Relevant Medical History” (repeat as necessary)</b>
D.7.1.r.6	<p>“Family History”</p> <ul style="list-style-type: none"> <li>• Use this data element when the medical information provided for D.7.1.r is reported also to be present in another family member (e.g. hereditary diseases): Value = True</li> <li>• This data element <u>is not used</u> when the same medical concept is already provided in D.10.7 “Relevant Medical History and Concurrent Conditions of Parent”</li> <li>• Detailed information should be provided in narrative section H.1.</li> </ul>

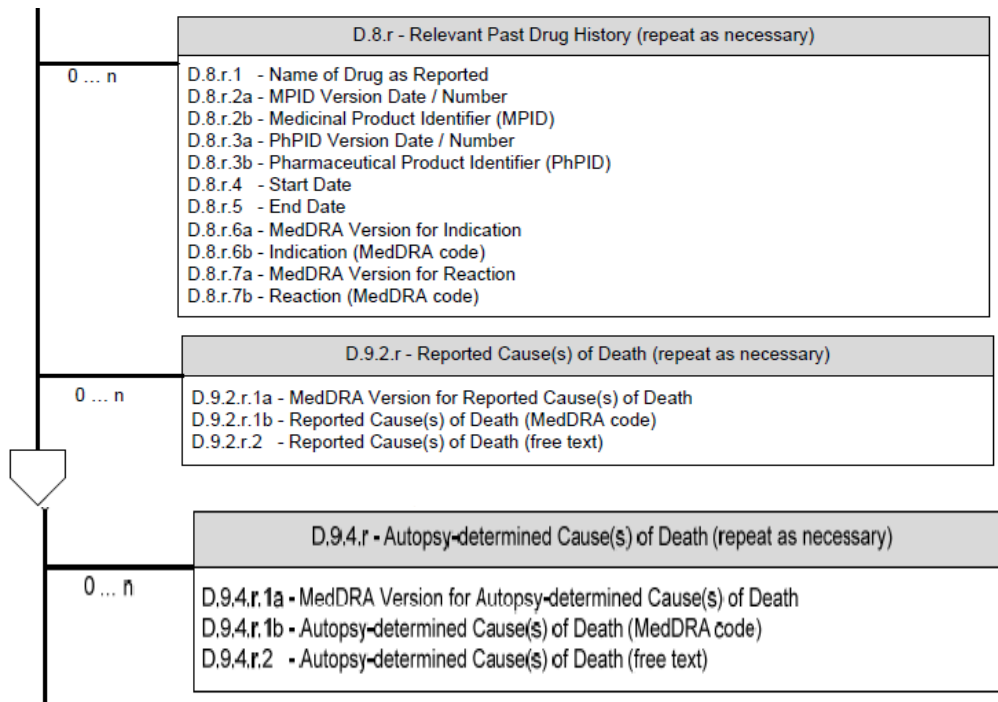





# D Patient Characteristics (continued)

ICH E2B(R3)  
**D** Patient  
Characteristics


ICH E2B(R2)  
**B.1** Patient  
Characteristics



## D Patient Characteristics

E2B(R3)	Summary
D.8.r.2a	<p>“MPID Version Date/Number” (repeat as necessary)</p> <ul style="list-style-type: none"> <li>•This data element provides the version number for D.8.r.2b</li> </ul>
 <p>D.8.r.2b</p>	<p>“Medicinal Product Identifier” (MPID)</p> <ul style="list-style-type: none"> <li>•This data element is used to capture the most specific identifier for the medicinal product</li> </ul> <p>NOTE: This will become applicable when the ISO IDMP related identifiers become available</p> <p>Meanwhile capture the information in D.8.r.1 “Name of Drug as Reported”</p>

## D Patient Characteristics

E2B(R3)	Summary
D.8.r.3a	<p>“PhPID Version Date/Number” (repeat as necessary)</p> <ul style="list-style-type: none"> <li>•This data element provides the version number for D.8.r.3b</li> </ul>
	<p>“Pharmaceutical Product Product Identifier” (PhPID)</p> <ul style="list-style-type: none"> <li>•This data element is used to capture the most specific identifier for the pharmaceutical product</li> </ul> <p>NOTE: This will become applicable when the ISO IDMP related identifiers become available</p> <p>Meanwhile capture the information in D.8.r.1 “Name of Drug as Reported”</p>



## D Patient Characteristics

E2B(R3)	Summary
D.9.2.r	“Reported Cause(s) of Death” (repeat as necessary)
D.9.2.r.1a	- “MedDRA Version for Reported Cause(s) of Death”
D.9.2.r.1b	- “Reported Cause(s) of Death (MedDRA code)”
D.9.2.r.2	“Reported Cause of Death” (free text) •This data element captures the original reporter’s words and or short phrases used to describe the cause of death



## D Patient Characteristics

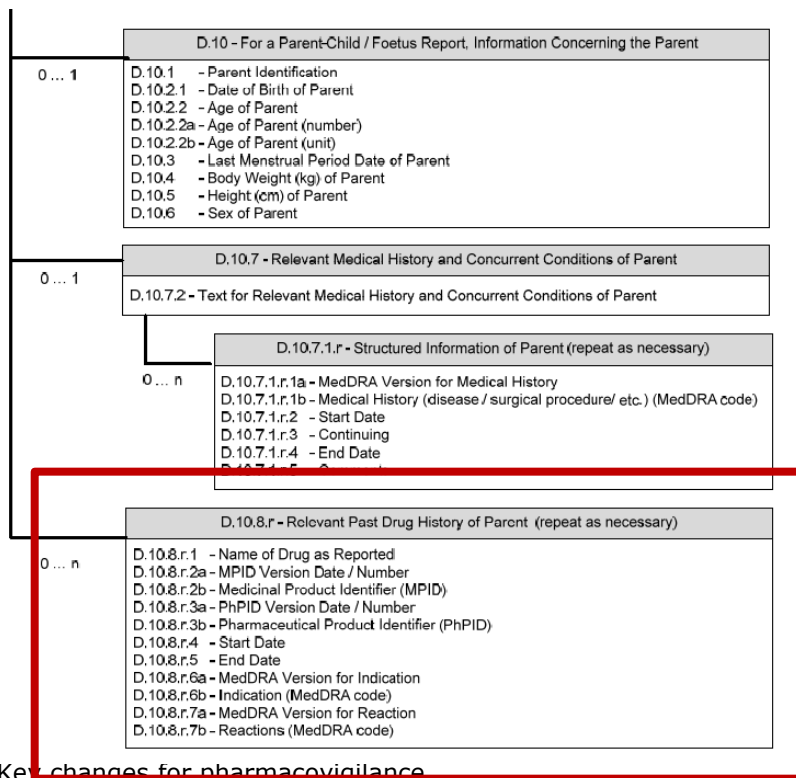
E2B(R3)	Summary
D.9.4.r.	"Autopsy determined Cause(s) of Death" (repeat as necessary)
D.9.4.r.1a D.9.4.r.1b	<ul style="list-style-type: none"><li>• MedDRA Version for Autopsy-determined Cause(s) of Death</li><li>• Autopsy-determined Cause(s) of Death (MedDRA code)</li></ul>
D.9.4.r.2	"Autopsy determined Cause(s) of Death" (free text) <ul style="list-style-type: none"><li>• This data element captures the original reporter's words and or short phrases used to describe the autopsy determined cause of death.</li></ul>



# D Patient Characteristics (continued)

ICH E2B(R3)  
D Patient  
Characteristics

ICH E2B(R2)  
B.1 Patient  
Characteristics



## D Patient Characteristics

E2B(R3)	Summary
D.10.8r.2a	<p>“MPID Version Date/Number” (repeat as necessary)</p> <ul style="list-style-type: none"> <li>•This data element provides the version number for D.10.8.r.2b</li> </ul>
D.10.8.r.2b	<p>“Medicinal Product Identifier” (MPID)</p> <ul style="list-style-type: none"> <li>•This data element is used to capture the most specific identifier for the medicinal product</li> </ul> <p>NOTE: This will become applicable with the ISO IDMP related identifiers become available</p> <p>Meanwhile capture the information in D.10.8.r.1 “Name of Drug as Reported”</p>





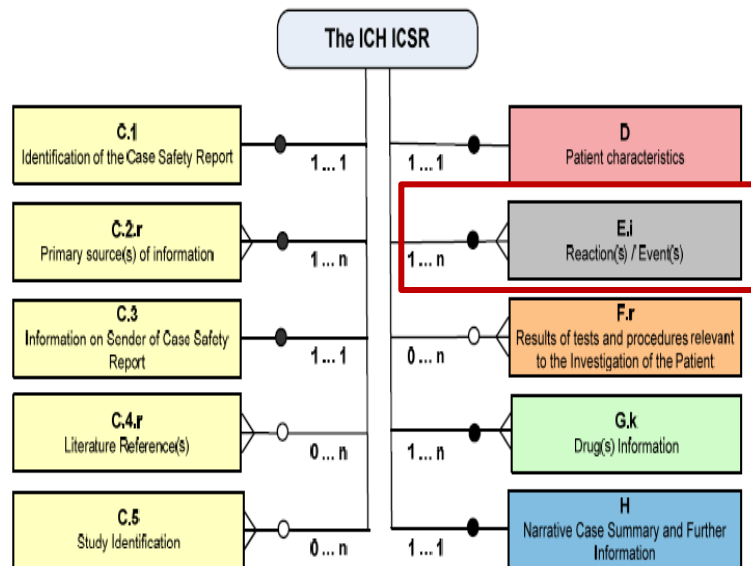
## D Patient Characteristics

E2B(R3)	Summary
D.10.8r.3a	<p>“PhPID Version Date/Number” (repeat as necessary)</p> <ul style="list-style-type: none"> <li>•This data element provides the version number for D.10.8.r.3b</li> </ul>
D.10.8.r.3b	<p>“Pharmaceutical Product Product Identifier” (PhPID)</p> <ul style="list-style-type: none"> <li>•This data element is used to capture the most specific identifier for the pharmaceutical product</li> </ul> <p>NOTE: This will become applicable when the ISO IDMP related identifiers become available</p> <p>Meanwhile capture the information in D.10.8.r.1 “Name of Drug as Reported”</p>





# The ICH E2B(R3) ICSR – Section E



## ICH E2B(R3)



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

(Repeat as necessary)

ICH E2B(R3)

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

ICH E2B(R2)

**B.2** Reaction(s)/  
Event(s)


E - Reaction(s)/Event(s)

1 ... n


E.i - Reaction(s)/Event(s) (repeat as necessary)

E.i.1.1a - Reaction / Event as Reported by the Primary Source in Native Language  
E.i.1.1b - Reaction / Event as Reported by the Primary Source Language  
E.i.1.2 - Reaction / Event as Reported by the Primary Source for Translation  
E.i.2.1a - MedDRA Version for Reaction / Event  
E.i.2.1b - Reaction / Event (MedDRA code)  
E.i.3.1 - Term Highlighted by the Reporter  
E.i.3.2 - Seriousness Criteria at Event Level  
E.i.3.2a - Results in Death  
E.i.3.2b - Life Threatening  
E.i.3.2c - Caused / Prolonged Hospitalisation  
E.i.3.2d - Disabling / Incapacitating  
E.i.3.2e - Congenital Anomaly / Birth Defect  
E.i.3.2f - Other Medically Important Condition  
E.i.4 - Date of Start of Reaction / Event  
E.i.5 - Date of End of Reaction / Event  
E.i.6a - Duration of Reaction / Event  
E.i.6b - Duration of Reaction / Event (duration unit)  
E.i.7 - Outcome of Reaction / Event at the Time of Last Observation  
E.i.8 - Medical Confirmation by Healthcare Professional  
E.i.9 - Identification of the Country Where the Reaction / Event Occurred

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


E2B(R3)	Summary
E.i.3.2 	<p data-bbox="421 353 1213 394">“Seriousness Criteria at Event Level”</p> <p data-bbox="421 421 1837 503">NOTE: The seriousness criteria are provided at reaction/event level and no longer at case level as specified in ICH E2B(R2)</p> <ul data-bbox="421 528 1837 972" style="list-style-type: none"> <li>• More than one seriousness criteria can be chosen</li> <li>• If the reaction is non-serious, the seriousness criteria data elements E.i.3.2.a up to E.i.3.2.f should be left blank</li> <li>• In cases of foetal demise such as miscarriage, (where the ICSR should be prepared only for the parent being the patient), the seriousness criterion is <i>‘Other medically important condition’</i>.</li> <li>• Depending if the parent (being the patient) experienced complications, the seriousness criterion could also include <i>‘life-threatening’</i> and/or <i>‘hospitalisation’</i>.</li> </ul>

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

E2B(R3)	Summary
E.i.8 	<p>“Medical Confirmation by Healthcare Professional”</p> <p>NOTE: medical confirmation is now captured at reaction level            In E2B(R2) medical confirmation was captured at case level (A.1.14)</p> <p>If an event is reported by a non healthcare professional (e.g. lawyers, consumers), this data element indicates whether the <i>occurrence</i> of the event was subsequently confirmed by a healthcare professional</p>

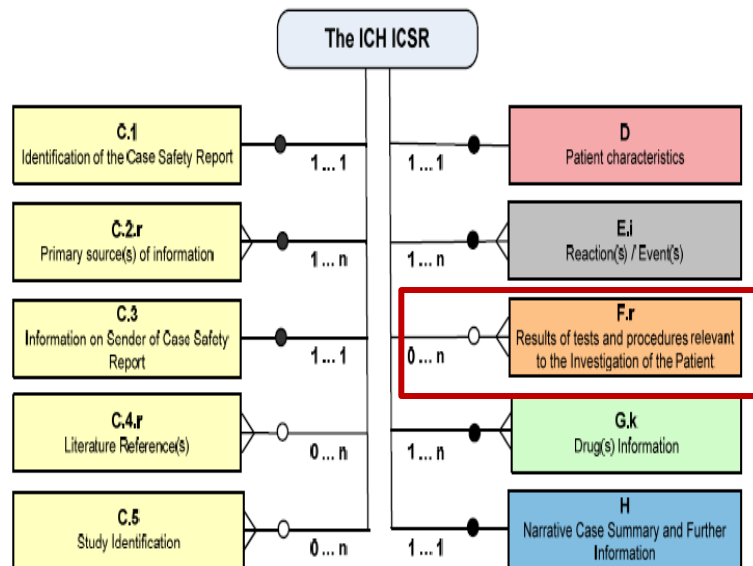


## E.i Reaction(s)/Event(s)

E2B(R3)	Summary
<p data-bbox="104 353 214 399">E.i.9</p> 	<p data-bbox="421 353 1630 445">"Identification of the Country Where the Reaction/Event Occurred"</p> <p data-bbox="421 473 1804 568">NOTE: the country where the reaction occurred is now captured at reaction level (see examples in the ICH ICSR IG)</p> <p data-bbox="421 594 1711 685">In E2B(R2) the occurrence country is captured at case level (A.1.2)</p>



# The ICH E2B(R3) ICSR – Section F



## ICH E2B(R3)



# F Results of Tests and Procedures

(Repeat as necessary)

ICH E2B(R3)  
**F** Results of  
Tests &  
Procedures

ICH E2B(R2)  
**B.3** Results of  
Tests &  
Procedures

## F - Results of Tests and Procedures Relevant to the Investigation of the Patient

0 ... n

F.r - Results of Tests and Procedures Relevant to the Investigation of the Patient  
(repeat as necessary)

F.r.1 - Test Date  
F.r.2.1 - Test Name (free text)  
F.r.2.2a - MedDRA Version for Test Name  
F.r.2.2b - Test Name (MedDRA code)  
F.r.3.1 - Test Result (code)  
F.r.3.2 - Test Result (value/qualifier)  
F.r.3.3 - Test Result (unit)  
F.r.3.4 - Result Unstructured Data (free text)  
F.r.4 - Normal Low Value  
F.r.5 - Normal High Value  
F.r.6 - Comments (free text)  
F.r.7 - More Information Available



## F Results of Tests and Procedures

E2B(R3)	Summary
F.r.2.2b	<p>“Test Name” (MedDRA code)</p> <ul style="list-style-type: none"><li>• A dedicated data element to code the test name in MedDRA is now available</li></ul>
F.r.3.1	<p>Test Result (code)</p> <ul style="list-style-type: none"><li>• This is a new data element to provide a descriptive code for the test result.</li><li>• Values allowed are:<ul style="list-style-type: none"><li>– Positive</li><li>– Negative</li><li>– Borderline</li><li>– Inconclusive</li></ul></li></ul>

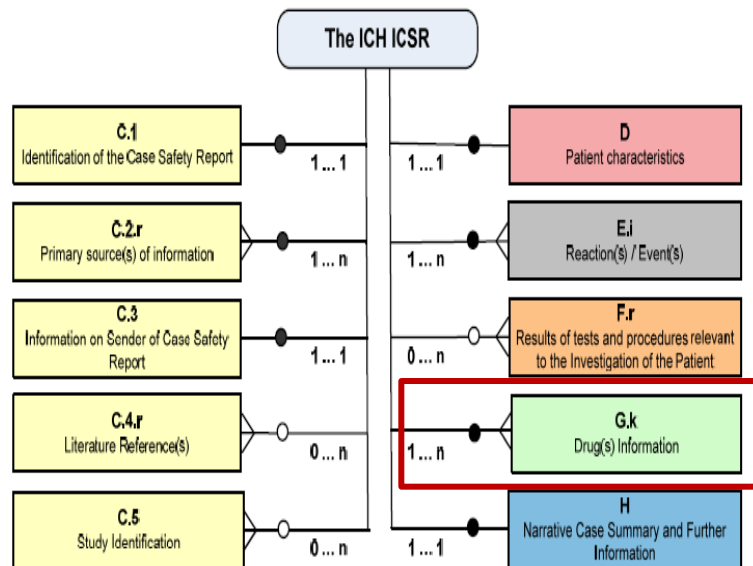




## F Results of Tests and Procedures

E2B(R3)	Summary
F.r.3.4	<p>“Result Unstructured Data” (free text)</p> <ul style="list-style-type: none"><li>•This data element can be used when ‘results’ and ‘units’ cannot be split often because a UCUM code is not available for the test unit e.g. for the test ‘protein excretion’ the result could be recorded here as 125 mg/24 hours</li></ul>
F.r.6	<p>“Comments” (free text)</p> <ul style="list-style-type: none"><li>•This data element captures any relevant comments made by the reporter about the test results</li></ul>
F.r.7	<p>“More Information Available”</p> <ul style="list-style-type: none"><li>•This allows to indicate if more info is held by the sender about the test results – Values: True or False</li></ul>

# The ICH E2B(R3) ICSR – Section G



## ICH E2B(R3)



# G Drug(s) Information

(Repeat as necessary)


ICH E2B(R3)  
**G** Drugs  
Information

ICH E2B(R2)  
**B.4** Drug(s)  
Information

G - Drug(s) Information	
1 ... n	
G.k - Drug(s) Information	
G.k.1	- Characterisation of Drug Role
G.k.2.1.1a	- MPID Version Date / Number
G.k.2.1.1b	- Medicinal Product Identifier (MPID)
G.k.2.1.2a	- PhPID Version Date / Number
G.k.2.1.2b	- Pharmaceutical Product Identifier (PhPID)
G.k.2.2	- Medicinal Product Name as Reported by the Primary Source
G.k.2.4	- Identification of the Country Where the Drug Was Obtained
G.k.2.5	- Investigational Product Blinded
G.k.3.1	- Authorisation / Application Number
G.k.3.2	- Country of Authorisation / Application
G.k.3.3	- Name of Holder / Applicant
G.k.5a	- Cumulative Dose to First Reaction (number)
G.k.5b	- Cumulative Dose to First Reaction (unit)
G.k.6a	- Gestation Period at Time of Exposure (number)
G.k.6b	- Gestation Period at Time of Exposure (unit)
G.k.8	- Action(s) Taken with Drug
G.k.11	- Additional Information on Drug (free text)
G.k.2.3.r - Substance/Specified Substance Identifier and Strength (repeat as necessary)	
0 ... n	G.k.2.3.r.1 - Substance/ Specified Substance Name
	G.k.2.3.r.2a - Substance/Specified Substance TermID Version Date / Number
	G.k.2.3.r.2b - Substance/Specified Substance TermID
	G.k.2.3.r.3 - Strength (number)
	G.k.2.3.r.4 - Strength (unit)




# G Drug(s) Information

E2B(R3)	Summary
<p data-bbox="86 317 202 358">G.k.1</p> 	<p data-bbox="407 317 1000 358">"Characterization of Drug Role"</p> <ul data-bbox="407 380 1831 827" style="list-style-type: none"><li data-bbox="407 380 1831 511">• This data element should describe the characterisation of the drug role as provided by the primary reporter, or, if this information is missing, by the sender</li><li data-bbox="407 532 1605 573">• All spontaneous reports should have at least <b>one</b> suspect drug</li><li data-bbox="407 595 1649 678">• For suspected interactions, 'interacting' should be selected for all suspected interacting drugs</li><li data-bbox="407 699 1818 827">• The type of interaction should be captured using the appropriate MedDRA LLT in Section E.i, e.g. drug interaction, food interaction, alcohol interaction etc</li></ul>




# G Drug(s) Information

E2B(R3)	Summary
G.k.1 	<p>“Characterization of Drug Role”</p> <ul style="list-style-type: none"><li>•There is a new value: ‘<i>Drug not administered</i>’ to be used for:<ol style="list-style-type: none"><li>i) <b>Clinical trials</b> where an adverse event occurred after the informed consent was signed but prior to the administration of the study drug (such as during the screening period or washout procedure); the adverse event should in general be reported as per the trial procedure. In that case only sections G.k.1, Gk.2 and G.k.8 are to be completed for section G</li><li>ii) <b>Medication error</b> if the patient did not actually receive the prescribed drug (MedDRA LLT code to be captured in Section E.i)</li></ol></li><li>•The information on the suspect cause of the event should be provided in the narrative H.1</li><li>•Comments can be provided by the reporter in H.2 and by the sender in H.4</li></ul>




# G Drug(s) Information

E2B(R3)	Summary
G.k.2 	<p data-bbox="407 317 823 358">“Drug Identification”</p> <ul data-bbox="407 383 1823 907" style="list-style-type: none"><li data-bbox="407 383 1721 470">• <i>Medicinal product names or active ingredient names</i> should be provided in G.k.2.2 <i>as they were reported by the primary source</i></li><li data-bbox="407 481 1823 568">• To standardise the identification of medicinal products, the ISO IDMP standard identifiers have been incorporated in the ICSR standard</li><li data-bbox="407 579 1765 710">• The most precise structured information should be provided when identifying medicinal products and redundant information does not have to be repeated</li><li data-bbox="407 721 1775 809">• The identifiers resulting of the ISO IDMP standards should be used once available</li><li data-bbox="407 820 1707 907">• <b>Until this time, G.k.2.2 “Medicinal Product as Reported by the Primary source” should be used</b></li></ul>



# G Drug(s) Information

E2B(R3)	Summary
<p data-bbox="86 398 208 442">G.k.2</p> 	<p data-bbox="407 398 852 442">“Drug Identification”</p> <ul data-bbox="407 469 1818 819" style="list-style-type: none"><li data-bbox="407 469 1818 616">• In case of <i>investigational drugs</i>, provide as much information as known in G.k.2.2 and G.k.2.3.r.1 even if only an abstract code might be known</li><li data-bbox="407 671 1818 819">• If more than one substance name is specified for a drug product, each of them should be included in this section by repeating the item G.k.2.3 as necessary</li></ul>




# G Drug(s) Information

E2B(R3)	Summary
G.k.2.1	<p data-bbox="388 380 1765 467">“Medicinal Product Unique Identifier/Pharmaceutical Product Unique Identifier”</p> <p data-bbox="388 494 1740 582">This section provides the necessary data elements for the relevant ISO IDMP identifiers as follows:</p> <ul data-bbox="388 592 1479 778" style="list-style-type: none"><li data-bbox="388 592 1219 631">•G.k.2.1.1a MPID Version Date / Number</li><li data-bbox="388 642 1340 680">•G.k.2.1.1b Medicinal Product Identifier (MPID)</li><li data-bbox="388 691 1209 729">•G.k.2.1.2a PhPID Version Date/Number</li><li data-bbox="388 740 1479 778">•G.k.2.1.2b Pharmaceutical Product Identifier (PhPID)</li></ul> <p data-bbox="388 833 1290 876">They should be used once they are available</p>



# G Drug(s) Information

E2B(R3)	Summary
G.k.2.2.EU.9.r.1 	<p>“Device Component name”</p> <ul style="list-style-type: none"><li>•For suspected adverse reactions relating to advanced therapies or involving medicinal products that have device component(s)</li><li>•In the EU this data element can be used to specify the name of the device where applicable as text</li><li>•Not allowed if G.k.2.1.1 is provided</li></ul>
G.k.2.2.EU.9.r.2	<p>“Device Component TermID version Date/Number”</p> <ul style="list-style-type: none"><li>•This data element captures the version date/number of the Device component TermID. If Device component TermID is known the TermID version must also be provided</li><li>•Required if G.k.2.2.EU.9.r.3 is provided</li></ul>




## G Drug(s) Information

E2B(R3)	Summary
G.k.2.2.EU.9.r.3	<p data-bbox="465 336 1045 376">"Device Component TermID"</p> <ul data-bbox="465 401 1692 507" style="list-style-type: none"><li data-bbox="465 401 1692 442">•The Device component TermID should be provided if known</li><li data-bbox="465 467 1271 507">•Required if G.k.2.2.EU.9.r.2 is provided</li></ul>
G.k.2.2.EU.9.r.4	<p data-bbox="465 620 1016 660">"Device Batch Lot number"</p> <ul data-bbox="465 685 1570 726" style="list-style-type: none"><li data-bbox="465 685 1570 726">•The batch lot number if applicable to a unique device.</li></ul>



# G Drug(s) Information

E2B(R3)	Summary
G.k.2.2.EU.1 	<p data-bbox="465 336 716 372">"Name Part"</p> <ul data-bbox="465 401 1773 809" style="list-style-type: none"><li data-bbox="465 401 1773 489">•Medication Name Parts are a means of specifying the name of a product as separated components</li><li data-bbox="465 514 1773 653">•This allows for input name strings to be automatically matched to possible medicinal products, rather than through manual recoding activities</li><li data-bbox="465 678 1773 809">•The product name parts should be used if the MPID cannot be selected and if the medicinal product has been reported as a brand/invented name</li></ul>



## G Drug(s) Information – “Name part”

Concept Code	Concept Name	Description	Example
<b>CON</b>	container name	container if present in the medicinal product name	<i>Totalflu suspension for injection in pre-filled syringe Influenza vaccine (surface antigen, inactivated, prepared in cell culture) (2009/2010 season)</i> <b>pre-filled syringe</b>
<b>DEV</b>	device name	name for device if present in the medicinal product name	<i>Fastaction InjectPen 100 IU/ml Solution for injection: <b>InjectPen</b></i>
<b>FRM</b>	Form name	pharmaceutical form/ if present in the medicinal product name	<i>For Discopan 50 mg soft capsules: <b>Soft Capsules</b></i> <i>For Totalflu suspension for injection in pre-filled syringe Influenza vaccine (surface antigen, inactivated, prepared in cell culture) (2009/2010 season): <b>suspension for injection</b></i>



# G Drug(s) Information – “Name part”

Concept Code	Concept Name	Description	Example
<b>INV</b>	invented name	product name without the trademark or the name of the marketing authorization holder or any other descriptor reflected in the product name and, if appropriate, whether it is intended e.g. for babies, children or adults	<b>Discopan Totalflu Fuldimil</b>
<b>SCI</b>	scientific name	product common or scientific name without the trademark or the name of the marketing authorization holder or any other descriptor reflected in the product name.	Discopan: <b>N/A</b> Totalflu: <b>Influenza vaccine (surface antigen, inactivated, prepared in cell culture) (2009/2010 season)</b> For Fuldimil: <b>N/A</b>



## G Drug(s) Information – “Name part”

Concept Code	Concept Name	Description	Example
<b>STR</b>	strength name	strength if present in the medicinal product name	<i>Discopan 50 mg soft capsules: <b>50mg</b> Fuldimil 25mg-Filmtabletten: <b>25 mg</b> Totalflu suspension for injection in pre-filled syringe Influenza vaccine (surface antigen, inactivated, prepared in cell culture) (2009/2010 season): `</i>
<b>TMK</b>	trademark name	trademark/company element if present in the medicinal product name	<i>Insulin Human Syncopharm Comb 15: <b>Syncopharm</b></i>
<b>USE</b>	intended use name	intended use if present in the medicinal product name without trademark or name of MAH or any other descriptor reflected in the product name	<i>Multivax PAEDIATRIC: <b>Paediatric</b> Multivax ADULT: <b>Adult</b></i>




# G Drug(s) Information

E2B(R3)	Summary
G.k.2.2.3.r	<p>“Substance / Specified Substance Identifier and Strength” (repeat as necessary)</p> <ul style="list-style-type: none"><li>• This section provides the necessary data elements for the relevant ISO IDMP identifiers as follows (to be used once available):<ul style="list-style-type: none"><li>– G.k.2.3.r.1 Substance / Specified Substance Name</li><li>– G.k.2.3.r.2a Substance/Specified Substance TermID Version Date/Number</li><li>– G.k.2.3.r.2b Substance/Specified Substance TermID</li></ul></li><li>• Strength has been added within the Substance section<ul style="list-style-type: none"><li>– G.k.2.3.r.3a Strength (number)</li><li>– G.k.2.3.r.3b Strength (unit)</li></ul></li></ul>





# G Drug(s) Information

E2B(R3)	Summary
<p data-bbox="86 336 251 376">G.k.2.5</p> 	<p data-bbox="401 336 1072 376">“Investigational Product Blinded”</p> <ul data-bbox="401 401 1825 955" style="list-style-type: none"><li data-bbox="401 401 1342 442">•Is applicable only to ICSRs from clinical trials</li><li data-bbox="401 447 1825 589">•Whilst according to ICH E2A case safety reports with blinded therapy should not be reported, there may be instances where it is important to exchange a blinded case; proceed as follows:<ul data-bbox="440 595 1825 955" style="list-style-type: none"><li data-bbox="440 595 1758 682">– Until the investigational product is un-blinded, the status ‘blinded’ should be indicated: Value ‘TRUE’</li><li data-bbox="440 687 1690 769">– Section G.k.2 Drug Identification should be populated with the characteristics of the investigational product</li><li data-bbox="440 775 1825 862">– If more than one investigational product is potentially suspect, each suspect product should be represented in separate G.k blocks</li><li data-bbox="440 868 1700 955">– If appropriate, after unblinding, ‘placebo’ should be reported in G.k.2.3.r as a suspect drug</li></ul></li></ul>



# G Drug(s) Information (continued)

(Repeat as necessary)

ICH E2B(R3)  
**G** Drugs  
Information

ICH E2B(R2)  
**B.4** Drug(s)  
Information

G.k.4.r - Dosage Information (repeat as necessary)	
0 ... n	<p>G.k.4.r.1a - Dose (number)  G.k.4.r.1b - Dose (unit)  G.k.4.r.2 - Number of Units in the Interval  G.k.4.r.3 - Definition of the Time Interval Unit  C.k.4.r.4 - Date and Time of Start of Drug  G.k.4.r.5 - Date and Time of Last Administration  G.k.4.r.6a - Duration of Drug Administration (number)  G.k.4.r.6b - Duration of Drug Administration (unit)  G.k.4.r.7 - Batch / Lot Number  G.k.4.r.8 - Dosage Text  G.k.4.r.9.1 - Pharmaceutical Dose Form (free text)  G.k.4.r.9.2a - Pharmaceutical Dose Form TermID Version Date / Number  G.k.4.r.9.2b - Pharmaceutical Dose Form TermID  G.k.4.r.10.1 - Route of Administration (free text)  G.k.4.r.10.2a - Route of Administration TermID Version Date / Number  G.k.4.r.10.2b - Route of Administration TermID  G.k.4.r.11.1 - Parent Route of Administration (free text)  G.k.4.r.11.2a - Parent Route of Administration TermID Version Date / Number  G.k.4.r.11.2b - Parent Route of Administration TermID</p>



# G Drug(s) Information (continued)

E2B(R3)

Summary

G.k.4.r



“Dosage and Relevant Information” (repeat as necessary)


- Data elements G.k.4.r.1 through G.k.4.r.3 should be used to provide dosage information
- The way to provide dosage information is changing

Field	R2 value	R3 value
G.k.4.r.1a	10	10
G.k.4.r.1b	mg	mg
B.4.k.5.3	3	<i>element removed</i>
G.k.4.r.2	1	8
G.k.4.r.3	day	hours

*See Appendix I (G) of the ICH ICSR IG for further information*




## G Drug(s) Information (continued)


E2B(R3)	Summary
<p data-bbox="85 380 272 419">G.k.4.r.7</p> 	<p data-bbox="401 380 813 419">"Batch/Lot Number"</p> <ul data-bbox="401 445 1804 711" style="list-style-type: none"><li data-bbox="401 445 1804 484">•Several batch numbers can now be repeated within the drug section</li><li data-bbox="401 511 1804 598">•Expiration date and other related information should be reflected in G.k.11 'Additional Information on Drug' (free text)</li><li data-bbox="401 624 1804 711">•Batch/lot number for biologics – value is mandatory and should be completed with the value or an appropriate nullflavor</li></ul>



## G Drug(s) Information (continued)

E2B(R3)	Summary
<p data-bbox="85 365 272 405">G.k.4.r.9</p> 	<p data-bbox="403 365 981 405">"Pharmaceutical Dose Form"</p> <ul data-bbox="403 432 1765 805" style="list-style-type: none"><li data-bbox="403 432 1765 521">• This section provides the data elements for the relevant ISO IDMP identifiers as follows (to be used once available):<ul data-bbox="504 530 1682 663" style="list-style-type: none"><li data-bbox="504 530 1682 620">– G.k.4.r.9.2a Pharmaceutical Dose Form TermID Version Date/Number</li><li data-bbox="504 628 1508 663">– G.k.4.r.9.2b Pharmaceutical Dose Form TermID</li></ul></li><li data-bbox="403 725 1765 805">• If the Pharmaceutical Dose Form TermID is not available, free text in G.k.4.r.9.1 should be used</li></ul>

## G Drug(s) Information (continued)

E2B(R3)	Summary
G.k.4.r.10.  	<p>“Routes of Administration”</p> <ul style="list-style-type: none"> <li>• This section provides the data elements for the relevant ISO IDMP identifiers as follows (to be used once available):               <ul style="list-style-type: none"> <li>– G.k.4.r.10.2a Route of Administration TermID Version Date / Number</li> <li>– G.k.4.r.10.2b Route of Administration TermID</li> </ul> </li> <li>• Until ISO IDMP identifiers are available, use the existing code list attached in Appendix I of the ICH ICSR IG</li> <li>• For a parent-child/foetus report, this data element indicates the route of administration for the child/foetus (patient); this is usually an indirect exposure, such as transmammary, but can include more usual routes of administration for other drugs given to the child</li> <li>• Parent route of administration should be provided in G.k.4.r.11.</li> </ul>



## G Drug(s) Information (continued)

E2B(R3)	Summary
G.k.4.r.11	<p data-bbox="401 380 1721 470">“Parent Route of Administration” (in case of a parent child/foetus report)</p> <ul data-bbox="401 525 1290 565" style="list-style-type: none"><li data-bbox="401 525 1290 565">•The same principles apply as for G.k.4.r.10</li></ul>

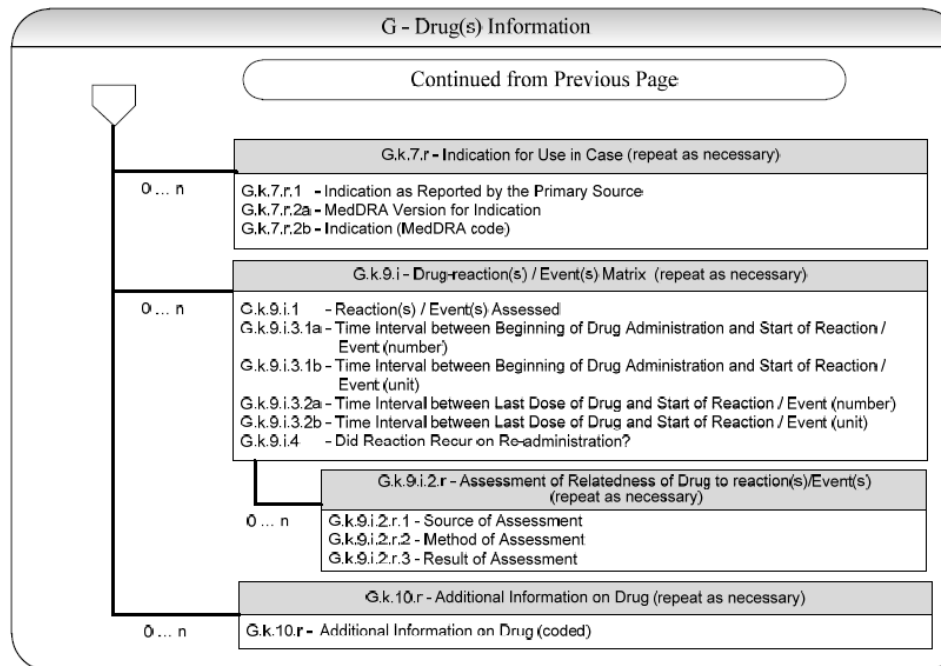


# G Drug(s) Information (continued)

(Repeat as necessary)


ICH E2B(R3)  
**G** Drugs  
Information

ICH E2B(R2)  
**B.4** Drug(s)  
Information





# G Drug(s) Information (continued)

E2B(R3)	Summary
G.k.7.r  	<p>“Indication for Use in Case” (repeat as necessary)</p> <ul style="list-style-type: none"> <li>• Indication for use can now be repeated within the drug section without the need to repeat the entire drug section</li> <li>• The following data elements are available to capture the indication as reported as well as the MedDRA version and the MedDRA code               <ul style="list-style-type: none"> <li>– G.k.7.r.1 Indication as Reported by the Primary Source (free text)</li> <li>– G.k.7.r.2a MedDRA Version for Indication</li> <li>– G.k.7.r.2b Indication (MedDRA code)</li> </ul> </li> </ul>

# G Drug(s) Information (continued)

E2B(R3)

Summary

G.k.9.i



“G.k.9.i Drug-reaction(s)/Event(s) Matrix” (repeat as necessary)


- This section provides the means to transmit the degree of suspected relatedness of the drug (k) with a suspect role to each reaction(s)/event(s) (i) in Section E
- The repeating items (r) are used to provide the assessment of relatedness by different sources or methods of assessment

G.k.9.i.1	G.k.9.i.2.r.1	G.k.9.i.2.r.2	G.k.9.i.2.r.3
technical reference to event 1 in E.i	Reporter	global introspection	related
	Company	algorithm	possibly related
	Company	Bardi	0.76
technical reference to event 2 in E.i	Reporter	global introspection	not related
	Company	algorithm	possibly related
	Company	Bardi	0.48
technical reference to event 3 in E.i	Company	algorithm	unlikely related
	Company	Bardi	0.22

See  
 ICH ICSR IG  
 Page 133-137)




## G Drug(s) Information (continued)

E2B(R3)	Summary
G.k.9.i.4 	<p>“Did Reaction Recur on Re-administration?” (repeat as necessary)</p> <ul style="list-style-type: none"><li>• This data element has been further structured</li><li>• It indicates <b><i>if the patient was rechallenged or not with the drug</i></b> and the known outcome<ul style="list-style-type: none"><li>– 1=yes – yes (rechallenge was done, reaction recurred)</li><li>– 2=yes – no (rechallenge was done, reaction did not recur)</li><li>– 3=yes – unk (rechallenge was done, outcome unknown)</li><li>– 4=no – n/a (no rechallenge was done, recurrence is not applicable)</li></ul></li><li>• <b><i>The data element should not be coded if it was not reported whether or not a rechallenge was done</i></b></li></ul>

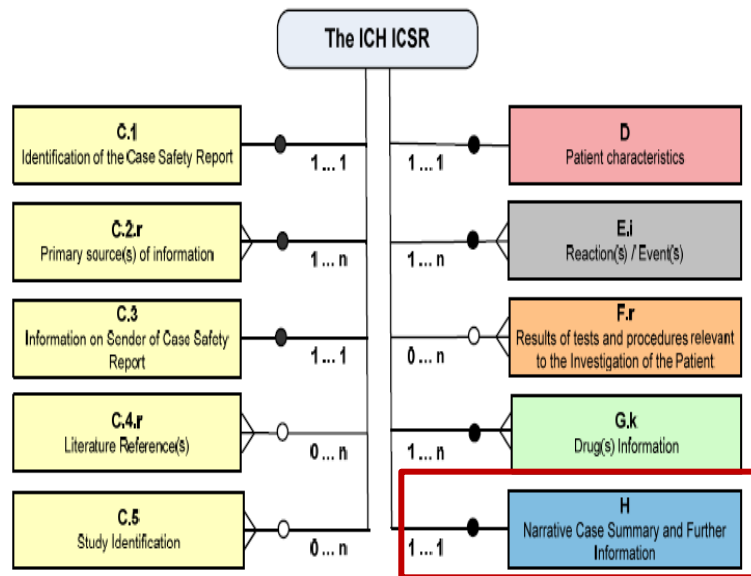


# G Drug(s) Information (continued)

E2B(R3)	Summary
<p data-bbox="85 347 266 386">G.k.10.r</p> 	<p data-bbox="401 347 1688 386">"Additional information on Drug (coded)" (repeat as necessary)</p> <ul data-bbox="401 397 1688 954" style="list-style-type: none"><li data-bbox="401 397 1688 484">•This data element captures additional information on the drug pertinent to the case</li><li data-bbox="401 495 1688 528">•Values allowed are:<ul data-bbox="401 539 1688 954" style="list-style-type: none"><li data-bbox="401 539 1688 572">–Counterfeit</li><li data-bbox="401 583 1688 615">–Overdose</li><li data-bbox="401 626 1688 659">–Drug taken by the father</li><li data-bbox="401 670 1688 703">–Drug taken beyond expiry date</li><li data-bbox="401 714 1688 746">–Batch and lot tested and found within specifications</li><li data-bbox="401 757 1688 790">–Batch and lot tested and found not within specifications</li><li data-bbox="401 801 1688 834">–Medication error</li><li data-bbox="401 845 1688 877">–Misuse</li><li data-bbox="401 888 1688 921">–Abuse</li><li data-bbox="401 932 1688 965">–Occupational exposure</li><li data-bbox="401 976 1688 1009">–Off label use</li></ul></li></ul>



# The ICH E2B(R3) ICSR – Section H



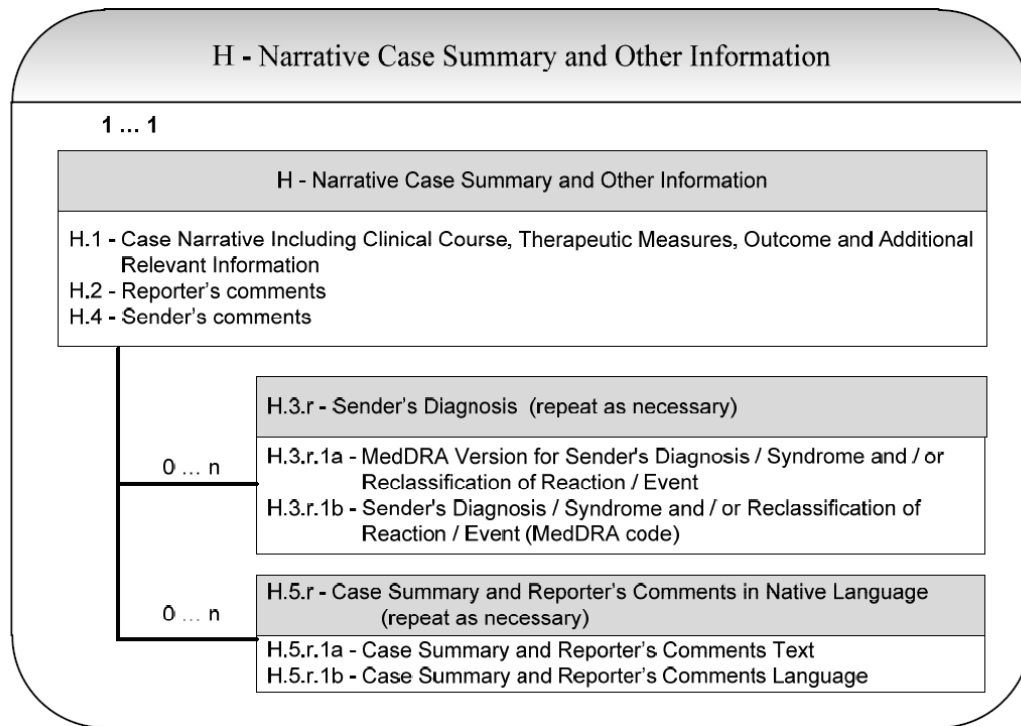
## ICH E2B(R3)



# H Narrative Case Summary and further Information


ICH E2B(R3)  
**H** Narrative  
Case Summary

ICH E2B(R2)  
**B.5** Narrative  
Case Summary






# H Narrative Case Summary

E2B(R3)	Summary
<p>H.1</p> 	<p>“Case Narrative Including Clinical Course, Therapeutic Measures, Outcome and Additional Relevant Information”</p> <ul style="list-style-type: none"><li>•The field length of the case narrative have been extended substantially from 20000 AN to 100000AN</li><li>•A narrative must be provided for cases related to serious adverse reactions</li></ul>
<p>H.5.r</p>	<p>“Case Summary and Reporter’s Comments in Native Language” (repeat as necessary)</p> <ul style="list-style-type: none"><li>•This section provides information on the clinical course of the case, therapeutic measures, outcome and other relevant information, as well as the reporter’s comments on the case in a language different from that used in Sections H.1, H.2, and H.4</li><li>•H.5.r.1a and H.5.r.1b are used in combination to transmit the sender’s and receiver’s comments in a language other than English, as required in some countries and regions</li></ul>

# Object Identifiers

E2B(R3)	Summary
	<ul style="list-style-type: none"><li>• E2B(R3) uses Object Identifiers (OIDs) to identify code systems for the ICSR message exchange</li><li>• OIDs are presented in a form that consists only of numbers and dots (e.g., "2.16.840.1.113883.3.1")</li><li>• The list of OIDs is presented in the ICH E2B(R3) IG with EU specific OIDs reflected in the EU ICSR IG</li></ul>





# Object Identifiers

E2B(R3)	Summary
	<p>A summary of all OIDs is provided in the ICH ICSR IG:</p> <ul style="list-style-type: none"><li>• Table 1: E2B (R3) data elements and IDMP OIDs</li><li>• Table 2: E2B (R3) data elements and MedDRA OIDs</li><li>• Table3: E2B (R3) data elements and ICH ICSR message Codes OIDs</li><li>• Table4: E2B (R3) data elements and ICH ICSR message Codes OIDs (ICH constrained UCUM codes)</li><li>• Table5: E2B (R3) data elements and ICSR message Namespace OIDs</li><li>• Table6: E2B (R3) data elements and Ack message Namespace OIDs</li><li>• Table7: ICSR / Ack common technical OIDs</li></ul>





# MedDRA version

E2B(R3)



Summary



- Only one MedDRA version is allowed per ICSR



# nullFlavors

E2B(R3)	Summary
 	<ul style="list-style-type: none"><li>• ICH ICSR uses nullFlavors from the HL7 Messaging Standard to categorise exceptions</li><li>• The ICH ICSR IG indicates, where nullFlavors should be used and which types are allowed to be used</li></ul> <p><i>NOTE: refer also to the EU ICSR IG and GVP Module VI (revision 2) for EU specific requirements on nullFlavors</i></p>



# nullFlavors

Code	Name	Definition
NI	No Information	<ul style="list-style-type: none"> <li>No information whatsoever can be inferred from this exceptional value</li> <li>This is the most general exceptional value</li> <li>It is also the default exceptional value</li> </ul> <p>Example: C.1.9.1 "Other Case Identifiers in Previous Transmissions"</p>
MSK	Masked	<ul style="list-style-type: none"> <li>There is information on this item available - it has not been provided by the sender due to security, privacy or other reasons</li> <li>Its primary purpose is for those circumstances where it is necessary to inform the receiver that the information does exist without providing any detail</li> </ul> <p>Example: e.g. C.2.r.1.2 "Reporter's Given Name"</p>



# nullFlavors

Code	Name	Definition
UNK	Unknown	<ul style="list-style-type: none"> <li>A proper value is applicable, but not known</li> </ul> Example: C.2.r.2.7 "Reporter's Telephone"
NA	Not applicable	<ul style="list-style-type: none"> <li>No proper value is applicable in this context</li> </ul> Example: last menstrual period for a male
ASKU	Asked but Unknown	Information was sought but not found  Example: C.5.2 "Study Name"



# nullFlavors

Code	Name	Definition
NASK	Not Asked	<ul style="list-style-type: none"> <li>This information has not been sought</li> </ul> <p>Example: C.5.3 "Sponsor Study Number"</p>
NINF	Negative Infinity	<ul style="list-style-type: none"> <li>Negative infinity of numbers</li> </ul> <p>Example: F.r.3.2 "Test Result (value / qualifier)"</p>
PINF	Positive Infinity	<ul style="list-style-type: none"> <li>Positive infinity of numbers</li> </ul> <p>Example: F.r.3.2 "Test Result (value / qualifier)"</p>





# EU ICSR Implementation Guide

## Please carefully review the EU ICSR IG



4 December 2014  
EMA/51938/2013

### EU Individual Case Safety Report (ICSR)<sup>1</sup> Implementation Guide

Start of Public Consultation	30 April 2014
End of Public Consultation	30 June 2014
Final draft agreed by Project Team 1	10 October 2014
Final draft agreed by Project Coordination Group	19 November 2014
Final draft endorsed by European Risk Management Strategy - Facilitation Group	27 November 2014
Final draft adopted by Pharmacovigilance Risk Assessment Committee (PRAC)	4 December 2014



- We are now going to discuss important principles and changes to the business rules for the validation of ICSRs which are reported electronically to EudraVigilance in line with the ISO/ICH E2B(R3) format



NOTE: ensure that your pharmacovigilance system is aligned with the new business rules when processing ICSRs in the new format



## EU ICSR Implementation Guide

- Attachments
- Use of local language
- Causality assessment
- Batch/Lot Number
- nullFlavor
- Characterisation of Drug Role “Drug Not Administered”
- Literature references - Digital Object Identifiers (DOI)
- Business Rules





# EU ICSR Implementation Guide



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## EU ICSR Implementation Guide – Attachments



- Main use for attachments will be the provision of literature articles and any associated translation of the literature article into English (if requested by the Agency)
- Other documents made available by a primary source (e.g. autopsy reports, ECG strips, chest X-ray, or photographs, etc.) can also be provided as attachments using the same method
- Additional documents should not be routinely attached to ICSRs:
  - Either be at the request of the receiver on a case by case basis or
  - Where the correct medical interpretation of the ICSR cannot be made without access to the attachment(s)

## EU ICSR Implementation Guide – Attachments



- Within one ICSR, multiple document titles (C.1.6.1.r) and literature titles (C.4.r.1) can be provided, as well as the associated materials
- In line with GVP module VI, if a literature article refers to more than one ICSR then the literature article should be attached to the first ICSR created only and all the associated ICSRs should be linked to the first ICSR through the linked report number (C.1.10.r)
- Table 9 “Supported file types in the EU” of the EU ICSR IG provides an overview of portable document formats


## EU ICSR Implementation Guide – Attachments



- Because documents might not be ready for transmission at the time of ICSR reporting, attachments can be transmitted separately from the ICSR transmission
- When the sender transmits an attachment later, the original ICSR should be retransmitted along with the attachment
- Data element C.1.11.1 should be completed as an 'amendment' along with the reason for amendment in data element C.1.11.2 i.e. transmission of attachment(s)
- If additional documents are subsequently received by the sender and contain medically relevant information a follow-up case containing the additional information should be created and submitted



## EU ICSR Implementation Guide

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# EU ICSR Implementation Guide – Use of local language in Reaction/Event section and case summary section



- EU requirements for use of languages in ICSRs

Primary Source Country	Sender	Language
EEA	NCA	Local language <ul style="list-style-type: none"> <li>• Case translation shall be provided by the NCA when requested by the Agency or other Member States for the evaluation of potential signals</li> </ul>
EEA	MAH	English language + Reaction/Event as reported by the primary source in Narrative Language (Ei.1.1a) + Reporter's comments Text (H.5.r.1a) in local language
Non-EEA	MAH	English



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## EU ICSR Implementation Guide – Data elements for Causality Assessments



- *For SUSAR reporting* medicinal products classified as suspect or interacting should have *at least one method of assessment*
- The *binary decision method* detailed in the CIOMS Working Group VI report for each event/reaction reported in the ICSR should be used
- This method of assessment should be characterised:
  - With the value '1' in the data element = *EU Method of Assessment* (G.k.9.i.2.r.2.EU.1)
  - With the data element EU Source of Assessment (G.k.9.i.2.r.1.EU.1) and
  - With the data element EU Result of the Assessment (G.k.9.i.2.r.3.EU.1) (1,2)
- The *use of other methods of causality assessment is optional* and can be provided in accordance with the ICH E2B(R3) Implementation Guide





## EU ICSR Implementation Guide – Data elements for Causality Assessments



NOTE: In SUSARs where a medicinal product is classified as “drug not administered” causality assessments are not required for that specific drug

# EU ICSR Implementation Guide – Data elements for Causality Assessments



## **G.k.9.i.2.r.1.EU.1- EU Source of Assessment:**

- Values: Investigator [1], Sponsor [2], NCA [3], MAH [4], Healthcare professional [5], non-Healthcare professional [6]
- Business Rule(s): Mandatory if G.k.9.i.2.r.2.EU.1 = '1'
  - For reports sent to EVCTM, the value must be [1-3]
  - For reports sent to EVHUMAN, the value must be [3-6]

# EU ICSR Implementation Guide – Data elements for Causality Assessments



## G.k.9.i.2.r.3.EU.1 - *EU Result of Assessment*

EU Result of Assessment	Value
Reasonable possible	1
No reasonable possibility	2

- Each MedDRA LLT code reported in the data element E.i.2.1b should have an assessment provided by the Investigator AND/OR by the Sponsor for each reported medicinal product classified as suspect or interacting
- Failure to comply with this requirement generates an error acknowledgement



## EU ICSR Implementation Guide – Data elements for Causality Assessments

- Any initial ICSR submitted to EVCTM should contain at least one reaction with a causality assessment 'Reasonable possibility' to at least one of the reported medicinal products classified as suspect or interacting
- This rule is not applied to follow-up ICSRs submitted to EVCTM in order to allow sponsors the possibility to downgrade the causality of an initial ICSR
- When the sponsor is sending the report at an early stage and does not have sufficient information to assign causalities, a 'Reasonable possibility' of causal association should be considered until further information is available to confirm or downgrade the initially reported causality

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# EU ICSR Implementation Guide – Biological Products requiring Batch Number



## **G.k.4.r.7 - Batch / Lot Number**

- Data element should be completed with a value or an appropriate null flag for all suspect or interacting drugs being biologics
- The nullflavor “ASKU” should be completed for biological products where the primary source has been contacted for this information but was unable to provide it
- For all other situations the nullflavor “UNK” should be used when this information is missing



## EU ICSR Implementation Guide



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## EU ICSR Implementation Guide – nullFlavors



- In the EU the ICH E2B(R3) IG is generally followed for the usage of nullflavor flags
- Usually, for specific data fields which are required in the EU for an ICSR to be considered valid, nullflavor flags are not permitted
- There are situations where the use of a nullflavor is required in the EU, which is not foreseen in the ICH E2B(R3) IG
- A summary of the exceptions between the EU and ICH E2B(R3) ICSR IG is provided as follows



# EU ICSR Implementation Guide – nullFlavors



## Nullflavor flag- Exceptions

ICH E2B(R3) field	Description
C.2.r.4 - Qualification	<ul style="list-style-type: none"> <li>• The <b>reporter qualification</b> is mandatory for all reporters</li> <li>• The use of a nullflavor is not permitted</li> </ul>
C.4.r.1 - Literature Reference(s)	<ul style="list-style-type: none"> <li>• For a <b>literature report</b>, the literature reference must be provided</li> <li>• The use of a nullflavor is not permitted</li> </ul>

# EU ICSR Implementation Guide – nullFlavors



## Nullflavor flag- Exceptions

ICH E2B(R3) field	Description
C.5.1.r.2 - Study Registration Country	<ul style="list-style-type: none"> <li>To identify EU registration numbers and the EudraCT number, the study registration country code must be provided</li> <li>The use of a nullflavor is not permitted</li> </ul>
G.k.4.r.7 - Batch / Lot Number	<ul style="list-style-type: none"> <li>The nullflavors "UNK" &amp; "ASKU" should be provide for each reported suspect or interacting drug if no information is available</li> </ul>



## EU ICSR Implementation Guide – nullFlavors



- The ICH E2B(R3) IG foresees the use of the nullflavor “MSK”, which indicates to the receiver of an ICSR that the sender of the ICSR holds this information but is unable to send this information due to data protection / privacy reasons
- In the EU ICSR IG, for Patient name or initials (D.1) or Date of Birth (D.2.1) the “MSK” flag can be used
- In other E2B(R3) fields the use of the “MSK” flag is not considered valid for use in the EU as those fields would not lead to the direct identification of an individual
  - The EU exceptions are summarised and provided as follows

# EU ICSR Implementation Guide – nullFlavors



## Data elements where the use of “MSK” is not allowed in the EU

ICH E2B(R3) field code	ICH E2B(R3) field Description	ICH E2B(R3) field code	ICH E2B(R3) field Description
D.5	Patient Sex		
D.6	Patient Last Menstrual Period Date		
D.7.1.r.2	Medical History Start Date	D.10.7.1.r.3	Relevant Medical History and Concurrent Conditions of Parent Continuing
D.7.1.r.3	Medical History Continuing	D.10.7.1.r.4	Relevant Medical History and Concurrent Conditions of Parent End Date
D.7.1.r.4	Medical History End Date		
D.7.2	Text for Relevant Medical History and Concurrent Conditions (not including reaction / event)	D.10.8.r.4	Relevant Past Drug History of Parent Start Date
D.8.r.4	Relevant Past Drug History Start Date	D.10.8.r.5	Relevant Past Drug History of Parent End Date
D.8.r.5	Relevant Past Drug History End Date	E.i.4	Date of Start of Reaction / Event
D.9.1	Date of Death	E.i.5	Date of End of Reaction / Event
D.10.3	Last Menstrual Period Date of Parent	G.k.4.r.4	Date and Time of Start of Drug
D.10.6	Sex of Parent	G.k.4.r.5	Date and Time of Last Administration
D.10.7.1.r.2	Relevant Medical History and Concurrent Conditions of Parent Start Date		



## EU ICSR Implementation Guide



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## EU ICSR Implementation Guide – Characterisation of Drug Role “Drug Not Administered”



### G.k.1= 4- Drug not administered

- For ***clinical trials***, in accordance with section 7.11.4 of the “*Detailed guidance on the collection, verification and presentation of adverse event/reaction reports arising from clinical trials on medicinal products for human use*” (‘CT-3’), this type of report should not be submitted as a SUSAR



## EU ICSR Implementation Guide – Characterisation of Drug Role “Drug Not Administered”



### G.k.1= 4- Drug not administered

- **Medication error:** If the patient did not receive the actual prescribed drug but another one: Repeatable Sections G should be completed with
  - the information about the prescribed drug (selecting the characterisation of drug role as “Drug Not Administered”) and
  - the information on the dispensed drug as the ‘suspect’ drugThe appropriate medication error LLT should be captured with the appropriate MedDRA LLT code for the associated reaction/event in Section E.i “Reaction(s) / Event(s)”



## EU ICSR Implementation Guide

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## EU ICSR Implementation Guide – Literature references and the use of Digital Object Identifiers (DOI)



- For a literature report, literature reference should be provided in the data field *Literature Reference(s)* (C.4.r.1) in 'Vancouver style' developed by the International Committee of Medical Journal Editors
- The EU IG also requires the Digital Object Identifier (DOI) for the article to be included where available

*Example: International Committee of Medical Journal Editors. Uniform requirements for manuscripts submitted to biomedical journals. N Engl J Med 1997; 336:309-15. **doi:10.1056/NEJM199701233360422***



## EU ICSR Implementation Guide

RULES

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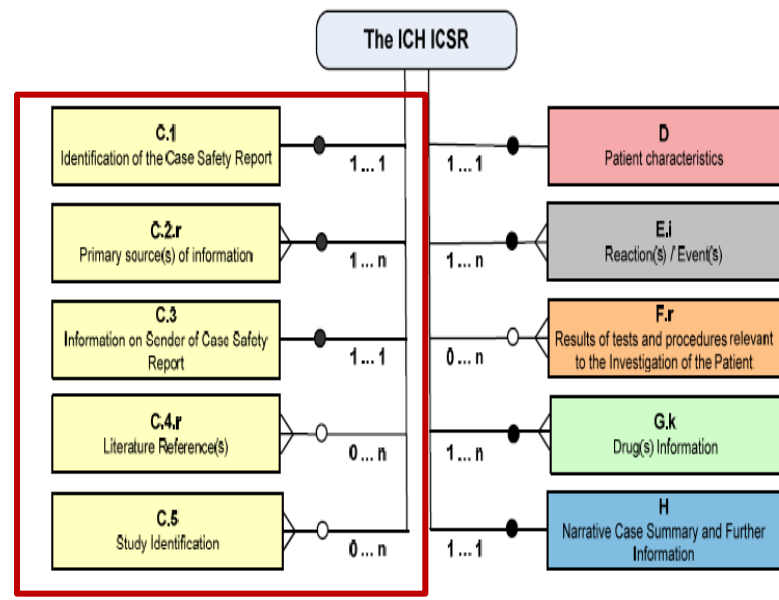
## The ICH E2B(R3) ICSR – EudraVigilance Business Rules

- The following slides provide an overview of the most important changes of the EudraVigilance business rules with the move from the ICH E2B(R2) ICSR format to the ICH E2B(R3) format
- Always consult the reference documents for detailed requirements and specifications
  - For ICH E2B(R2): Note for guidance – EudraVigilance Human – Processing of safety messages and individual case safety reports (ICSRs) Revision 2
  - For ICH E2B(R3): European Union individual case safety report (ICSR) implementation guide



# The ICH E2B(R3) ICSR – EudraVigilance Business Rules

RULES



ICH E2B(R3)



# The ICH E2B(R3) ICSR – EudraVigilance Business Rules

Data element	Description	ICH E2B(R2)	ICH E2B(R3)
C.1.6.1	Are additional documents available? Boolean (false/true)	Optional	Mandatory
C.1.6.1.r.1	Documents held by sender	100 AN	2000 AN Mandatory if C.1.6.1 = 'true' or if C.1.6.1r.2 contains a file
C.1.7	Does this case fulfil local criteria for an expedited report? Boolean (false/true; nullFlavor: NI*)	Optional	Mandatory  * 'nullFlavor' only allowed when sender is retransmitting a case that was first received ICH E2B (R2) format, where the equivalent data element for C.1.7 was optionally not populated; in other cases, only 'false' or 'true' should be used.



## The ICH E2B(R3) ICSR – EudraVigilance Business Rules

Data element	Description	ICH E2B(R2)	ICH E2B(R3)
C.1.9.1	Other case identifiers in previous transmissions Boolean (true; nullFlavor: NI)	Optional	Mandatory
C.1.9.1.r.1	Source(s) of the case identifier	N/A	Mandatory if C.1.9.1. = "true"
C.1.9.1.r.2	Case identifier(s)	N/A	Mandatory if C.1.9.1. = "true"
C.1.11.2	Reason for Nullification/Amendment	200 AN Optional	2000 AN Mandatory if it is a nullification or amendment report (C.1.11.1 is populated) (Conditional-Mandatory)



## The ICH E2B(R3) ICSR – EudraVigilance Business Rules

Data element	Description	ICH E2B(R2)	ICH E2B(R3)
C.2.r.3	Reporter's country code	Look up ISO 3166  At least one reporter family name, organization, postcode, country, literature reference or study name.	Mandatory if C.2.r.5. =1  ISO 3166-1 alpha-2, <b>value EU not accepted</b>
C.2.r.5	Primary source for regulatory purposes	N/A	Mandatory for one and only one instance of this element



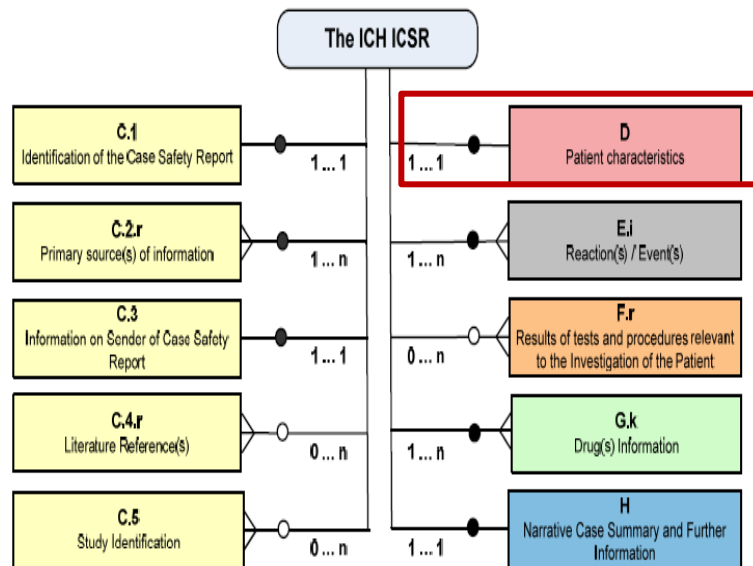
# The ICH E2B(R3) ICSR – EudraVigilance Business Rules

Data element	Description	ICH E2B(R2)	ICH E2B(R3)
C.3.2	Sender's organization	60 AN Mandatory	100 AN Mandatory if sender type C.3.1 = Pharmaceutical Company or Regulatory authority
C.4.r.1.	Literature reference(s)	At least one reporter family name, organization, postcode, country, literature reference or study name	Mandatory if a document is embedded in section C.4.r.2 Vancouver Style should be used





# The ICH E2B(R3) ICSR – EudraVigilance Business Rules



ICH E2B(R3)



# The ICH E2B(R3) ICSR – EudraVigilance Business Rules

Data element	Description	ICH E2B(R2)	ICH E2B(R3)
D.1	Patient (name or initials)	10 AN (only initials)	60 AN At least one of D.1: D.1.1.1, D.1.1.2, D.1.1.3, D.1.1.4, D.2.1, D.2.2a, D.2.2.1a, D.2.3 or D.5 (Note 9)
D.2.1	Date of Birth	At least one of initials, medical record number, specialist record number, hospital record number, investigation number, birth day, age, gestation period, age group, patient sex	Minimum precision required is the day (i.e. 'CCYYMMDD'). At least one of D.1: D.1.1.1, D.1.1.2, D.1.1.3, D.1.1.4, D.2.1, D.2.2A, D.2.2.1a, D.2.3 or D.5 (Note 5 & 9)



# The ICH E2B(R3) ICSR – EudraVigilance Business Rules

## NOTE 5:

- *No date/time value should exceed the current UK GMT time plus 12 hours*
- *Failure of the validation of the date format generates an error*
- *All dates should be inferior or equal to the EudraVigilance Gateway date plus 12 hours*
- *Failure of this validation generates an error*



## The ICH E2B(R3) ICSR – EudraVigilance Business Rules

### NOTE 9:

- *At least one patient identifier is required to indicate that a patient exists this is met through the completion of at least one of the following fields D.1, D.1.1.1, D.1.1.2, D.1.1.3, D.1.1.4, D.2.1, D.2.2A, D.2.2.1a, D.2.3 or D.5. The use of "UNK", "ASKU" or "NASK" nullflavors in any of the patient identifier fields does not indicate that a patient exists*
- *If due to data privacy the name or initials of the patient is known but cannot be provided the nullflavor "MSK" can be used and will pass the validation rules*
- *If nullflavor "MSK" is used in the date of birth field then either the patient age or patient age group should be completed, if not an error message will be generated*



# The ICH E2B(R3) ICSR – EudraVigilance Business Rules

Data element	Description	ICH E2B(R2)	ICH E2B(R3)
D.2.2.a	Age at time of onset of reaction/event (number)	If not null, should not be > 150 years	Mandatory if D.2.2b is populated Should not be > 150 years (Note 3) At least one of D.1: D.1.1.1, D.1.1.2, D.1.1.3, D.1.1.4, D.2.1, D.2.2A, D.2.2.1a, D.2.3 (Note 5 & 9)



# The ICH E2B(R3) ICSR – EudraVigilance Business Rules

## NOTE 3:

- *If the patient/parent's age, height or weight value is above the allowed upper limit, the relevant ICH E2B(R3) data element should remain empty and the information should be reported in the data element Case Narrative (ICH E2B(R3) H.1)*
- *Reported values above the upper limits generate an error message*



## The ICH E2B(R3) ICSR – EudraVigilance Business Rules

Data element	Description	ICH E2B(R2)	ICH E2B(R3)
D.2.2b	Age at time of onset of reaction/event (unit)	Mandatory if B.1.2.2.a is not null	50 AN UCUM Year, Month, Week, Day, Hour and {Decade} Mandatory if D.2.2a is populated (Note 9)
D.2.2.1.b & (G.k.6.b Gestation period at time of exposure)	Gestation period when reaction was observed in the Foetus (unit)	3N 802 = Month 803= week 804 = day 805 = Trimester	50 AN (UCUM) Month, Week, Day and Trimester Mandatory if D.2.2.1a is populated



## The ICH E2B(R3) ICSR – EudraVigilance Business Rules

Data element	Description	ICH E2B(R2)	ICH E2B(R3)
D.2.3	Patient Age Group (as per reporter)	[1-6] 1= Neonate 2= Infant 3= Child 4= Adolescent 5= Adult 6=Elderly	[0-6] <u>0= Foetus</u> 1= Neonate 2= Infant 3= Child 4= Adolescent 5= Adult 6=Elderly At least one of D.1: D.1.1.1, D.1.1.2, D.1.1.3, D.1.1.4, D.2.1, D.2.2A, D.2.2.1a, D.2.3 or D.5 (Note 9)





## The ICH E2B(R3) ICSR – EudraVigilance Business Rules

Data element	Description	ICH E2B(R2)	ICH E2B(R3)
D.7.1.r.1.a.	MedDRA version for Medical history	8 AN (x.x) Mandatory if B.1.7.1a.2 Is not NULL	4 AN (N.N) Mandatory if D.7.1.r.1.b is populated Numeric values and the decimal point only (Note 1)
D.7.1.r.1.b.	MedDRA history (disease/ procedure/etc) MedDRA Code	250 AN (Look up MedDRA LLT)	Mandatory if D.7.1.r.1.a is populated



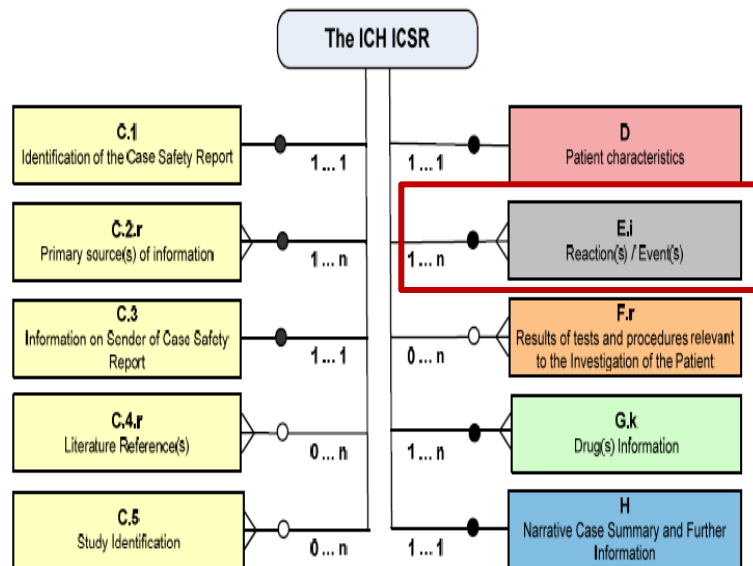
# The ICH E2B(R3) ICSR – EudraVigilance Business Rules

## NOTE 1:

- *The supported MedDRA versions are related to the EV environment (EV compliance testing environment or production environment) that is the recipient of the Safety Message transmission*
- *It also relates to the current MedDRA version officially published by the MedDRA Maintenance Support Service Organisation (MSSO)*
- *The EV compliance testing environment supports MedDRA version 4.0 and higher*
- *The EV production environment supports the previous and the current MedDRA version*
- *The validation process of the ICSRs accepts only current lower level term (LLT) numeric codes of the supported MedDRA versions*
- *All stakeholders should follow the recommendations of the MedDRA MSSO regarding the switch to a new MedDRA version*
- *The latest supported MedDRA versions in line with the official semi-annual releases are posted on the EudraVigilance website*
- *The use of non-valid or non-current numeric MedDRA LLT codes generates an error message in the validation process*



# The ICH E2B(R3) ICSR – EudraVigilance Business Rules



ICH E2B(R3)

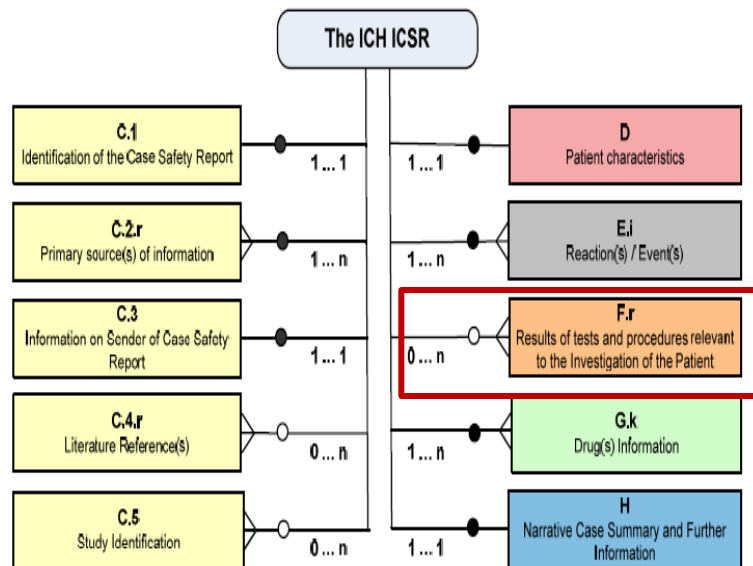


## The ICH E2B(R3) ICSR – EudraVigilance Business Rules

Data element	Description	ICH E2B(R2)	ICH E2B(R3)
E.i.9	Identification of the country where the reaction occurred	ISO 3166	ISO 3166-1 alpha 2, including value EU



# The ICH E2B(R3) ICSR – EudraVigilance Business Rules



## ICH E2B(R3)



# The ICH E2B(R3) ICSR – EudraVigilance Business Rules

Data element	Description	ICH E2B(R2)	ICH E2B(R3)
F.r.1	Test date	Optional	Date/Time CCYY minimum Mandatory if F.r.2.2.b (Test name MedDRA) or F.r.2.1(test name free text) is populated  Nullflavor "UNK" is supported (Note 5)



## The ICH E2B(R3) ICSR – EudraVigilance Business Rules

Data element	Description	ICH E2B(R2)	ICH E2B(R3)
F.r.2.2b	Test name (MedDRA code)	A valid MedDRA LLT name or code The failure of a successful match with MedDRA lookup generates an error If necessary, test names and results can be provided in free text in the data element “result test procedures”	Mandatory if F.r.2.2a is populated or if F.r.1 is populated



## The ICH E2B(R3) ICSR – EudraVigilance Business Rules

Data element	Description	ICH E2B(R2)	ICH E2B(R3)
F.r.3.1	Test result (code) 1= positive 2= negative 3= borderline 4= inconclusive	N/A	Mandatory if F.r.2.2b (test name MedRA) is populated, and F.r.3.2 (test result value), or F.r.3.4 (Result Unstructured Data) is not populated
F.r.3.2	Test Result (value/qualifier)	Optional	Mandatory if F.r.2.2.b (test name MedDRA) is populated, and F.r.3.1 (test result code), or F.r.3.4 (Result Unstructured Data) is not populated



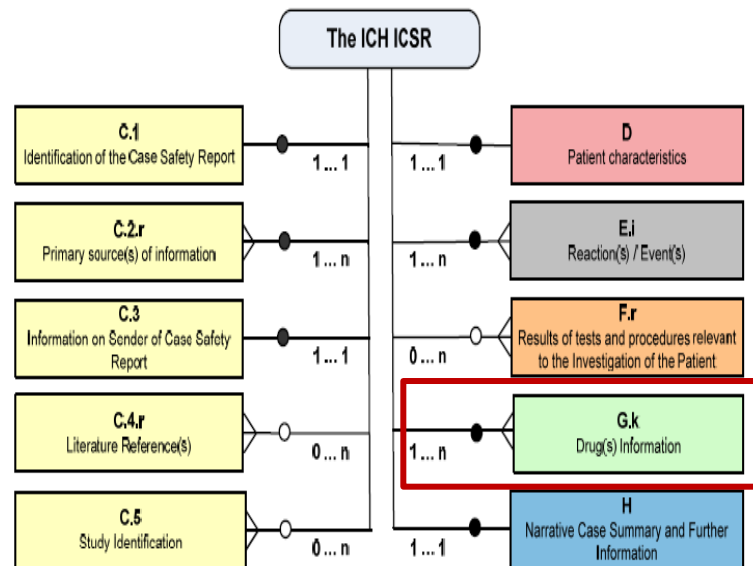


# The ICH E2B(R3) ICSR – EudraVigilance Business Rules

Data element	Description	ICH E2B(R2)	ICH E2B(R3)
F.r.3.4	Result Unstructured Data	2000 AN Optional	2000 AN Mandatory if F.r.2.2b (test name MedDRA) is populated, and F.r.3.1 (test result code), or F.r.3.2 (test result value) is not populated



# The ICH E2B(R3) ICSR – EudraVigilance Business Rules



ICH E2B(R3)



# The ICH E2B(R3) ICSR – EudraVigilance Business Rules

Data element	Description	ICH E2B(R2)	ICH E2B(R3)
G.k.1	Characterisation of Drug Role	Mandatory 1= suspect 2= concomitant 3= interacting	Mandatory [1-4] 1= suspected 2= concomitant 3= interacting 4= Drug not administered At least one iteration of the Drug section G.k must have the value 1, 3 or 4



## The ICH E2B(R3) ICSR – EudraVigilance Business Rules

Data element	Description	ICH E2B(R2)	ICH E2B(R3)
G.k.2.2	Medicinal Product Name as reported by the Primary Source	70 AN At least one between medicinal product or active substances.	250 AN Mandatory
G.k.2.3.r.1	Substance name	100 AN Mandatory for any transmission to EVCTM (error) or EVPM (warning) when characterisation of drug role is suspected or interacting	250 AN Optional



## The ICH E2B(R3) ICSR – EudraVigilance Business Rules

Data element	Description	ICH E2B(R2)	ICH E2B(R3)
G.k.2.4	Identification of the country where the drug was obtained	ISO 3166	ISO3166-1 alpha-2, including value EU
G.k.3.2	Country of authorisation/ application	ISO 3166	ISO3166-1 alpha-2, including value EU



# The ICH E2B(R3) ICSR – EudraVigilance Business Rules

Data element	Description	ICH E2B(R2)	ICH E2B(R3)
G.k.4.r.1a	Dose (number)	8N	8N Mandatory if G.k.4.r.1b is populated
G.k.4.r.1b (same for G.k.5b Cumulative Dose to First Reaction (unit)	Dose (Unit)	3N [001-032] Mandatory if dose number is not null	50AN UCUM Mandatory if G.k.4.r.1a is populated



## The ICH E2B(R3) ICSR – EudraVigilance Business Rules

Data element	Description	ICH E2B(R2)	ICH E2B(R3)
G.k.4.r.2	Number of units in the interval	3N	4N Mandatory if G.k.4.r.3 is populated unless the definition of the time interval unit (G.k.4.r.3) is 'cyclical', 'as necessary', or 'total'
G.k.4.r.3	Definition of the time interval unit	3 AN (year, week, day, hour, minute, second trimester, cyclical, as necessary, total)	50 AN Mandatory if G.k.4.r.2 is populated



## The ICH E2B(R3) ICSR – EudraVigilance Business Rules

Data element	Description	ICH E2B(R2)	ICH E2B(R3)
G.k.4.r.6a	Dose (number)	8N	8N Mandatory if G.k.4r.6b (Dose Unit) is populated
G.k.4r.6b	Dose (unit)	3N [001-032] Mandatory if dose number is not null.	50AN UCUM Mandatory if G.k.4.r.6a (Dose number) is populated





## The ICH E2B(R3) ICSR – EudraVigilance Business Rules

Data element	Description	ICH E2B(R2)	ICH E2B(R3)
G.k.4.r.7	Batch / Lot number	35 AN	35 AN Mandatory for all suspected or interacting drugs Field should be completed with a value or an appropriate null flag
G.k.4.r.8	Dosage Text	100 AN	2000 AN
G.k.4.r.9.1	Pharmaceutical dosage form (free text)	100 AN Lookup on dosage forms (Warning)	60 AN



## The ICH E2B(R3) ICSR – EudraVigilance Business Rules

Data element	Description	ICH E2B(R2)	ICH E2B(R3)
G.k.4.r.10.1	Route of administration (free text)	3N	60 AN
G.k.4.r.10.2a (same for G.k.4.r.11.2a)	Route of administration termID version date/number	N/A	4 (N.N) E2B (R2) 10 AN (free text) E2B R3 Mandatory if G.k.4.r.10.2b is populated; numeric values and the decimal point only
G.k.4.r.10.2b (same for G.k.4.r.11.2b)	Route of administration term ID	N/A	3N (RoA) E2B(R2) 100 AN (RoAID) E2B (R3) Mandatory if G.k.4.r.10.2a is populated



## The ICH E2B(R3) ICSR – EudraVigilance Business Rules

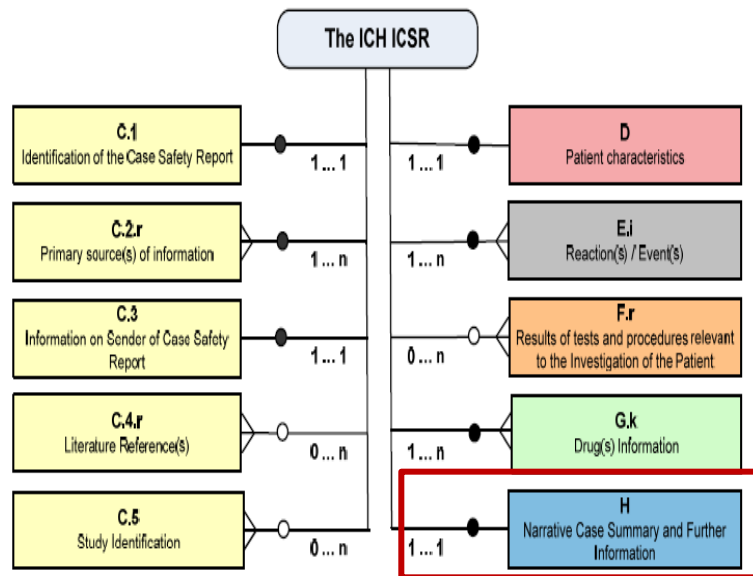
Data element	Description	ICH E2B(R2)	ICH E2B(R3)
G.k.7.r.1	Indication reported by the primary source	N/A	250AN
G.k.7.r.2a	MedDRA version for indication	8 AN (X.X) Mandatory if B.4.k.11 (Indication MedDRA code) is not null	4AN N.N Mandatory if G.k.7.r.2.b (Indication MedDRA code) is populated Numeric values and the decimal point only (Note 1)



# The ICH E2B(R3) ICSR – EudraVigilance Business Rules

Data element	Description	ICH E2B(R2)	ICH E2B(R3)
G.k.7.r.2b	Indication (MedDRA code)	250 N (Lookup on MedDRA LLT)	8N MedDRA Mandatory if G.k.7.r.2a or G.k.7.r.1 is populated (Note 1)

# The ICH E2B(R3) ICSR – EudraVigilance Business Rules



ICH E2B(R3)



## The ICH E2B(R3) ICSR – EudraVigilance Business Rules

Data element	Description	ICH E2B(R2)	ICH E2B(R3)
H.1	Case Narrative Including Clinical Course, Therapeutic Measures, Outcome and Additional Relevant Information	20000 AN	100000 AN
H.2	Reporter's comments	500 AN	20000 AN
H.4	Sender's comments	2000 AN	20000 AN



# Session summary: What are the key changes for the operation of pharmacovigilance?

## **In this session you learned:**

- To recognise the key changes that will occur with the use of the ICH E2B(R3)/ISO ICSR standard in comparison with the ICH E2B(R2) guideline /M2 format
- To define the areas where adaptation to your pharmacovigilance system and business processes will be required
- To discuss each ICSR section and modifications that have been introduced as part of the ICH ICSR IG
- To describe the main changes as regards the business rules to be applied for the electronic transmission of ICSRs as set out in the EU ICSR IG



# Session summary: What are the key changes for the operation of pharmacovigilance?

NOTE 1: training module PhV-G2 will describe the main changes that will be introduced as part of revision 2 of the guideline on Good Pharmacovigilance Practices, Module VI, which will provide guidance on how to use the ICH E2B(R3) format for adverse reaction reporting in the EU

NOTE 2: training module IT-M1 will describe the aspects to be taken into account by IT developers for the ISO ICSR standards implementation



# Overview Module PhV-M2a

- Introduction to this training module
- What is the origin of the ISO ICSR and ICH E2B(R3) guideline?
- What are the legal basis and benefits for the use of the new ICSR standard?
- What are the key changes for the operation of pharmacovigilance?
- How can I get supporting information?**



# Session summary: How I can I get supporting information?

## **In this session you will learn:**

- What documents are essential for you to prepare for the implementation of the ISO ICSR standard based on the ICH E2B(R3) Implementation Guide and the EU ICSR Implementation Guide
- How to contact the Service Desk in case you require support or further information



## Supporting Documents (1)

<b>Documentation</b>	<b>Description</b>
<p>Guideline on good pharmacovigilance practices (GVP) Module VI – Management and reporting of adverse reactions to medicinal products (Rev 1)</p> <p><i>Revision 2 in draft</i></p>	<ul style="list-style-type: none"><li>• Addresses the legal requirements detailed in Title IX of Directive 2001/83/EC and chapter 3 of Regulation (EC) No 726/2004 as regards the collection, data management and reporting of suspected adverse reactions (serious and non-serious) associated with medicinal products for human use authorised in the European Union (EU).</li></ul>



## Supporting Documents (2)

<b>Documentation</b>	<b>Description</b>
EudraVigilance stakeholder change management plan	Details the changes taking place in the EudraVigilance system and to the process of reporting Individual Case Safety Reports (ICSRs)



## Supporting Documents (3)

Documentation	Description
European Union individual case safety report (ICSR) implementation guide	<ul style="list-style-type: none"><li>• This guidance describes the EU-specific requirements to generate a valid ICSR safety and acknowledgment messages in the international format EN ISO ICSR 27953-2:2011 in accordance with ICH E2B(R3) guidance.</li><li>• This guidance should be read in conjunction with the ICH E2B(R3) implementation guide and related materials published on the ICH website.</li></ul>

[Implementation of the ISO IDMP standards](#) webpage of the Agency

[EudraVigilance](#) webpage of the Agency

## Supporting Documents (4)

Documentation	Description
EU ICSR implementation guide business rules spreadsheet	<ul style="list-style-type: none"><li data-bbox="716 380 1798 506">• This spreadsheet includes all the ICH E2B(R3) and EU specific business rules in a format to help system developers.</li></ul>
EU backwards forwards conversion element mapping spreadsheet	<ul style="list-style-type: none"><li data-bbox="716 547 1837 809">• This document describes the relationship between EU specific data elements in E2B(R3) and E2B(R2). This document is an addition to the ICH backwards-forwards conversion rules. It covers additional EU-specific rules for the conversion back and forth between E2B(R2) and E2B(R3).</li></ul>

## Supporting Documents (5)

<b>Documentation</b>	<b>Description</b>
Draft EU BFC conversion	<ul style="list-style-type: none"><li>• The ICH backwards-forwards conversion tool updated to include additional EU-specific data fields.</li></ul>
EU E2B(R3) code lists	<ul style="list-style-type: none"><li>• The list of codes for EU-specific data fields.</li></ul>
EU reference instances	<ul style="list-style-type: none"><li>• ICH reference instances amended to include EU-specific data fields.</li></ul>

Reference: EudraVigilance webpage



## Supporting Documents (6)

<b>Documentation</b>	<b>Description</b>
EU example instances	Additional example instances to be used for testing E2B(R3) transmissions to the EudraVigilance. EudraVigilance is a centralised European database of suspected adverse reactions to medicines that are authorised or being studied in clinical trials in the European Economic Area (EEA).





## Supporting Documents (7)

<b>Documentation</b>	<b>Description</b>
ICH Implementation guide package	<ul style="list-style-type: none"><li data-bbox="720 424 1798 554">• A set of documents including the ICH ICSR implementation guide, backwards and forwards compatibility recommendations and element mapping</li></ul>
ICH E2B(R3) Questions and answers	<ul style="list-style-type: none"><li data-bbox="720 579 1831 663">• A question-and-answer document relevant for technical E2B questions</li></ul>



## Supporting Documents (8)

<b>Documentation</b>	<b>Description</b>
Note for guidance – EudraVigilance Human – Processing of safety messages and individual case safety reports (ICSRs) Revision 2	The purpose of this guidance is to describe the aspects of the message processing and acknowledgment generation implemented in EudraVigilance (EV) based on the use of the ICH E2B(R2) guideline
Maintenance of the ICH guideline on clinical safety data management: Data elements for transmission of individual case safety reports E2B(R2)	The purpose of this document is to describe the data elements for the electronic reporting of Individual Case Safety Reports (to be read with the ICH ICSR M2 Version 2.3 Specification Document)



# Where can I get support if needed?

## EudraVigilance Registration

- Email - [eudravigilanceregistration@ema.europa.eu](mailto:eudravigilanceregistration@ema.europa.eu)
- Tel - 44 (0) 20 3660 7523

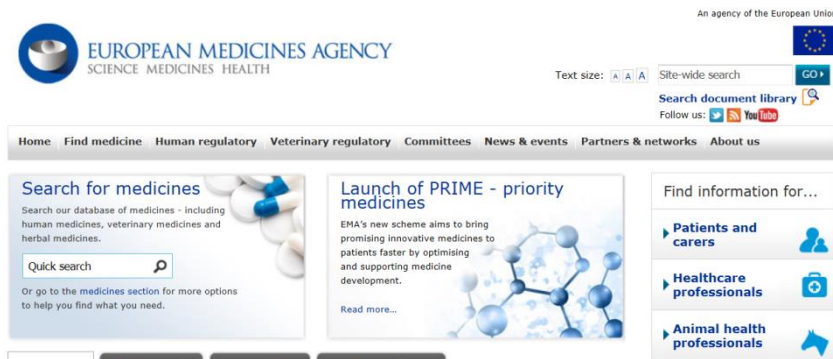
## EudraVigilance Operations and IT Operations

- Visit the EMA Service Desk portal: <https://servicedesk.ema.europa.eu>
- **Urgent** helpline for technical enquiries: +44 (0)20 3660 8520

# Where can I get support if needed?

## Pharmacovigilance operations

- Send a question to EMA (accessible from the EMA homepage)





The screenshot shows the EMA homepage with the following elements:

- EMA logo and tagline: "EUROPEAN MEDICINES AGENCY SCIENCE MEDICINES HEALTH"
- Text size controls and a "Site-wide search" box with a "GO" button.
- A "Search document library" button and social media icons for Twitter, Facebook, and YouTube.
- A navigation menu with links: Home, Find medicine, Human regulatory, Veterinary regulatory, Committees, News & events, Partners & networks, About us.
- Three main content boxes:
  - "Search for medicines" with a search input field and a "Quick search" button.
  - "Launch of PRIME - priority medicines" with a molecular structure graphic and a "Read more..." link.
  - "Find information for..." with three categories: "Patients and carers", "Healthcare professionals", and "Animal health professionals", each with an icon.

Web address:  
[http://www.ema.europa.eu/ema/index.jsp?curl=pages/about\\_us/landing/ask\\_ema\\_landing\\_page.jsp&mid=WC0b01ac05806499f0](http://www.ema.europa.eu/ema/index.jsp?curl=pages/about_us/landing/ask_ema_landing_page.jsp&mid=WC0b01ac05806499f0)

Home | Find medicine | Human regulatory | Veterinary regulatory | Committees | News & events | Partners & networks | About us | Site Map

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# Session summary: How I can I get supporting information?

## **In this session you have learned:**

- What documents are essential for you to prepare for the implementation of the ISO ICSR standard based on the ICH E2B(R3) Implementation Guide and the EU ICSR Implementation Guide
- How to contact the Service Desk in case you require support or further information

# Overview Module PhV-M2a

- Introduction to this training module
- What is the origin of the ISO ICSR and ICH E2B(R3) standard?
- What are the legal basis and benefits for the use of the new ICSR standard?
- What are the key changes for the operation of pharmacovigilance?
- How can I get supporting information?

## Summary of PhV-M2a

We are now at the end of the training module PhV-M2a, which provided you to basis for:

- Understanding the origin of the ISO ICSR and ICH E2B(R3) standard and the ICH E2B(R3) Implementation Guide (IG)
- Describe the legal basis and the benefits for the use of the ISO ICSR/ICH E2B(R3) guideline
- Recognise the impact on pharmacovigilance with the move from the ICH E2B(R2) guideline /M2 format to the E2B(R3) guideline/ISO ICSR standard
- Describe changes to the business rules as outlined in the EU ICSR IG
- Understand where to obtain supporting information





## Feedback

- Please provide us with feedback on this E-learning module and any attendant guidance documents you have viewed by taking the EMA training survey.
- The survey is accessible via [this link](#).

Save a backup on your local computer (disable if you are using a public/shared computer)

### EudraVigilance training feedback survey


Fields marked with \* are mandatory.

**Disclaimer** ✕

*The European Commission is not responsible for the content of questionnaires created using the EUSurvey service - it remains the sole responsibility of the form creator and manager. The use of EUSurvey service does not imply a recommendation or endorsement, by the European Commission, of the views expressed within them.*

Pages Training Details Training Feedback

## Training Details



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## Acronyms (1)

<b>Acronym</b>	<b>Description</b>
CDISC	Clinical Data Interchange Consortium
CEN	European Committee for Standardization
CV	Controlled Vocabulary
EEA	European Economic Area
EU	European Union
EV	EudraVigilance
HL7	Health Level 7



## Acronyms (2)

<b>Acronym</b>	<b>Description</b>
ICH	International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use
ICSR	Individual Case Safety Reports
IDMP	Identification of Medicinal Products
IHTSDO	International Health Terminology Standards Development Organisation
IG	Implementation Guide
ISO	International Organization for Standardization



## Acronyms (3)

<b>Acronym</b>	<b>Description</b>
MAH	Marketing authorisation holder
MedDRA	Medical Dictionary for Regulatory Activities
MPID	Medicinal Product Identifier
NCA	National competent authority
OID	Object Identifier
PHPID	Pharmaceutical Product Identifier
PhV	Pharmacovigilance



## Acronyms (4)

<b>Acronym</b>	<b>Description</b>
SDO	Standards Development Organisation
UCUM	Unified Code for Units of Measure



# Thank you for your attention

## Further information

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