



HL7 Individual Case Safety Report

43rd
Annual Meeting



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Session Outline

- Overview of the HL7 Individual Case Safety Report Standard (ICSR)
- Comparison between the HL7 and ICH ICSR
- Next Steps



HL7 Individual Case Safety Report

- HL7 ICSR is a standard for the exchange for adverse event and product problems
 - Release 1 ANSI accredited HL7 standard for human pharmaceuticals and devices
 - Release 2 Draft Standard for Trial Use (DSTU) covering additional products approved by HL7 January 2007
- Supports reporting of adverse events and product problems to a variety of organizations:
 - Public health: State, local, federal
 - Patient safety or quality improvement organizations
 - Regulatory or other statutory agencies



ICH and HL7 ICSR Comparison

ICH ICSR

- Limited scope
 - Related to Pharmacovigilance
- Limited in design
 - Capturing events and outcomes as a result of a substance administration

HL7 ICSR

- Broader scope
 - Related to Patient Safety
- Broader in design
 - Capturing actions and relationships between patients and associated persons and anyone involved in their healthcare



ICH and HL7 ICSR Comparison

ICH ICSR

- Mandatory reporters
 - Supports pre and post market adverse event reporting by mandatory reporters only
- Terminology fixed
 - Clinical information requires the use of MedDRA

HL7 ICSR

- Mandatory and Voluntary reporters
 - Supports pre and post market adverse event and product problem reporting for both voluntary and mandatory reporters
- Terminology Flexible
 - Clinical information terminology is flexible



ICH and HL7 ICSR Comparison

ICH ICSR

- Limited information exchange
 - Designed to support EDI reporting between pharmaceutical companies and regulatory authorities based upon the company's core safety database
- Limited perspective
 - ICH regional perspective, based upon ICH participants: pharmaceutical and regulatory

HL7 ICSR

- Broader information exchange
 - Designed to support integration of clinical decision support triggers automated reporting based upon stored electronic health record data
- Broader perspective
 - Global perspective and interests: clinical, pharmaceutical, quality improvement, academic, regulatory, vendors



ICH and HL7 ICSR Comparison

ICH ICSR

- Limited product support
 - E2B(M) supports human drugs and biologics (excluding vaccines)
 - E2B(R) plans to support human vaccines
- Limited case reporting
 - Individual case reporting

HL7 ICSR

- Broad product support
 - ✓ Human and Animal Drugs Biologics including vaccines
 - ✓ Medical devices and combination products
 - ✓ Food, food additives, dietary supplements and cosmetics
- Broad case reporting
 - Group case reporting
 - Individual case reporting



HL7 ICSR Comparison Summary

- Supports a wider variety of product classifications
- Supports flexible implementations
- Supports pre and post market surveillance
- Supports integration with Electronic Health Record systems



HL7 ICSR Structure

- HL7 ICSR is comprised of three components:
 - ICSR Base Model
 - Product Intervention (Use)
 - Product Information



HL7 ICSR Structure

- ICSR Base Model captures:
 - Administrative Information
 - Investigative Subject and Associated Person Information
 - Reaction and Case Narrative
 - Medical and Medications History
 - Clinical Trial Enrollment



HL7 ICSR Structure

- **Product Intervention** captures:
 - Information about how the product was used or administered to the investigative subject or associated persons
 - Release 2 created a generic structure with flexibility to support requirements for a variety of product types



HL7 ICSR Structure

- **Product Information** captures:
 - Detailed information about the product (such as its ingredients, manufacturer, packaging, approval and characteristics)
 - Release 2 generic model supports a wider variety of product classifications including combination products



HL7 ICSR Supports FDA Initiatives

- The HL7 ICSR supports FDA vision of a consolidate infrastructure for report receipt and cross-product analyses by:
 - Providing a common format for consistent data capture
 - Providing flexibility for harmonizing domains using common terminology



HL7 ICSR Next Steps FDA

- Continue pilot testing with ICSR Release 1 for electronic device reporting
- Continue agency harmonization of data elements and terminology requirements
- Coordinate HL7 ICSR Release 2 DSTU testing



HL7 ICSR Next Steps

National and International

- Evaluation of HL7 ICSR in the Health Information Technology Standards Panel (HITSP)
- Evaluation of HL7 ICSR in ISO activity
- Continue participation in HL7 and federal government initiatives to harmonize ICSR with clinical trial reporting:
 - ✓ NIH Federal Adverse Event Task Force (FAET)
 - ✓ HL7 *RCRIM and *CDISC *BRIDG Harmonization

- NIH = National Institutes of Health
- RCRIM = Regulated Clinical Research Information Management Technical Committee
- CDISC = Clinical Data Interchange Standards Consortium
- BRIDG = Biomedical Research Integrated Domain Group



HOW CAN YOU CONTRIBUTE?

- Become active in HL7 or subscribe to the HL7 Patient Safety Special Interest Group List server
- Contribute requirements to the ISO/HL7/CEN/ICH Consortium project through your appropriate PhRMA representatives
- Participate in FDA DSTU Testing





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