

ISPOR Real-World Evidence Summit 2024

17 November | Barcelona, Spain

#ISPORSummit



Our Mission

To promote health economics and outcomes research excellence to improve decision making for health globally.



ISPOR RWE Summit



Barcelona, Spain

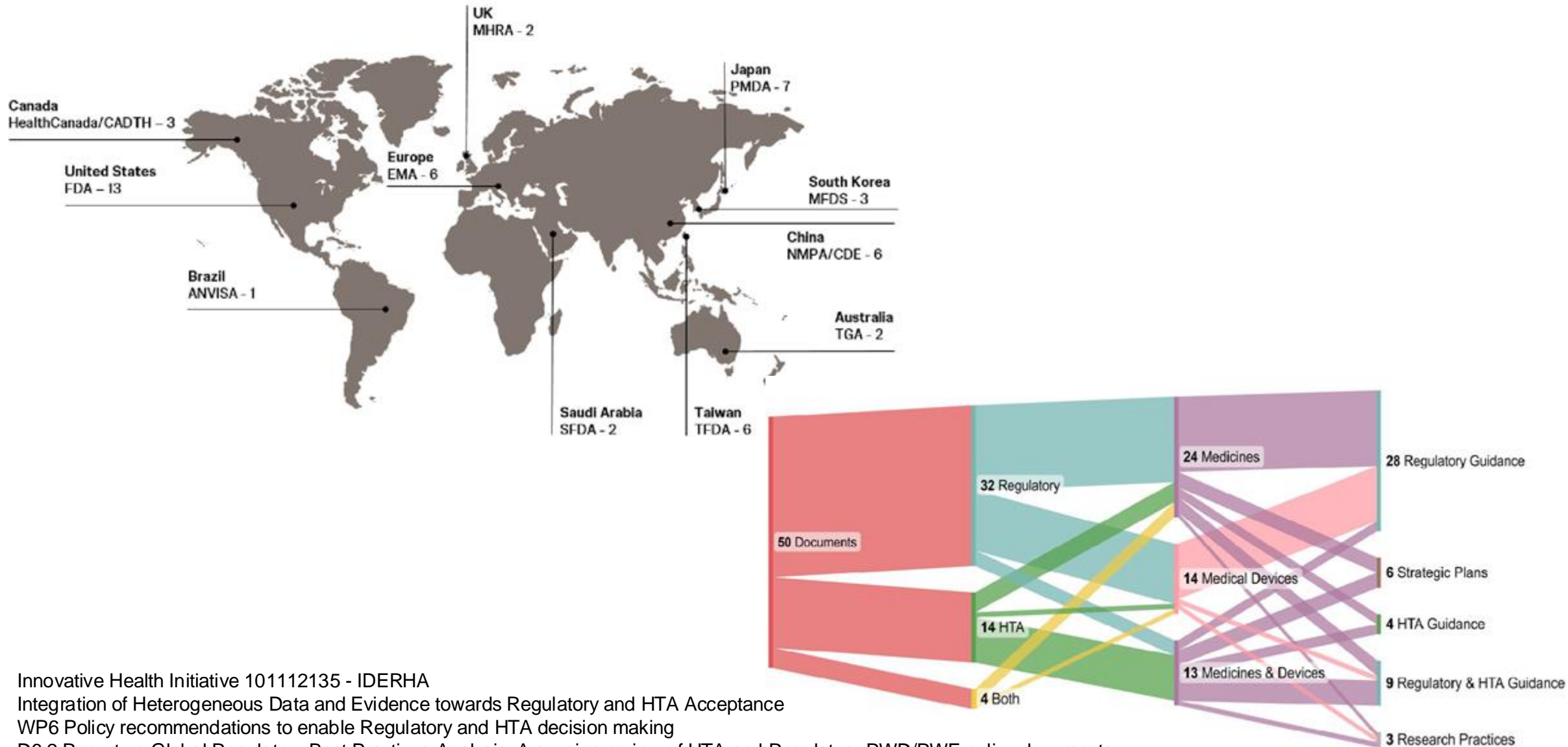
Sunday 17th November, 2024

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50+ Guidance Documents on RWE from Regulatory and HTA around the world between 2017-2024

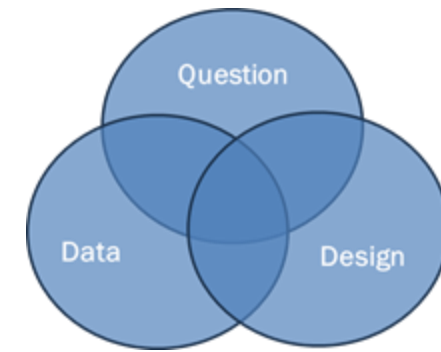


Innovative Health Initiative 101112135 - IDERHA
 Integration of Heterogeneous Data and Evidence towards Regulatory and HTA Acceptance
 WP6 Policy recommendations to enable Regulatory and HTA decision making
 D6.2 Report on Global Regulatory Best Practices Analysis: A scoping review of HTA and Regulatory RWD/RWE policy documents

ICH M14 General principles on plan, design and analysis of pharmacoepidemiological studies that utilize RWD for safety assessment of medicines

- Released for public comment May 30 2024
- “This document outlines recommendations and high-level best practices for the conduct of these studies, to streamline the development and regulatory assessment of [RWE] study protocols and reports. These recommendations and practices also seek to improve the ability of the study protocol and/or results to be accepted across health authorities and support decision-making in response to study results.”

Triad of Question, Data, Design



1. Articulate the study question

- the research question must align with the issue that the end user is trying to address
- target trial emulation table/estimand framework/PICOT is a starting point

2. Consider fitness of data

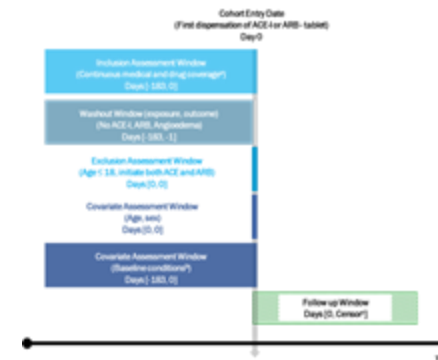
- the data must be reliable and relevant to address the question
- feasibility and data quality checks are recommended

3. Transparently operationalize design and analysis

- use methods that are appropriate for validly addressing the question using the proposed data
- consider sources of systematic bias: *confounding, measurement, selection*

Question + Data + Design

	RCT	RWE
Exposure		Green
Comparator		Yellow
Eligibility Criteria		White
1		Orange
2		Green
3		Green
Outcome		Light Green
Follow up start (index)		Orange
Follow up end		Green
Causal contrast		Orange
Statistical Analysis		Green



HHS Public Access
 Author manuscript
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**Assessing and Interpreting Real-World Evidence Studies:
 Introductory Points for New Reviewers**

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Abstract
 Nonrandomized real-world evidence (RWE) studies are conducted using healthcare data collected as part of clinical practice. As RWE studies are increasingly considered for regulatory, coverage, and other clinical decision making, non-specialists will find themselves in the position of assessing the validity of RWE studies, a field that may be less familiar to them. This introductory guide provides conceptual guidance for reviewing RWE studies and is particularly directed at professionals for whom this is new or whose prior experience has primarily been in reviewing randomized controlled trial evidence. We focus on RWE studies that make causal inference, evaluating whether one treatment option is better, worse, or neutral compared to another. Although we provide citations to direct the reader to resources with more details on complex issues, this guide cannot substitute for years of training and expertise in the field.

Where to begin?
 Imagine that you are given a real-world evidence (RWE) study and told to evaluate whether

(plus other items)

4. Early engagement

5. Provide a protocol with

- **graphical representation of study design**
- **conceptual and operational definitions of key study parameters**
- **performance characteristics of algorithms**
- **data quality assessment, provenance, strengths and limitations**
- **plan for missing data**
- **statistical analysis plan**
- **documented amendments**
- **pre-specified sensitivity analyses that evaluate robustness of evidence and potential threats to validity**

6. Pre-register protocol

7. ...

(plus other items)

4. Early engagement

5. Provide a protocol with

- **graphical representation of study design**
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6. Pre-register protocol

7. ...



8.2 Formatting and Content of Study Documents for Submission to Regulatory Authorities

...In the absence of specific formatting and content required by regulators, sponsors may utilize frameworks developed by the scientific community as a guide for document development, such as ISPE/ISPOR's HARmonized Protocol Template to Enhance Reproducibility (HARPER).



HARmonized **P**rotocol to **E**nhance **R**eproducibility



Joint Task Force

Co-led by Shirley Wang, Anton Pottegård, William Crown



Pharmacoepidemiology and Drug Safety
Value in Health
2023 9

RWE at ISPOR

- **2024 – 2025 Top 10 HEOR Trends: #1 Real-World Evidence**
- **Scientific Priorities** – As part of ISPOR’s Strategic Plan for 2030, ISPOR has a desire to build on the strong foundation of scientific research excellence to lead the definition, measurement, and use of value to improve healthcare decision making
 - **Strategic Initiative** – Improving standards and practice for the collection and analysis of real-world data
 - **Transparency Initiative:** Collaborative effort with ISPOR – ISPE – Duke Margolis Center for Health Policy – National Pharmaceutical Council
 - Real-World Evidence Registry: A fit-for-purpose platform to register study designs before they begin work to facilitate the transparency needed to elevate trust in study results (<https://osf.io/registries/rwe>)

RWE at ISPOR

- **Member Engagement**

- RWE Special Interest Group: over 600 members
 - Ongoing Key Project (SLR): “Assessment of Real-World Data Elements Describing Social Determinants of Health in Outcomes Research in the United States”
- Task Forces generating 7 Good Practice Reports as of June 2024
- Conference Short Courses
 - “Developing Decision-Grade Real-World Evidence”
 - Real-World Evidence in External Control Arms: Driving Innovation in Drug Development”
 - “Causal Inference and Causal Estimands From Target Trial Emulations Using Evidence From Real-World Observational Studies and Clinical Trials”

Session 1:

Unleashing the latent power of RWE in decision-making

Session 2:

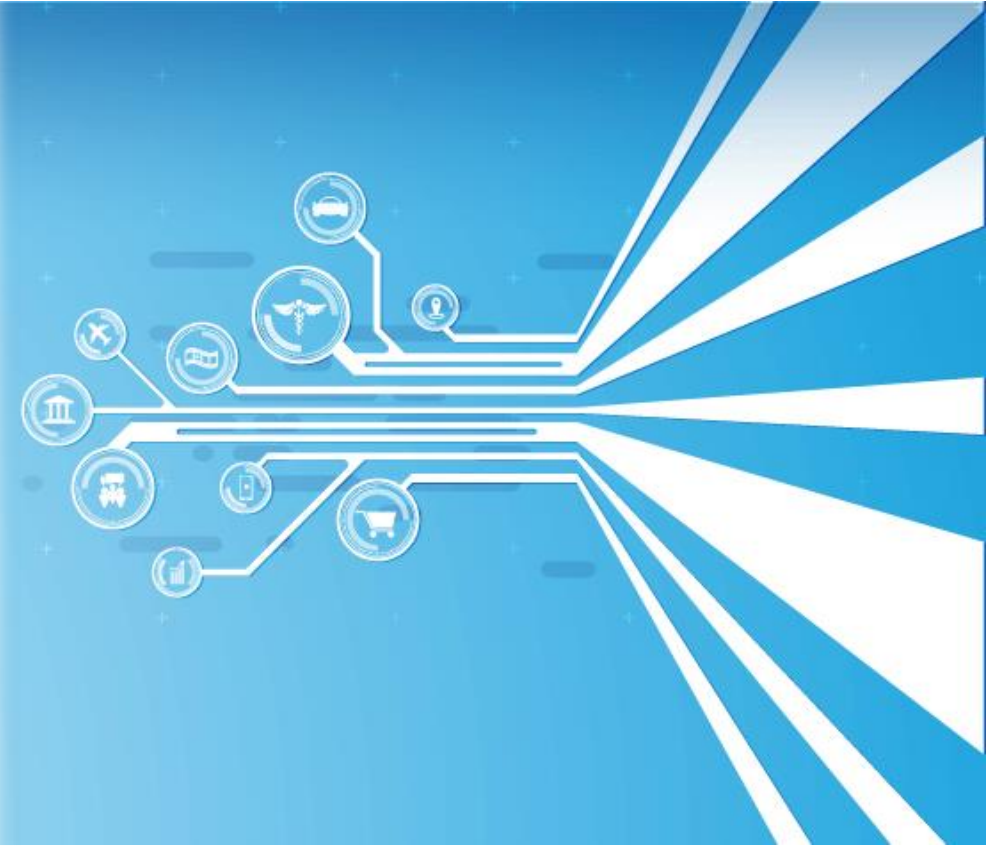
Methods for Causal Inference Using RWD

Session 3:

Embracing Diversity and Tackling HTE in Data, Methods, and Jurisdictions

Session 4:

Overcoming Obstacles: Charting the Path Ahead



Session 1:

Unleashing the Latent Power of RWD and RWE in Decision-Making



Maria Kamusheva, PhD
Sofia Medical University
Sofia, Bulgaria

What is RWE?
Why is it needed?
Where is it needed?



Steve Williamson, MS
National Institute for Health and Care Excellence
London, England, United Kingdom

Recent experiences from NICE
Successes and lessons learned



Ashley Jaksa, MPH
Aetion, Inc
Boston, MA, USA

What gaps to bridge?
Overcoming challenges