

REAGAN-UDALL

FOR THE FDA

Innovation in Medical Evidence and Development Surveillance (IMEDS)

THE RESEARCH RESOURCE

October 30, 2024 | 1:30-2:30 PM ET



Welcome

Carla Rodriguez-Watson, PhD, MPH

Director of Research Reagan-Udall Foundation for the FDA





Due to the size of the meeting, your cameras will be off and microphones muted.



If you'd like to ask a question, enter it in the Zoom Q&A.



This webinar is being **recorded**.

Virtual Meeting Housekeeping



The recording, along with the slide deck and transcript, will be available at www.ReaganUdall.org early next week.

Agenda

1:30 PM ET | Welcome

1:33 PM ET Keynote

1:40 PM ET | An Introduction to IMEDS

1:55 PM ET | Panel Discussion

2:25 PM ET Closing Remarks

2:30 PM ET Adjourn





Keynote

Jacqueline Corrigan-Curay, J.D., M.D.

Principal Deputy Center Director Center for Drug Evaluation and Research (CDER), FDA

Introduction to IMEDS



Claire (Hsiao-Ching) Huang, PhD, MPH

Research Scientist
Reagan-Udall Foundation for the FDA



Georgia Peeples, MPH

Program Coordinator Reagan-Udall Foundation for the FDA



How IMEDS Began

2013



Launched in 2013 by Reagan-Udall Foundation for the

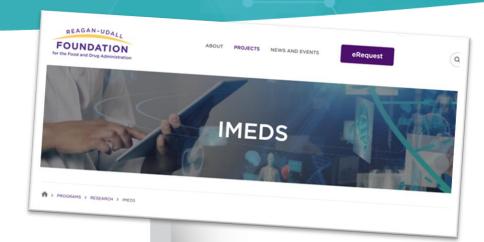
FDA



Innovation in Medical Evidence and Development Surveillance (IMEDS)





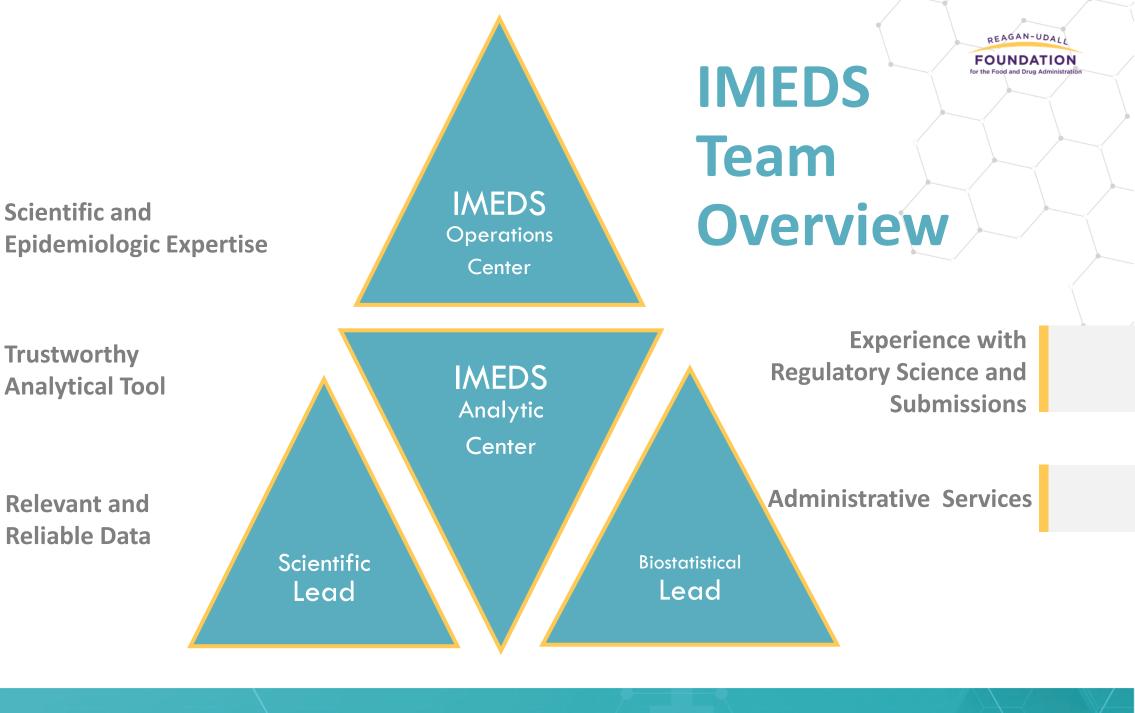


IMEDS Leverages Sentinel Capabilities

Innovation in Medical Evidence and Development Surveillance (IMEDS)

- Leverages Sentinel through IMEDS for evidence generation
- Utilize Sentinel Common Data Model and Sentinel Queries and Tools







The IMEDS Network

- CVS Healthspire Life
 Sciences Solutions
- Harvard Pilgrim Health Care
- Carelon Research, Inc.
- Health Partners Institute
- Humana Healthcare
 Research

- Kaiser Permanente Washington
 Health Research Institute
- Marshfield Clinic Health Systems
- Vanderbilt University Medical
 Center
- University of Massachusetts
 Chan Medical School Division of Health Systems Science





Distributed Network Framework

- Data protection & privacy
- Partner autonomy
- Central coordination for contracting, administration, and analysis

Experienced Network Partners

- Deep knowledge of native data
- Scientific expertise
- Geographically representative of all US states and territories



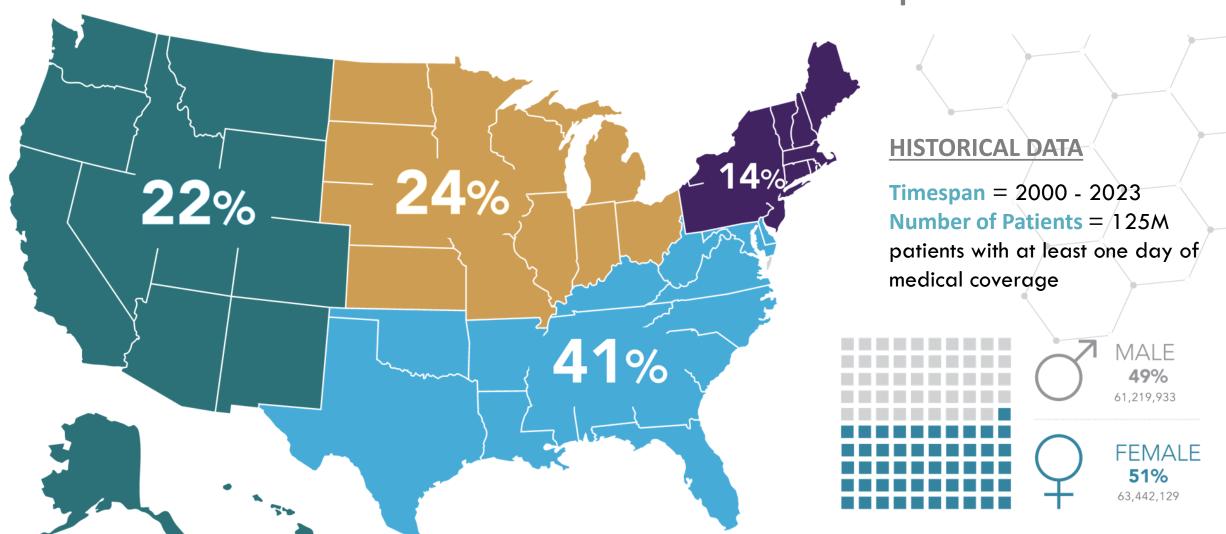


Trusted Analytics Tools

- · Developed by FDA Sentinel
- Ensures relevance & reliability of results

IMEDS

IMEDS Population Data



What Can IMEDS Do?





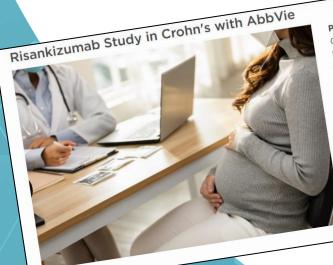
The Role of Real-World Data (RWD) in Research

Randomized, Interventional Study		Nonrandomized, Interventional Study	Nonrandomized, Noninterventional Study
Traditional randomized trial using RWD in planning	Trial in clinical practice settings, with pragmatic elements	Externally controlled trial	Observational study
RWD used to assess enrollment criteria and trial feasibility RWD used to support selection of trial sites	Selected outcomes identified using, e.g., health records data, claims data, or data from digital health technologies RCT conducted using, e.g., electronic case report forms for health records data or claims data	Single-group trial with external control group derived from RWD	Cohort study Case-control study Case-crossover study
		Generation of RWE	
	Increasing reliance on RV	VD	

Reliance on RWD in Representative Types of Study Design.

RCT denotes randomized, controlled trial; RWD real-world data; and RWE real-world evidence.

IMEDS Post Market Requirement Studies



Project Title: Pregnancy Exposures and Outcomes in Women with Crohn's Disease Treated with Risankizumab: A Cohort Study Utilizing Large Electronic Healthcare Databases with Mother-Baby Linkage in

the United States

project Sponsor: AbbVie project Status: Current product: Risankizumab

Summary: To help fulfill a requirement from the European Medicines Conditions: Crohn's Disease

Agency (EMA), IMEDS was contracted to help design and execute a study to assess the safety of Risankizumab among women with

Crohn's Disease during pregnancy. The risk of pre-specified pregnancy and outcomes will be estimated in pregnant women with Crohn's Disease and are exposed to Risankizumab, as well as in those exposed to comparator biologics (anti-tumor necrosis factor (TNF), integrin receptor antagonist biologics or their biosimilars



Ertugliflozin Study with Merck



Project Title: Post-authorization safety study to assess the risk of diabetic ketoacidosis among type 2 diabetes mellitus patients treated with ertugliflozin compared to patients treated with other

Project Sponsor: Merck Project Status: Current Product: Ertugliflozin

Conditions: Diabetic ketoacidosis, Type 2 diabetes mellitus Summary: The Reagan-Udall Foundation for the FDA (FDA Foundation PI: Carla Rodriguez-Watson) was recently awarded a contract to leverage data from the Innovation in Medical Evidence Development and Surveillance (IMEDS) Network to continue implementation of a study titled: "Post-authorization safety study to assess the risk of diabetic ketoacidosis among type 2 diabetes mellitus patients treated with ertugliflozin compared to patients treated with other antihyperglycemic agents (AHA)" (EU PAS Register number: EUPAS31378). This work is being conducted to fulfill a requirement from the European Medicines Agency (EMA). The research activities are a collaborative effort between the Merck research team, the IMEDS Operations Center at FDA Foundation, the IMEDS Analytic Center at the Harvard Pilgrim Health Care Institute. and participating IMEDS Network Partners.

 Click to view the European Union electronic Register of Post-Authorisation Studies (EU PAS) register number (EUPAS31718)

Risankizumab Study in Psoriasis with AbbVie

Project Title: Pregnancy Exposures and Outcomes in Women with Psoriasis Treated with Risankizumab: A Cohort Study Utilizing Large Electronic Healthcare Databases with Mother-Baby Linkage in the

Project Sponsor: AbbVie Project Status: Current Product: Risankizumab

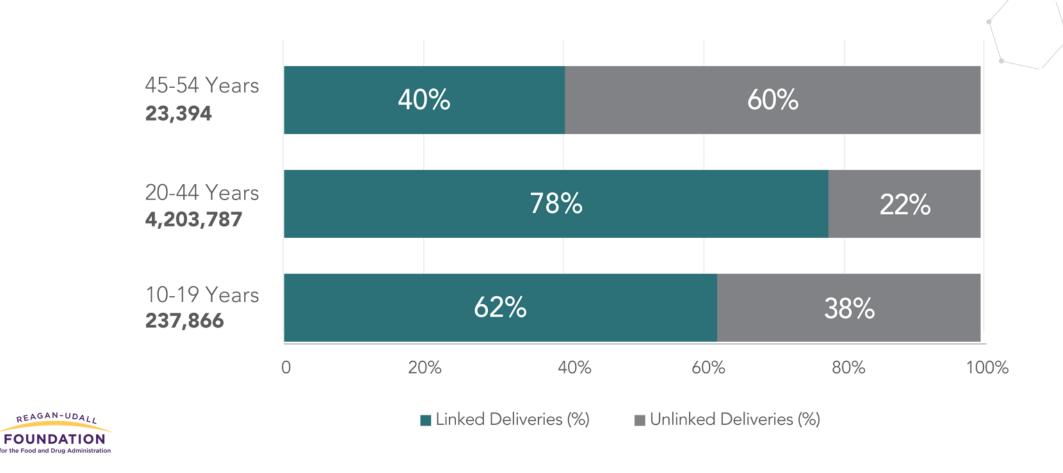
Conditions: Psoriasis, Pregnancy

Summary: To help fulfill a requirement from the European Medicines Agency (EMA), IMEDS was contracted to help design and execute a study to assess the safety of Risankizumab among pregnant women with psoriasis. The risk of pregnancy, birth and infant outcomes will be estimated in pregnant women exposed to Risankizumab, as well as in those exposed to comparator biologics including anti-tumor necrosis factor (TNF), interleukin (IL)-17 biologics or their biosimilars (comparator biologic-exposed group).



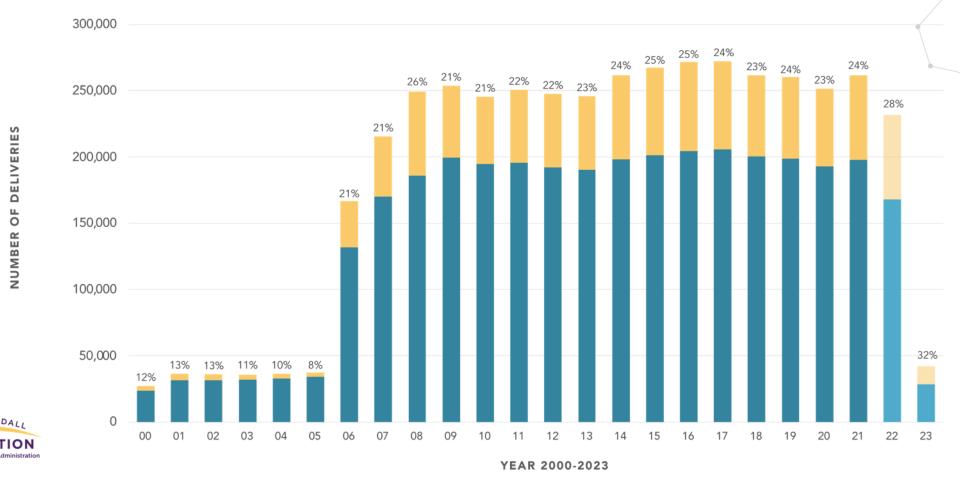
IMEDS and Pregnancy Data

Linked and Unlinked Deliveries in IMEDS Network, by Mother's Age



IMEDS and Pregnancy Data

Numbers of Deliveries in IMEDS Network, by Year and Linkage Status







Beyond the Post Market Research Studies



Real- World Evidence Generation

- Descriptive studies
- Utilization studies
- Hypothesis generation
- Safety and effectiveness studies

Regulatory Tool Project

- Pregnancy ACE-IT
- Reliability and Relevance of database (QCARD)



Regulatory Tool Example:

The Algorithm CErtainty Tool (ACE IT)

OBJECTIVE:

To inform the user's judgement to determine the fitness of an algorithm for use as an endpoint in a target safety study of the user's design

CLINICAL AREAS OF INTEREST:

- MACE
- Pregnancy outcome
- Acute/Severe Liver Injury
- Cancer
- Kidney Injury
- Serious Infections resulting in medical intervention
- Depression/Suicide

Panel Discussion









IMEDS Webinar

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Institute



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Palmsten, ScD
Senior Research Investigator
HealthPartners Institute



Ryan D.
Kilpatrick, PhD
Vice President and Head of
Global Epidemiology
AbbVie, Inc.

PANEL DISCUSSION



Closing Remarks

Susan C. Winckler, RPh, Esq.

Chief Executive Officer Reagan-Udall Foundation for the FDA

Summary

- Relevant and Reliable Data
- Experience with Regulatory Science and Submissions
- Scientific and Epidemiologic Expertise
- Administrative Services
- Exciting Research Opportunities
- Large, geographically representative database

