GetReal Faster: Advancing Real-World Data and Evidence in Global Contexts

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Disclaimer

- Mark McClellan is an independent director on the boards of Alignment Healthcare, Cigna, Johnson & Johnson, and PrognomIQ, and receives advisory fees from Arsenal Capital, Blackstone, GRAIL, MITRE, and Resilience Manufacturing.

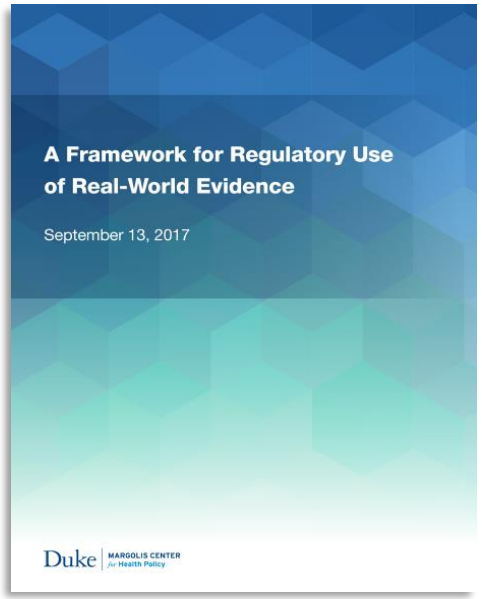
Overview

- **Where Are We Now? Keys to Progress From The U.S. Experience**
  - Public-private momentum: bipartisan legislation, regulatory frameworks, and demonstration projects
  - Broad stakeholder collaboration: Duke-Margolis RWE Collaborative and other collaborative efforts supporting and informing the process
- **Where Are We Going?**
  - Shared motivating vision for high-impact, systematic, confident RWE – regulatory applications plus more
  - Building an ecosystem of "fit for purpose" data infrastructure to support lifecycle RWE
  - Validated, well-developed "fit for purpose" methods that are well understood – and keep getting better
- **How Do We Get There?**
  - People, platforms, and policy to advance RWE applications and platforms
  - Key role for multistakeholder collaboratives
- **How Do We Get There Together? Opportunities for Faster Progress Through Global Coordination and Convergence**

Where are we now?

21st Century Cures Act of 2016

- **Building on the Sentinel Initiative and other public-private collaborations, FDA established a program to evaluate the potential use of real-world evidence (RWE) to:**
  - **Support a new indication for a drug approved under section 505(c)**
  - **Satisfy post-approval study requirements**
- **Draft framework issued in December 2018:**
  - **Describe sources of RWE, challenges, pilot opportunities, etc.**
- **Draft guidance for industry issued in Sep, Oct, Nov, Dec 2021**
- **Standard for substantial evidence remains unchanged; commitments met for Prescription Drug User Fee Act (PDUFA) VI; new Advancing RWE initiatives in PDUFA VII**



Generating RWE Fit for Regulatory Purpose

Regulatory Context

What specific decision is FDA considering?

- New indication
- Labeling revision
- Safety revision
- Benefit-risk profile

Clinical Context

Can the clinical question be reliably addressed with RWE?

- Prevalence of the disease
- Clinical equipoise
- Expected treatment effect size
- Relevant prior evidence

Data Considerations

Is the real-world dataset fit for regulatory purpose?

1. **Is the data relevant?**
   - Representative of the population of interest
   - Contains key variables and covariates
2. **Is the data of adequate quality?**
   - Minimal missing data
   - Data reliability and validity is satisfactory for study purpose
   - Known provenance and transparency of data processing

Methods Considerations

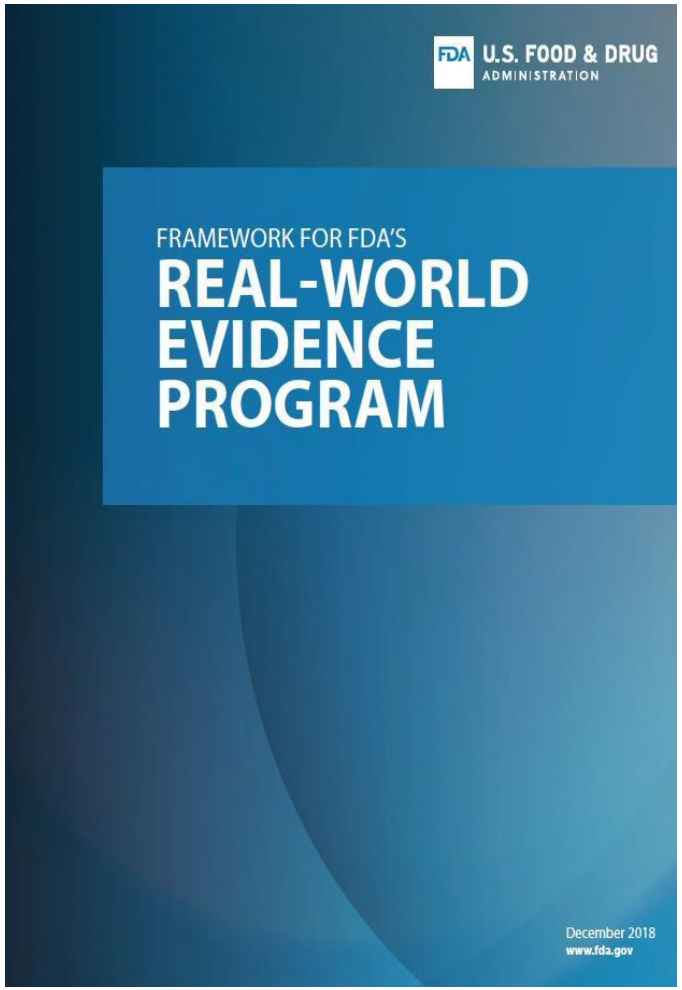
Are the methodological approaches of sufficient rigor?

1. **Are the methods credible?**
   - Appropriate analytic approach
2. **Can the approach produce actionable evidence?**
   - Interplay of body of clinical evidence and tolerance for uncertainty

Fit-for-purpose RWE

Matching data sources and methods to answer specific clinical and regulatory questions determines applicability of RWE for different regulatory uses

FDA RWE Framework (2018)



- **Applies to Center for Drug Evaluation and Research (CDER), Center for Biologics Evaluation and Research (CBER), & Oncology Center of Excellence (OCE)**
- **Key components for assessing submissions with RWE:**
  - **Real world data's fitness for use**
  - **Appropriate and rigorous study designs**
  - **Ensuring reliable applications of regulatory processes and study conduct**

FDA Draft RWE Guidance – Sep-Dec 2021

Guidance for Industry

DRAFT GUIDANCE

Real-World Data: Assessing Electronic Health Records and Medical Claims Data To Support Regulatory Decision-Making for Drug and Biological Products

Real-World Data: Assessing Registries to Support Regulatory Decision-Making for Drug and Biological Products

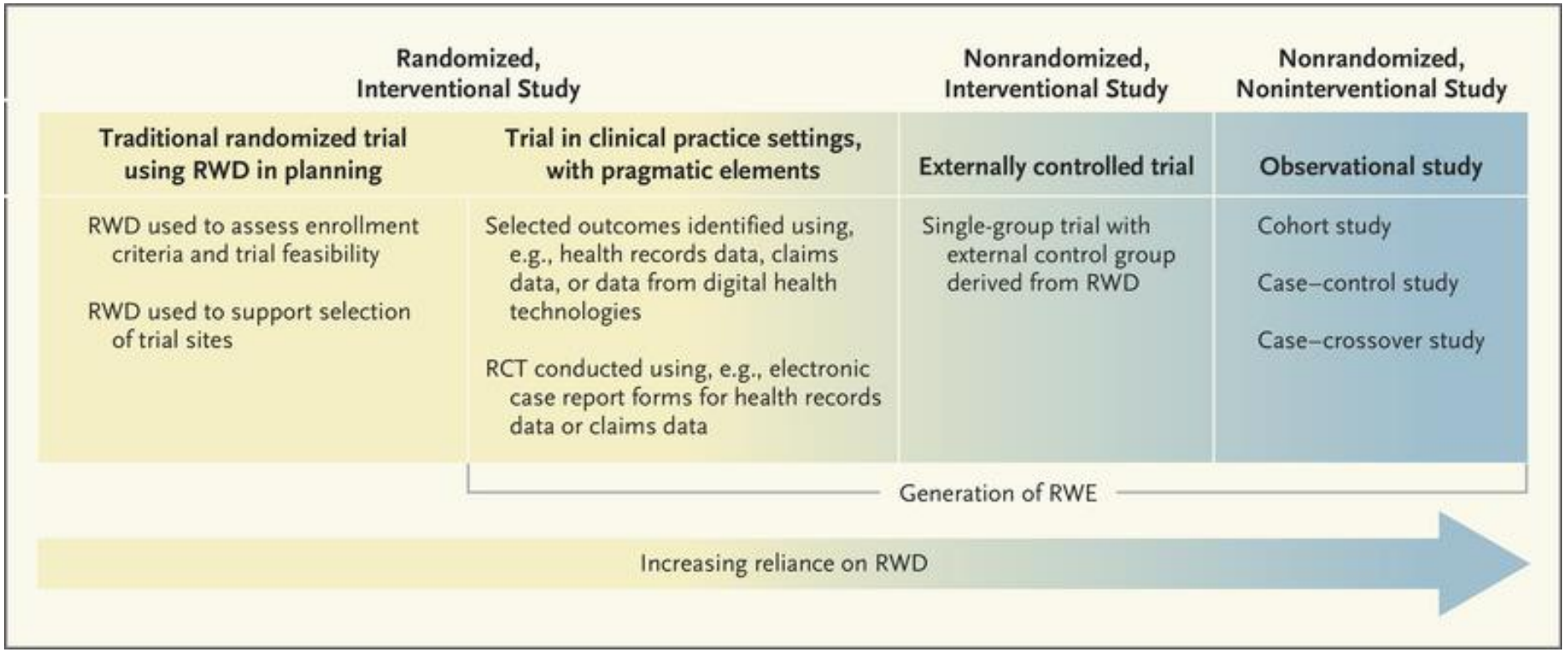
Data Standards for Drug and Biological Product Submissions Containing Real-World Data

Considerations for the Use of Real-World Data and Real-World Evidence to Support Regulatory Decision-Making for Drug and Biological Products

https://www.fda.gov/science-research/science-and-research-special-topics/real-world-evidence

Real-World Evidence — Where Are We Now?

John Concato, M.D., M.P.H., and Jacqueline Corrigan-Curay, J.D., M.D.



Reliance on RWD in Representative Types of Study Design.

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

RWE Demonstration Projects – Informal Categories

- Quality
- Relevancy
- Linkage

- Aspects of trial design
- Assessments of non-interventional methods

- Common data models
- Analytics
- Mobile technologies

Growing Range of Regulatory RWE Applications

- Post market safety surveillance studies (long established use of RWE)
- Supplemental applications for label expansions (FDA's 2018 framework)
- Moving towards primary evidence
  - Recent precedence for leveraging observational studies as "adequate and well-controlled" (Concato and Corrigan-Curay, 2022)
  - Emerging opportunities for postmarket "label deepening" in support of precision medicine and informing care and payment models
    - Due to improving study methods and data reliability

Real-World Evidence Uses Are Expanding

Lifecycle Approach for Real-World Data and Evidence

1. Medical Product Development

- Inform biological understanding of disease
- Identify unmet need
- Drug selection
- Improve RCT recruitment efficiency

2. Regulatory Review

- Inform PM safety
- Inform new approvals in rare diseases
- Inform indication and labeling decisions

3. Care Delivery

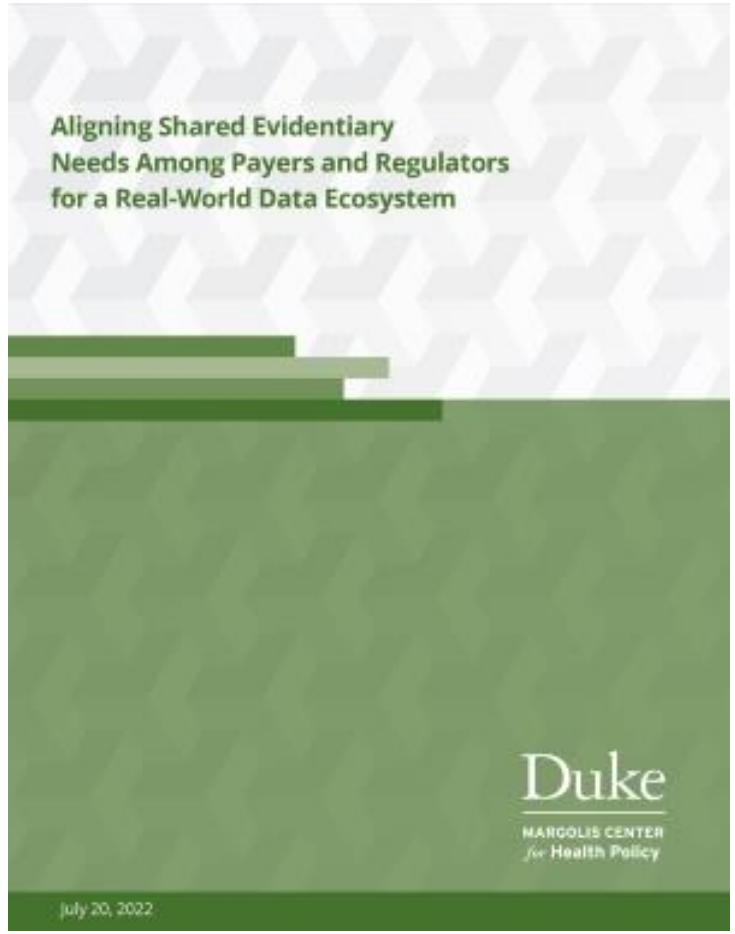
- AI-enabled CDS to personalize dx and tx decisions
- Support patients' engagement in their own care decisions
- Help drive higher-value care

4. Value-Based Payment and Coverage

- Increase stakeholder understanding of value of technology by incorporating RWE
- "De-risk" payment for high cost treatments to increase access

Shared Evidentiary Opportunities: FDA & CMS

- Duke-Margolis 2021 white paper: "Aligning Shared Evidentiary Needs Among Payers and Regulators for a Real-World Data Ecosystem"
- Duke-Margolis is now exploring and disseminating evidentiary opportunities within the FDA Accelerated Approval pathway and CMS Coverage with Evidence Development program
- Recent CMS announcement about price negotiations under the Inflation Reduction Act: “foundation” of price negotiation will be clinical impact of product including comparative effectiveness, intended to drive further investment in RWE on this topic



Duke-Margolis RWE Activities

- Duke-Margolis RWE Collaborative
  - Comments on all recent FDA RWE guidance documents
  - Regulatory Acceptability of RWE
  - Learning Health Care Systems
  - Master RWE Protocols
  - Real-World Efficacy: Patient Subgroups
  - Causal Inference and RWE
  - Shared Evidentiary Opportunities: Regulators and Payers
  - Clinical Trial Diversity
  - Patient-Generated Health Data and Genomic Data
  - International harmonization of RWE definitions and standards

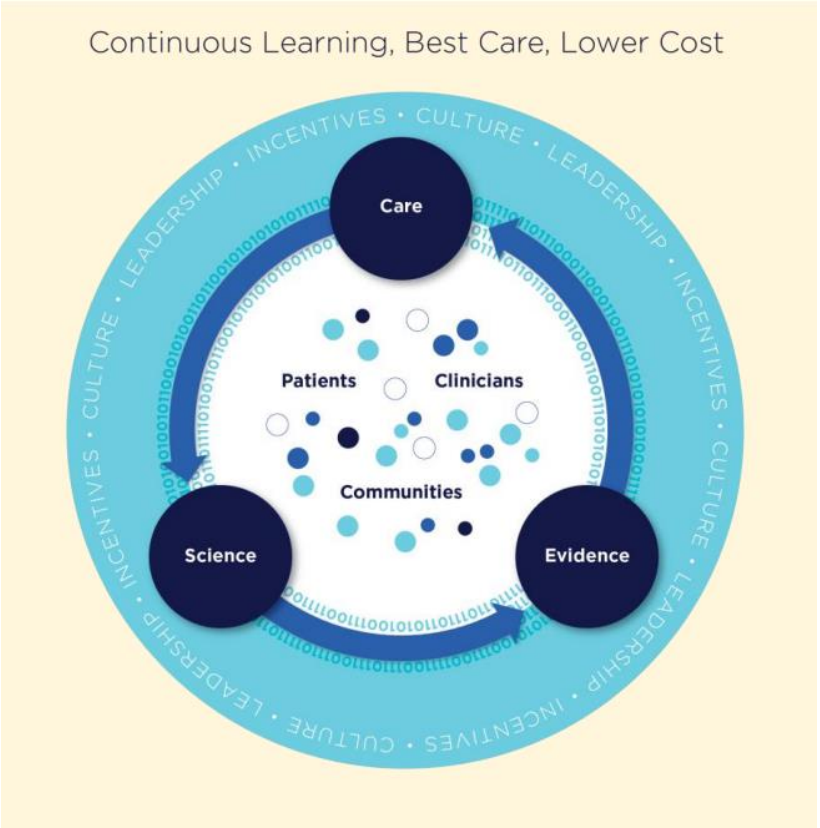
- Recent FDA-supported Duke-Margolis convening and reports related to RWE
  - Understanding the Use of Negative Controls to Assess the Validity of Non-Interventional Studies of Treatment Using Real-World Evidence
  - The State of Real-World Evidence Policy
  - Fourteenth Annual Sentinel Initiative Public Workshop
  - Lessons Learned from Trial Replication Analyses: Findings from the DUPLICATE Demonstration Project

Where are we going?

Vision: Learning Health Care System with Robust Evidence Generation Infrastructure

- Key needs for developing a robust evidence generation infrastructure:
  - Engage participants and clinicians
  - Outcome measurement and payment that aligns RWE ecosystem with better participant/patient outcomes
  - Transparent, shared information across the ecosystem
  - Quality by design to have the right amount of oversight to optimize useful research results
  - Data quality and societal norms for data sharing and reciprocal obligations of data aggregators

INSTITUTE OF MEDICINE
OF THE NATIONAL ACADEMIES



FDA

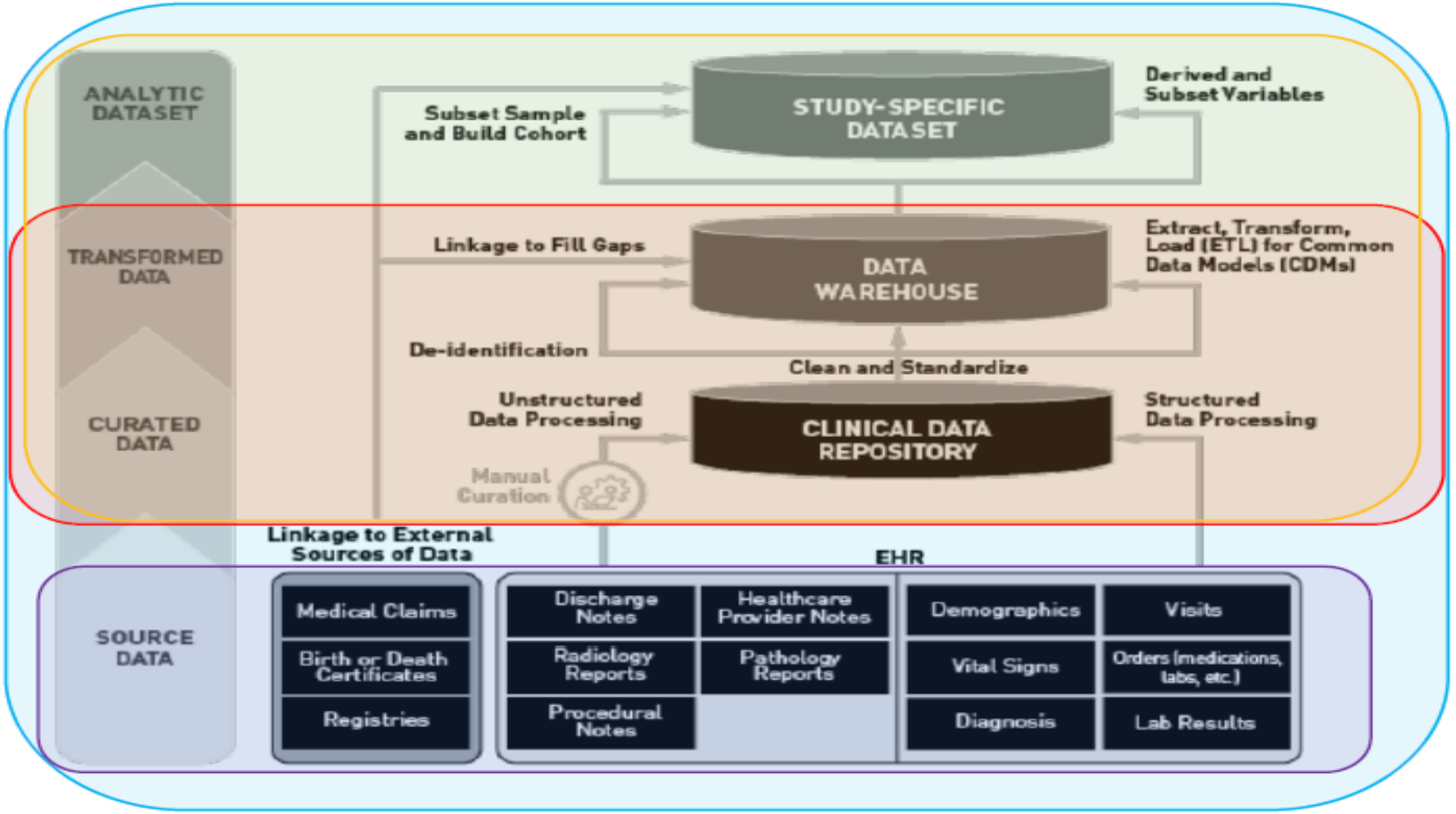
Vision for RWD

Trust and Transparency

Stakeholder Alignment and Shared Understanding of RWD

Standardization, Technology, and Analytical Methods

Overarching Data Considerations



https://www.fda.gov/media/152503/download

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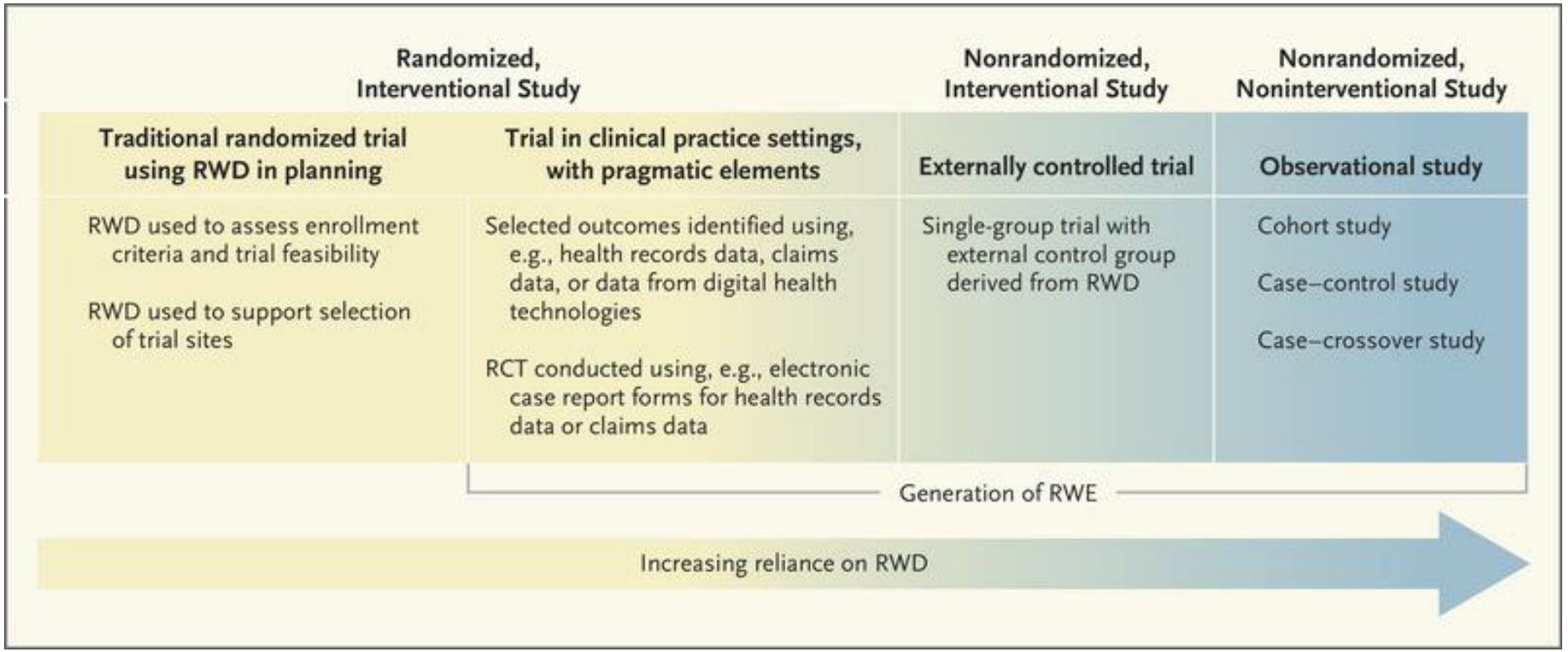
Real-World Evidence — Where Are We ~~Now?~~ Going?



Further development and validation of methods to address bias

Adapted from: N ENGL J MED 386;18 NEJM.ORG MAY 5, 2022

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How do we get there?

Coordination of people, platforms, and policy

- **Infrastructure:**
  - Randomised: Point-of-Care Clinical Trials
  - Observational: Interoperable Validated Platforms

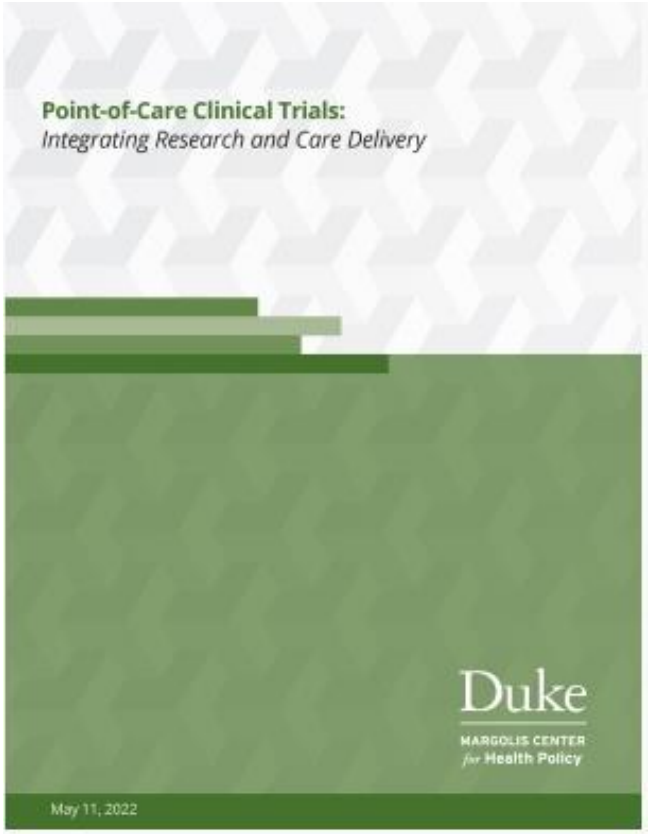
- **Tools for transparent and consistent implementation of RWE:**
  - RWE Master Protocols
  - HARPER Template

- **Innovative scientific methods to improve causal inferences**
  - Trial Emulations (e.g., RCT Duplicate, Operand)
  - Negative Controls
  - Subgroup Analyses

- **Keys for coordination**:
  - Harmonizing evidentiary needs for ecosystem stakeholders (e.g., regulator and payer)
  - Harmonizing stakeholder goals and initiatives in a pre-competitive space
  - Supporting robust data collection and curation and evidence generation

- **Keys for motivation and momentum for collaboration:**
  - Engaging “use cases” to highlight how initiatives address key evidentiary gaps to motivate collaboration and practical focus
  - Plan for supporting resources via multi-stakeholder legislation and collaboration

Point-of-Care Clinical Trials



Priority Solutions for Improving and Scaling Point-of-Care Trials	
Improving the Point-of-Care Approach	**Scaling the Point-of-Care Approach**
Supplement EHR data with other sources (i.e., PROs, wearables).	Secure key investments in reusable trial infrastructure.
Leverage existing interoperability standards (e.g., FHIR).	Align incentives to support point-of-care trial networks that will monitor long-term patient outcomes.
Use data surveillance systems and establishing a minimum set of common data elements.	Create an engagement framework to help build capacity for future point-of-care trial research based on key stakeholder perspectives, questions, and experiences.
Align incentives both internal and external to health systems.	Create a national point-of-care trials network and hub that establishes standards for data collection, tools, and other supports.
Adopt a risk-proportionate regulatory framework.	Develop ongoing partnerships between sponsors, clinicians, patients, and other health system stakeholders.
Streamline eligibility criteria and the consenting process.	Foster a culture of patient engagement and trust.

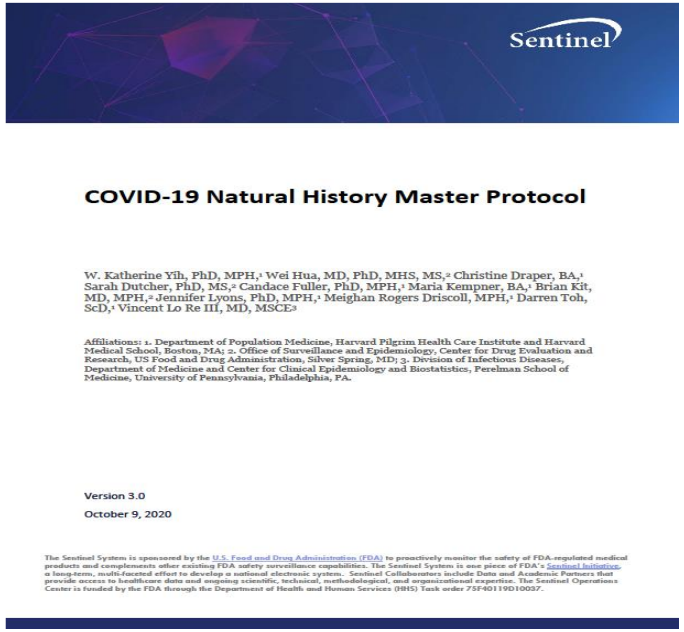
https://healthpolicy.duke.edu/publications/point-care-clinical-trials-integrating-research-and-care-delivery

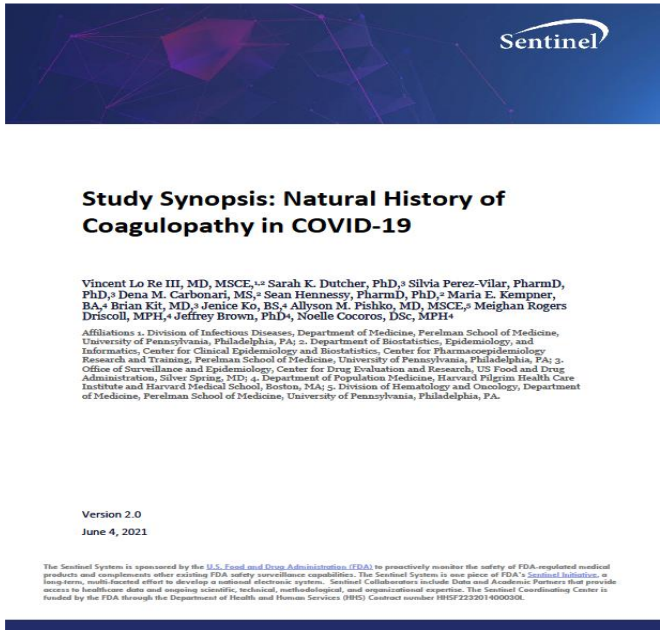
Frontline Randomized Trial Networks for Improving Evidence for Patient Care

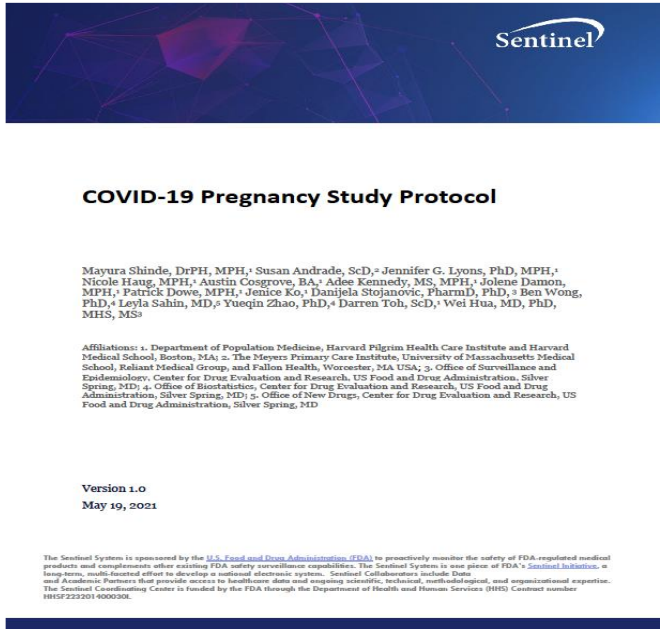
- Advancing Clinical Trials at the Point of Care (ACT@POC) Coalition engages health care systems and their frontline clinicians to integrate clinical research to routine care
- Effort originated from concerns of health system leaders of failure to generate timely needed evidence in COVID-19 through existing clinical trial infrastructure
- Focus extended to address critical gaps in clinically relevant evidence to guide use of new and existing treatments to reduce risks and complications from common chronic diseases
- Three major buckets of work:
  - Platform pilot projects
  - Policy updates: regulatory, payment, health system culture
  - Digital tools
- Similar (and collaborative) efforts underway with PROTAS in Europe

RWE Master Protocols

- Momentum for RWE master protocols borne out of coordination of research and resources during the Covid 19 pandemic.
- Benefits parallel master protocols for clinical trials:
  - Improve RWE study efficiency, transparency, scale, and consistency
- Areas for innovation:
  - Establishing infrastructure and governance to streamline logistics, improve data quality, and facilitate data sharing
  - Developing common protocols that incorporate innovative study designs, statistical approaches, and data analyses







› PLoS One. 2021 Mar 17;16(3):e0248128. doi: 10.1371/journal.pone.0248128. eCollection 2021.

COVID-19 Evidence Accelerator: A parallel analysis to describe the use of Hydroxychloroquine with or without Azithromycin among hospitalized COVID-19 patients

Mark Stewart [1], Carla Rodriguez-Watson [2], Adem Albayrak [3], Julius Asubonteng [4], Andrew Belli [5], Thomas Brown [6], Kelly Cho [7 8], Ritankar Das [9], Elizabeth Eldridge [3], Nicolle Gatto [10], Alice Gelman [3], Hanna Gerlovin [7], Stuart L Goldberg [11], Eric Hansen [5], Jonathan Hirsch [6], Yuk-Lam Ho [7], Andrew Ip [11], Monika Izano [6], Jason Jones [3], Amy C Justice [12 13], Reyna Klesh [14], Seth Kuranz [15], Carson Lam [9], Qingqing Mao [9], Samson Mataraso [9], Robertino Mera [4], Daniel C Posner [7], Jeremy A Rassen [10], Anna Siefkas [9], Andrew Schrag [6], Georgia Tourassi [16], Andrew Weckstein [10], Frank Wolf [6], Amar Bhat [2], Susan Winckler [2], Ellen V Sigal [1 2], Jeff Allen [1]
Affiliations + expand
PMID: 33730088 PMCID: PMC7968637 DOI: 10.1371/journal.pone.0248128
Free PMC article

Abstract

Background: The COVID-19 pandemic remains a significant global threat. However, despite urgent need, there remains uncertainty surrounding best practices for pharmaceutical interventions to treat COVID-19. In particular, conflicting evidence has emerged surrounding the use of hydroxychloroquine and azithromycin, alone or in combination, for COVID-19. The COVID-19 Evidence Accelerator convened by the Reagan-Udall Foundation for the FDA, in collaboration with Friends of Cancer Research, assembled experts from the health systems research, regulatory science, data science, and epidemiology to participate in a large parallel analysis of different data sets to further explore the effectiveness of these treatments.

Center for Biologics Evaluation and Research
Office of Biostatistics and Epidemiology

CBER Surveillance Program

Draft Master Protocol
Assessment of Risk of Safety Outcomes Following COVID-19 Vaccination

March 23, 2021

Prepared By:

Ellen Tworkoski, MS, MPhil, Hui-Lee Wong, PhD, Cindy Ke Zhou, PhD, Bradley Lufkin, MPA, MSES, Rositsa Dimova, PhD, MSPH, Manzi Ngaiza, MPH, Deborah Thompson, MD, MSPH, Tatum Turetzky, BA, An-Chi Lo, MS, MPH, Shanlai Shangguan, MPH, Mao Hu, BS, Yoganand Chillarige, MPA, Nirmal Choradia, MD, Laurie Feinberg, MD, MPH, MS, Richard Forshee, PhD, Steven A. Anderson, PhD, MPP

Study Team:

US FDA: Hui-Lee Wong, PhD, Cindy Ke Zhou, PhD, Deborah Thompson, MD, MSPH, Rositsa Dimova PhD, Joyce Obidi, PhD, Richard Forshee, PhD, Azadeh Shoaibi, PhD, Steven A. Anderson, PhD, MPP

› Pharmacoepidemiol Drug Saf. 2023 Jan;32(1):44-55. doi: 10.1002/pds.5507. Epub 2022 Oct 10.

HARmonized Protocol Template to Enhance Reproducibility of hypothesis evaluating real-world evidence studies on treatment effects: A good practices report of a joint ISPE/ISPOR task force

Shirley V Wang [1], Anton Pottegård [2], William Crown [3], Peter Arlett [4], Darren M Ashcroft [5], Eric I Benchimol [6 7 8], Marc L Berger [9], Gracy Crane [10], Wim Goettsch [11 12], Wei Hua [13], Shaum Kabadi [14], David M Kern [15], Xavier Kurz [4], Sinead Langan [16], Takahiro Nonaka [17], Lucinda Orsini [18], Susana Perez-Gutthann [19], Simone Pinheiro [13], Nicole Pratt [20], Sebastian Schneeweiss [1], Massoud Toussi [21], Rebecca J Williams [22]
Affiliations + expand
PMID: 36215113 PMCID: PMC9771861 (available on 2024-01-01) DOI: 10.1002/pds.5507

Abstract

Problem: Ambiguity in communication of key study parameters limits the utility of real-world evidence (RWE) studies in healthcare decision-making. Clear communication about data provenance, design, analysis, and implementation is needed. This would facilitate reproducibility, replication in independent data, and assessment of potential sources of bias.

https://www.sentinelinitiative.org/sites/default/files/documents/Pregnancy_Protocol_COVID_19.pdf
https://www.sentinelinitiative.org/sites/default/files/documents/Coagulopathy_COVID19_Study_Synopsis_v2.0_0.pdf
https://www.sentinelinitiative.org/sites/default/files/Methods/COVID-19-Natural_History_Protocol_v3.0.pdf

https://pubmed.ncbi.nlm.nih.gov/33730088/
https://bestinitiative.org/wp-content/uploads/2021/04/COVID-19-Vaccine-Safety-Inferential-Draft-Master-Protocol.pdf
https://pubmed.ncbi.nlm.nih.gov/36215113/

RCT-DUPLICATE: A methods demonstration project

Objective: To understand and improve the validity of RWE studies to support regulatory decision making

1	2	3
Emulate **30 RCTs** and predict **7 RCTs** considered by FDA	Test a **process** with FDA to evaluate RWE studies	Factors that predict replication success, causal estimates
Learnings: Had we replaced an RCT with a single RWE study would we have come to the same decision?	**Learnings:** How to conduct transparent, reproducible RWE studies and enable regulators to re-analyze data?	**Learnings:** Identify factors that predictably increase validity of RWE studies.

Franklin, Pawar, Martin, Glynn, Levenson, Temple, Schneeweiss. CPT 2020

Executive Summary

Knowledge gap: When can RWE provide valid causal estimates of treatment effects?

Objective: To emulate 30 RCTs using clinical practice data and compare findings

Approach: Using claims data, investigators applied a pre-defined, transparent process to emulate RCTs with RWE and compare treatment effect estimates

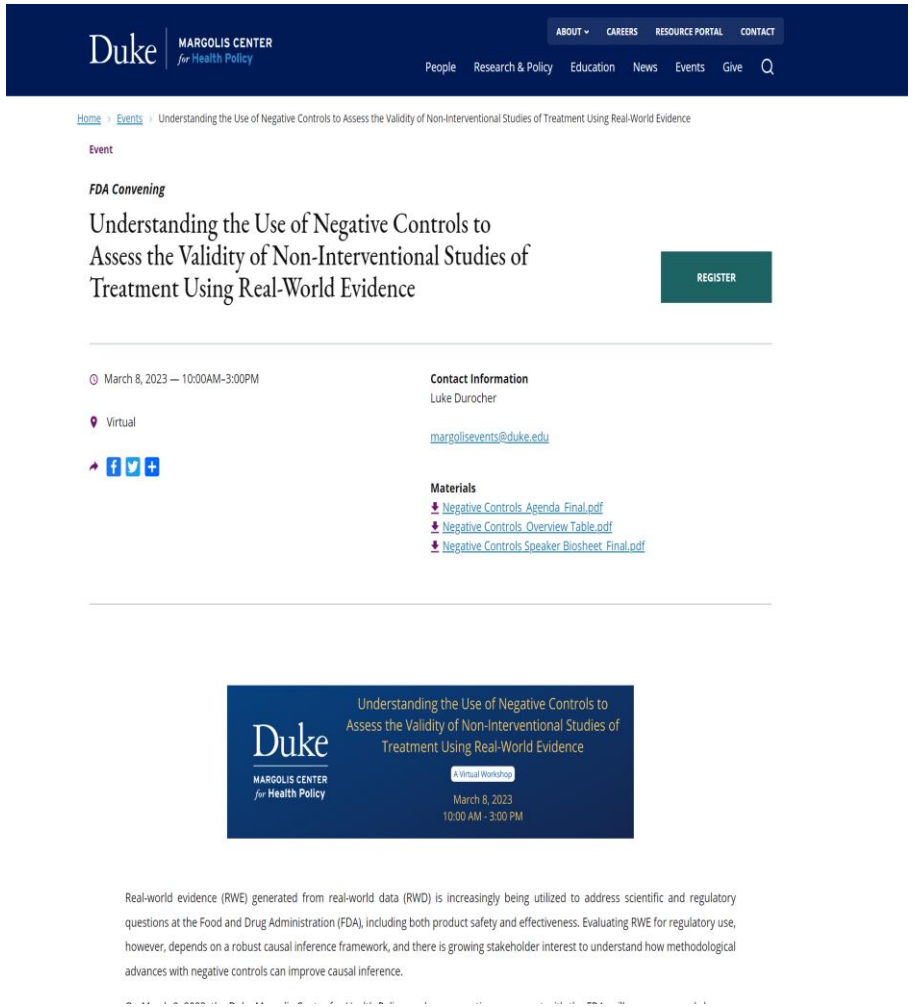
Findings:

- 50% of the selected RCTs could be emulated closely regarding design, analysis
- Closely emulated RCTs found comparable treatment effects to the RWE studies
- RCT and RWE findings were more likely to diverge when there were substantive emulation challenges, perhaps answering different target questions or due to bias

Implications: Rigorous epidemiologic methods combined with fit-for-purpose data and target trial approaches can produce valid inference from RWE studies – but that's not always feasible

Improving RWE Methods: Negative Controls

- **Negative Control Exposure (NCE):**
  - A variable that shares the same potential source of bias with the exposure of interest but is not causally related to the outcome of interest.
- **Negative Control Outcome (NCO):**
  - A variable that shares the same potential source of bias with the outcome of interest but is not causally related to the exposure of interest.
- **Next steps for advancing potential regulatory use of negative controls**
  - More methods development for identifying and validating NCEs and NCOs.
  - Key assumptions that underpin negative controls must be thoroughly tested for regulatory use (e.g., thresholds for identifying unmeasured bias and confounding).
  - More collaborations are needed to improve stakeholder understanding around context of use and utility.
    - Reference set of negative controls shared by the OHDSI community used in analyses Reference set library – OHDSI



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DRAFT GUIDANCE

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https://www.fda.gov/science-research/science-and-research-special-topics/real-world-evidence

Current landscape of relevant EU guidance on RWE

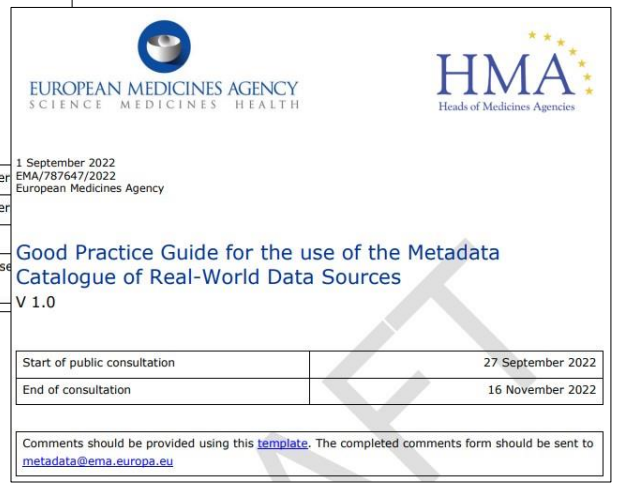
Oct. 2021

Dec. 2021

2022-2025

May 2022

June 2022



Consultations launched in Sept. 2022

For revision in 2023

NICE recently published its RWE framework, which describes best practices for the planning, conduct, and reporting of RWE studies

Overarching Principals for NICE RWE Framework[1]

NICE National Institute for Health and Care Excellence

1. Generating evidence in a transparent way "with integrity from study planning to study conduct and reporting"
2. Ensuring that the data is of good provenance, that it is trustworthy and fit for purpose
3. The use of appropriate analytical methods that minimize the risk of bias and characterize uncertainty

- Enhancing use of real-world data to resolve gaps in knowledge and drive forward access to innovative medicines for patients was noted as a strategic focus in the NICE Strategy 2021 to 2026[2]
- As a result, NICE published the RWE framework in June 2022 to help deliver on this ambition by[2]:
  - Identifying when real-world data can be used to reduce uncertainties and improve guidance
  - Clearly describing best-practices for planning, conduct, and reporting RWE studies to improve the quality and transparency of evidence
- The framework provides transparency by advising clear specification of research questions, early planning of studies, and clear descriptions of data sources and data curation data sources[1]
- It is intended to be a "living document" that will broaden overtime according to need[2]

Abbreviations: NICE - National Institute for Health and Care Excellence; RWE - Real-world evidence

References: 1) Bruce, Franchesca. England. HTA Body NICE Makes Big RWE Push. Pink Sheet Pharma Intelligence. Available at https://pink.pharmaintelligence.informa.com/PS146414/England-HTA-Body-NICE-Makes-Big-RWE-Push. Accessed 3 November 2022. 2) National Institute for Health and Care Excellence. NICE real-world evidence framework. Corporate document [ECD9]. 2022.

Preliminary Takeaways from Emerging Landscape of *RWD* Regulatory Frameworks

- Generally, support for and broad understanding of potential regulatory use cases for regulatory RWE (safety and effectiveness) and definitions/considerations surrounding fit-for-purpose datasets.
- However, there appears to be early potential divergence in terminologies and concepts:
  - Defining fitness-for-use datasets:
    - FDA: Reliability and Relevance
      - Reliability: data accuracy, completeness, provenance, and traceability
      - Relevance: availability of key data elements (exposure, outcomes, covariates) and sufficient numbers of representative patients for the study
    - EMA: Reliability, Relevance, Extensiveness, Coherence, and Timeliness
      - Reliability: precision, accuracy, and plausibility
      - Relevance: covers how closely the data reflects the aspects of reality that we intend to measure
    - NICE: Quality and Relevance
      - Reliability: completeness and accuracy
      - Relevance: data content, coverage, and characteristics
  - Challenging to apply and operationalize these concepts as part of fit-for-purpose assessment frameworks (e.g., validation approaches, quality checks, and documentation needs)
- Interactions with HTA for fit-for-purpose RWD guiding clinical practice and payment decisions are becoming clearer – similar issues for supporting evidence on comparative effectiveness and “label deepening” (clinical guidelines, increasing impact in care delivery)

RWD Audit Readiness Initiative: Landscape Assessment Insights Framework

2020-2021 Literature Review Findings*

DRAFT

Data Relevance

Data Reliability

	RELEVANCE	ACCRUAL	PROVENANCE	COMPLETENESS	ACCURACY
Definition	Robust and representative of the population of interest, and the data elements available for analysis address scientific/ regulatory questions when valid and appropriate analytic methods are applied (PICOTS)	Process by which data are collected/aggregated and patients are included in a study (including record prompts for entry/exit from dataset, operational definitions, and inclusion/exclusion criteria)	Origin(s) of data, sometimes including a chronological record of data custodians and transformations (sometimes referred to as 'data lineage' or 'data traceability').	Presence of all needed and expected elements for a given percentage of data points of an individual variable	Whether data values stored for an object are correct values and stored in consistent and unambiguous form
Documentation	Protocol; Final study report (FSR)	Protocol; Statistical analysis plan (SAP); Data mgmt. plan (DMP); Standard Operating Procedures (SOPs)	Protocol; SAP; DMP; SOPs	Customized report for key variables; DMP; SOPs; FSR	Customized report for key variables; DMP; SOPs; FSR
Gaps	No widely accepted approach for validation	No widely accepted approach (level of detail) or most appropriate place to document	No widely accepted approach (level of detail, structured vs. unstructured) or most appropriate place to document	None evident	Unclear: Validation or verification

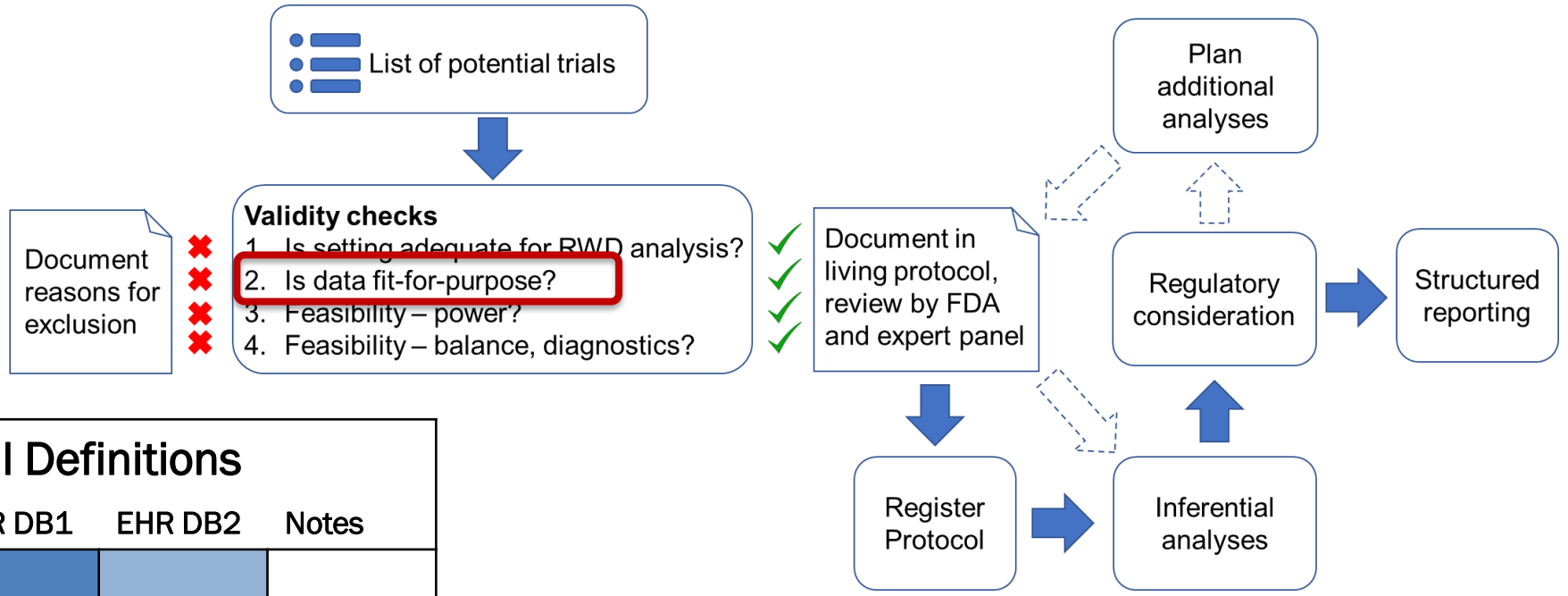
Validation Process

* Insights gathered from targeted literature review, including the following sources: Daniel et al. Characterizing RWD Quality and Relevancy for Regulatory Purposes. Oct 2018; Franklin et al. Evaluating the use of nonrandomized real-world data analyses for regulatory decision making. Clin Pharmacol Ther 2019;105:867; Kahn et al. A Harmonized Data Quality Assessment Terminology and Framework for the Secondary Use of Electronic Health Record Data. Egems 2016;4:1244; Mahendraratnam et al. Determining Real-World Data's Fitness for Use and the Role of Reliability. Sep 2019; US FDA. Framework for FDA's Real-World Evidence Program. Dec 2018

Slide presented by Dr. Cathy Critchlow, DIA, 2022

DIA

Assessing fitness of data



Operational Definitions	RCT	EHR DB1	EHR DB2	Notes
Time 0				
Exposure				
Comparator				
Outcome				
Follow up start				
Follow up end				
Inclusion criteria				
Exclusion criteria				
Effect estimation				
Causal estimand				

Operational definitions

- Where do the algorithms come from?
- What are the performance characteristics?
- Relevance, reliability of data for key study parameters?
- Color code to summarize and help make decisions, fit-for-purpose?

Gatto et al 2022, CPT, SPIFD
Wang et al 2022, PDS & ViH, HARPER

ICMRA Statement on RWE Collaboration – Jul 2022

The June 2022 ICMRA workshop on RWE identified four areas of opportunities for regulatory collaboration which could help address common challenges and further enable the integration of RWE into regulatory decision-making.

- **Harmonisation of RWD and RWE terminologies**:
  - Generate common operational definitions of RWD and RWE, with clear scope and level of granularity (e.g., pertaining to RCTs and observational studies);
  - Leverage existing ICH activities, such as M14 on "*General principles on planning and designing pharmacoepidemiological studies that utilize real-world data for safety assessment of a medicine*".
- **Convergence on RWD and RWE guidance and best practice, including**:
  - Common principles for RWD quality;
  - Metadata to enable characterisation and discoverability of RWD;
  - Suitable scenarios where RWE may contribute to regulatory decision-making, building on existing use-cases;
  - Templates for study protocols/reports that can be used in multiple regulatory jurisdictions.

Side presented by Dr. John Concato, US FDA, 2022

Enabling Pathways to Convergence

- Varying regulatory requirements for documenting RWD and generating RWE as part of submissions will slow progress on achieving RWD/RWE vision
- More systematic efforts to promote clear and consistent use of RWD/E concepts and terminology should be combined with increasing opportunities to apply them to practical examples and use cases that matter globally – from concepts to larger-scale implementation
  - Sentinel, DARWIN are platforms supported by regulatory agencies that can provide models for transparency, shared learning, and extension to additional industry applications
  - Creating additional opportunities to support RWE applications by product developers can increase “use case” implementations and advance RWE platforms
- “Coordinated” strategy to highlight and leverage US, EMA, and other shared topics of interest will lead to synergies and more progress globally on RWE

Thank You!

Contact Us

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