The NIH Collaboratory Distributed Research Network (DRN) enables investigators funded by the NIH and other not-for-profit sponsors to collaborate with investigators based in health plans that participate in the FDA’s Sentinel System. The DRN is especially useful for supporting multisite research programs.

The DRN fully leverages the FDA Sentinel System’s data, methods, tools, and querying infrastructure. It can also directly contact providers and health plan members to collect new information or in support of randomized clinical trials. Read more about the Sentinel System at sentinelinitiative.org.

NIH Collaboratory Distributed Research Network (DRN)

Millions of people. Strong Collaborations. Privacy First.

rethinkingclinicaltrials.org/nih-collaboratory-drn

The NIH Collaboratory DRN research partners have access to administrative claims data and, in some cases, linked clinical data. Also, because each research partner has direct identifiers and a relationship with potential participants, the DRN enables researchers to conduct prospective longitudinal observational studies.

The DRN uses a distributed analysis approach that enables authorized researchers to send queries to the DRN research partners who hold data. Queries take the form of program code that the DRN research partner can execute on a pre-existing, extensively curated dataset transformed into the Sentinel Common Data Model. The querying capability of the network reduces the need to share confidential or proprietary data. The DRN research partner can return the query result, typically aggregated (count) data, rather than the dataset itself. This form of remote querying reduces legal, regulatory, privacy, proprietary, and technical barriers associated with data sharing for research.

The DRN uses the PopMedNet software application and complies with standards for distributed querying supported by the Query Health Initiative of the Office of the National Coordinator for Health Information Technology and adopted by other research collaborations, including Sentinel and PCORnet.

EXAMPLES OF CAPABILITIES

Observational Studies of Comparative Effectiveness and Safety

Compare the safety and effectiveness of interventions in population-based, retrospective observational studies using large, curated datasets from DRN research partners.

Prospective Data Collection

Use real-world, patient-reported data linked securely to the patient’s electronic health record in support of traditional clinical trials, pragmatic trials, observational studies, and registries.

Randomized Clinical Trials

Conduct large, multicenter randomized trials involving direct outreach to clinicians and health plan members.

Studies of Live Birth Pregnancies and Pregnancy Outcomes

Study birth outcomes of maternal health and antenatal exposures using data from over 4 million pairs of mothers and infants.

DATA PARTNERS

- Aetna (Healthagen LLC)
- Blue Cross Blue Shield of Massachusetts
- Harvard Pilgrim Health Care Institute
- HCA Healthcare
- HealthCore, Inc. Government & Academic Research
- HealthPartners Institute
- Humana, Inc.
- Kaiser Permanente Hawaii, Center for Integrated Health Care Research
- Kaiser Permanente Mid-Atlantic States
- Kaiser Permanente Northern California, Division of Research
- Kaiser Permanente Northwest Center for Health Research
- Kaiser Permanente Washington Health Research Institute
- Marshfield Clinic Research Institute
- Optum
- Vanderbilt University Medical Center, Department of Health Policy and use the Department