



# Research Action for Health Network (REACHnet) Infrastructure and Services

REACHnet is one of 9 clinical research networks (CRNs) nationwide in PCORnet®, The National Patient-Centered Clinical Research Network.

**Our mission is to enable the conduct of multi-site research with enhanced efficiency in real-world healthcare delivery systems.**

REACHnet includes electronic health record data for **over 8 million patients** from multiple partner health systems:

Ochsner Health  
Tulane Medical Center  
University Medical Center New Orleans  
PATH network of FQHCs in Greater New Orleans  
Baylor Scott & White Health  
DHR Health Institute for Research & Development  
University of California San Francisco (UCSF) Health

REACHnet's academic partners are:

Tulane University Schools of Medicine & Public Health  
Louisiana State University Health Sciences Center (LSU HSC)  
Pennington Biomedical Research Center  
UCSF Clinical & Translational Sciences Institute

Louisiana Public Health Institute (LPHI) is the REACHnet Coordinating Center.

## ASSETS & RESOURCES

### Clinical data infrastructure

- Electronic health records conformed to the [PCORnet Common Data Model](#)
- Privacy preserving record linkage (PPRL) enables deduplication and matching of patient records across systems and linkage with other data sources

### Data linkages

- Partnerships with Louisiana Medicaid, Blue Cross Blue Shield of Louisiana, Humana, Medicare, and Office of Vital Records to link data for research
- Geocoding for linkage with socio-demographic and environmental data by census tract

### Streamlined regulatory processes

- Master Data Sharing & Use Agreement among partner health systems enables a single agreement for most multi-site observational studies
- All REACHnet health systems have signed the [SMART IRB](#) reliance agreement to facilitate single IRB review for multi-site studies

## DATA SERVICES

REACHnet streamlines access to multi-site longitudinal data for research.

### Prep-to-research query request

Estimate the target patient population when designing a study

### Prospective research request

Implement a prospective study in partnership with REACHnet health systems

### Data request

Obtain a dataset for observational research

Register on our Eco portal to submit your request: [eco.reachnet.org](http://eco.reachnet.org)

## STAKEHOLDER ENGAGEMENT

### Health in Our Hands

[HiOH](#) is a growing network that connects community members with health research. REACHnet provides outreach to this large community of patients and stakeholders for engagement in research. Investigators may work with REACHnet and HiOH to:

- Invite members to enroll in studies, complete surveys, or participate in focus groups.
- Invite members to work with research teams and inform projects from the patient or caregiver perspective.
- Disseminate information about research projects and results.

### Stakeholder advisory groups

REACHnet convenes stakeholder advisory groups to inform the research process. Investigators may engage with our advisory groups to obtain community input on their initiatives, including REACHnet's Community Health Advisory Board and Diabetes Advisory Groups.

### Clinic staff training

LPHI developed tools for effective engagement of clinic staff in implementation of clinic-based research, which often relies on their interactions with patients who are current or potential research participants.

## CONTACT

For more information, visit [www.REACHnet.org](http://www.REACHnet.org)  
or contact [info@reachnet.org](mailto:info@reachnet.org).

# REACHnet's Research Portfolio

## Louisiana Experiment Assessing Diabetes outcomes (LEAD) study

The objective of this study is to examine the impacts of Medicare reimbursement for non-face-to-face chronic care management services on diabetes-related outcomes. This 5-year PCORI-funded project is led by Dr. Lizheng Shi at Tulane University in partnership with REACHnet and our member health systems in Louisiana. This project is one of eight policy-focused studies that comprise the Natural Experiments for Translation in Diabetes 2.0 ([NEXT-D2](#)) Network.

## Aspirin Dosing: A Patient-Centric Trial Assessing Benefits and Long-term Effectiveness (ADAPTABLE)

The objective of this nationwide pragmatic clinical trial is to compare the effectiveness of 81mg versus 325mg daily aspirin dose for preventing heart attack and stroke in patients with cardiovascular disease. REACHnet's participating health systems include Ochsner Health System and Baylor Scott & White Health. Ochsner was one of the first two sites to begin recruiting and is the third-highest enrolling site among the 40 participating health systems across PCORnet.

## Comparative Effectiveness of Pharmacogenomics for Treatment of Depression (CEPIO-D)

This prospective randomized trial compares the effectiveness of combinatorial PGx-guided treatment versus best-practice guideline concordant treatment on well-being and depression severity in patients with major depressive disorder. This three-year, PCORI-funded study began in 2018. REACHnet's partner health system, University Medical Center New Orleans (UMC), is participating and will begin enrolling participants in 2019.

## Blood Pressure Control Lab

REACHnet partnered with University of California San Francisco, the American Heart Association (AHA), and the American Medical Association (AMA) on a PCORI-funded project to compare two different ways of helping clinical practices control blood pressure—by giving them access to several AMA/AHA materials that can help doctors improve their methods, with or without a practice facilitator to guide their use of those materials. The study will also test two types of home blood pressure monitors—one that connects with a smartphone, and one that does not—to see which is more effective for helping patients achieve their personal goals for blood pressure control.

## PCORnet Bariatric Study

The objective of this study is to compare the benefits and risks of the three most common bariatric surgery procedures—Roux-en-y gastric bypass, adjustable gastric banding, and sleeve gastrectomy. The study employs an observational design using electronic health record (EHR) data for over 65,000 patients from 41 participating healthcare organizations across the country. Data were collected through the PCORnet distributed research infrastructure from 11 clinical research networks (CRNs), including REACHnet. Two peer-reviewed manuscripts are published: [Comparative Effectiveness of Bariatric Procedures for Weight Loss and Safety](#) in *Annals of Internal Medicine* and [Comparative Effectiveness of Bariatric Procedures among Adolescents: The PCORnet Bariatric Study](#) in *Surgery for Obesity and Related Diseases*.

## Short- and Long-term Effects of Antibiotics on Childhood Growth

The objective of this study is to examine the effects of antibiotic use in the first two years

of life on body mass index (BMI) at ages 5 and 10 years and on growth trajectories to age 5. The study employs an observational design using electronic health record (EHR) data for over 362,000 patients from 35 participating healthcare organizations nationwide. Data were collected through the PCORnet distributed research infrastructure from 11 clinical research networks (CRNs), including REACHnet. One peer-reviewed manuscript is published: [Early Antibiotic Exposure and Weight Outcomes in Young Children](#) in *Pediatrics*. REACHnet is performing a sub-study, in partnership with Humana and Harvard Pilgrim Health Care, to link claims with EHR data and re-analyze the main study aims using claims records for antibiotic prescriptions filled.

## PCORnet Rapid Cycle Research Projects

REACHnet is leading a rapid cycle project titled **"PCORnet for Outcome Measurement and Process Dissemination: Accelerating Evidence Development for the Opioid Overdose Epidemic"** to demonstrate PCORnet's capacity to create a more robust opioid surveillance dataset and address current gaps in timely access to clinical data necessary for surveillance, prevention, and intervention.

REACHnet partnered with Vanderbilt University on a **Diabetes Incidence Prevalence and Medications Use** project focused on using PCORnet data to describe and validate the use of several major classes of glucose-lowering medications for type 2 diabetes. REACHnet is performing a sub-study in partnership with Tulane University and Blue Cross Blue Shield of Louisiana to link clinical data with claims records and perform comparison analyses to describe and enumerate differences in clinical outcomes and medication patterns.

REACHnet partnered with University of Florida on a study called **"PCSK9 Inhibitor Use in the Real World: Data from the National Patient Centered Research Network (PCORnet)"** which used electronic health record data to characterize the early utilization of PCSK9 inhibitors in addition to standard lipid lowering therapies among real-world patients with varying degrees of cardiovascular risk. Data for this study were collected from eighteen geographically diverse healthcare systems.

## Latent Tuberculosis Surveillance

REACHnet partnered with the CDC and [OCHIN](#) on a project to evaluate the utility of data generated through routine healthcare delivery as a surveillance tool for latent tuberculosis infection (LTBI). The study aims to provide accurate LTBI screening metrics by identifying patients at risk for LTBI using electronic health record data in the PCORnet Common Data Model.

## REACHnet Data Services

REACHnet has provided data services to academic partners and industry clients for various observational studies, including:

*Real-world disease burden and treatment outcomes of patients with Hyperkalemia*

*Real-world treatment patterns and outcomes of patients with Type 2 Diabetes*

*Total joint replacement outcomes in patients with Hepatitis C*

*Racial disparities in Parkinson's Disease*

*Examination of emergency department visits and treatments for Migraine*

*End-of-life cancer care*