VA-funded Studies on Long COVID

There are currently eleven studies on long-term COVID-19 outcomes funded by the VA that have coordination of plans, activities and findings through the CORC. Together, these studies aim to advance our understanding of the underlying mechanisms, epidemiology, diagnosis, and treatment of **post-acute sequelae of COVID-19 infection (PASC)** to help us diagnose, treat, and support Veterans with PASC.

CORC
VA COVID-19 Observational Research Collaboratory

The CORC conducts and supports rigorous research to understand the long-term effects of SARS-CoV-2 infection. To achieve this goal, CORC will provide VA researchers with dynamic analytic datasets of SARS-CoV-2 infected and uninfected cohorts, promote collaborations, provide methodologic guidance and support to early and mid-career investigators, and advance our understanding of long-term effects of COVID via mixed methods study – medical records extractions, surveys, and qualitative interviews.

Funding: VA HSR&D C1921278 & C1921279
Timeline: 5/1/ 2021 - 4/30/2024
Principal Investigators:
- George Ioannou (VA Puget Sound)
- Edward Boyko (VA Puget Sound)
- Matthew Maciejewski (VA Durham)
- Amy Bohnert (VA Ann Arbor)
- Thomas Osborne (VA Palo Alto)
- Denise Hynes (VA Portland)
- Ann O'Hare (VA Puget Sound)
- Jack Iwashyna (Johns Hopkins University)
- Elizabeth (Liz) Viglianti (VA Ann Arbor)
- Barrett Bowling (VA Durham)

Learn more about VA CORC

COPE-VA
COVID-19 Pharmacotherapy Effectiveness in the VA

The COPE-VA establishes a platform for studies of Real World Effectiveness (RWE) using national VA databases in collaboration with FDA and BARDA. The overarching goal is to determine if receipt of outpatient COVID-19 pharmacotherapies, including nirmatrelvir-ritonavir, molnupiravir, remdesivir, and others, reduces the risk of hospitalization, death, acute and post-acute sequelae of COVID-19 in order to rapidly inform treatment practices.

Funding: VA CSP #2038
Timeline: 10/1/2022 - 12/31/2027
Principal Investigators:
Co-Chairs:
- Kristina Bajema (VA Portland)
- George Ioannou (VA Puget Sound)

Director, West Haven Clinical Epidemiology Research Center (CERC):
- Mihaela Aslan

Learn more about COPE-VA

COPES Center
COVID Post-Exposure Evaluation and Symptomatology Center

The purpose of the COPES Center is to generate new knowledge about clinical phenotypes, health inequities, and management strategies for PASC. In addition to supporting the two COPES projects, the center will apply lessons learned from diagnosing and treating chronic multi-symptom illness (CMI) in Veterans to improve care of PASC and engage Veterans, clinicians, and operational partners to enhance the relevance and impact of research on PASC and ameliorate inequities associated with PASC in vulnerable Veteran populations.

Funding: VA HSR&D C1923086
Timeline: 05/01/2023 - 04/30/2027
Principal Investigators:
- Matthew Samore (VA Salt Lake City)
- Mary Jo Pugh (VA Salt Lake City)
- Adam Gordon (VA Salt Lake City)

COPES Project 1
Identifying Post-COVID Phenotypes and Related Health Inequities

This project seeks to define and characterize PASC using unsupervised clustering and survey data. It will also characterize clinical management strategies and care delivery models for PASC and assess health inequities in PASC phenotypes, symptom trajectories, and management.

Funding: VA HSR&D I01 HX003668
Timeline: 8/1/2023 - 7/30/2027
Principal Investigators:
- April Mohanty (VA Salt Lake City)
- Sara Knight (VA Salt Lake City)

COPES Project 2
Leveraging Knowledge of Chronic Multi-symptom Illness to Improve Care for Veterans Post-COVID

This project seeks to adapt and refine Concordant Care training for PASC using an interactive, iterative, and user-centered design process informed by qualitative interviews and focus groups to optimize clinician access, uptake, and utilization.

Funding: VA HSR&D I01 HX003667
Timeline: 10/12023 - 9/30/2027
Principal Investigators:
- Lisa McAndrew (VA New Jersey)
- Shannon Nugent (VA Portland)

Long COVID Collaborative Merit
Exercise Challenge of Gut Microbiome and Neuroinflammation in PASC

This project will determine the effects of a standard exercise challenge (SEC) on post-exertional malaise, gut microbiome diversity (structure) and metagenomics (function), and neuroinflammation (positron emission tomography imaging of TSPO receptor occupancy) in Veterans with PASC.

Funding: VA CSR&D I01 CX002616
Timeline: 10/01/2023-9/30/2027
Principal Investigators:
- Dane Cook (VA Madison)
- Jacob Lindheimer (VA Madison)

LAUREL
Chronic Lung Disease and COVID-19: Understanding Severity, Recovery, & Rehabilitation Needs

This project will identify factors associated with severity and complications of COVID-19 using patient-reported data collected via surveys and medical records for up to 4 years. The study also interviews Veterans with COVID-19 and their caregivers to understand the impacts of infections to their quality of life and health care utilization, including rehabilitation services.

Funding: VA RR&D I01 RX003666
Timeline: 1/1/2021 - 12/31/2025
Principal Investigators:
- Kristina Crothers (VA Puget Sound)
- Aaron Turner (VA Puget Sound)

Learn more about LAUREL

EPIC³
Epidemiology, Immunology and Clinical Characteristics of COVID-19 within VHA

This study will characterize virologic, immunologic, sociodemographic, and clinical determinants of short- and long-term outcomes among Veterans as a function of SARS-CoV-2 infection. These data will be used to identify novel phenotypes and validate preexisting phenotypes of PASC using machine learning strategies.

Funding: VA CSP #2028
Timeline: 5/1/2020 – 9/30/2024
Principal Investigators:
Co-Chairs:
- Javeed Shah (VA Puget Sound)
- Jennifer Ross (VA Puget Sound)
- Jennifer Lee (VA Palo Alto)

Director, Epidemiologic Research and Information Center (ERIC):
- Nicholas Smith

Learn more about EPIC³

CIPHER
Centralized Interactive Phenomics Resource

CIPHER has undertaken several COVID-19-related projects to conduct and facilitate VA research. This program is identifying patients in medical records who have long COVID (per WHO definition) via chart review. This will be used to understand the utility of U09.9 ICD-10 code ("post-COVID-19, condition post, long haul") for identifying long COVID patients in EHRs and to develop and train a phenotyping algorithm for long COVID.

Funding: VA
Timeline: Ongoing
Principal Investigators:
- Jacqueline Honerlaw (VA Boston)
- Kelly Cho (VA Boston)
- Monika Maripuri (VA Boston)

Learn more about CIPHER

MVP Survey
Million Veterans Program COVID-19 Survey

The survey was disseminated to MVP participants from May 2020 to March 2021 as part of an MVP Core activity. An MVP COVID Follow-Up Survey is under consideration, which would assess additional COVID infections, vaccination status, and a Long-COVID symptom checklist. MVP also has a scientific study on long COVID that will be launched soon in collaboration with the Department of Energy.

Funding: VA
Timeline: Ongoing
Principal Investigators:
- Sumitra Muralidhar (VA Central Office/Office of Research and Development)
- Michael Gaziano (VA Boston)
- Stacey Whitbourne (VA Boston)

Learn more about MVP

Long COVID PBRN
Long COVID Practice Based Research Network

PBRN aims to identify and support data-driven, practice-based and stakeholder-informed research on long COVID. They also convene and connect partners to centralize Long COVID clinical, research, and operational activities.

Funding: VA HSR&D
Timeline: 2023-2027
Principal Investigators:
- Allison Gustavson (VA Minneapolis)
- R. Adams Dudley (VA Minneapolis)
- Norbert Bräu (VA Bronx NY)
- Aaron Turner (VA Puget Sound)
- Kristina Crothers (VA Puget Sound)

Learn more about Long COVID PBRN