

PCORnet CDC Collaboration on COVID-19 Pandemic Response

The PCORnet CDC collaboration on COVID-19 has been a unique partnership that was forged to provide timely data and analyses to support the federal government response to the pandemic. Since its inception in 2020, this partnership has supported efforts within CDC and the federal government to respond to the pandemic and has led to published manuscripts and presentations while serving as the catalyst for other related projects exploring COVID-19. This document highlights the impact PCORnet data have had on understanding COVID-19 epidemiology and informing public health policy and action to help manage the pandemic.

Highlights:

- Three MMWR publications were widely cited by news and social media, and informed public health policy and recommendations.
- [Racial and ethnic disparities in receipt of medications for treatment of COVID-19](#) (Altmetric score: 2548)
 - Online attention in top 0.05% of scientific articles published around the same time, including by 236 news outlets
 - Data on disparities in monoclonal antibody treatment were presented to the White House COVID-19 Health Equity Task Force to raise awareness and inform governmental efforts to reduce disparities
- [Cardiac complications after SARS-CoV-2 infection and mRNA COVID-19 vaccination](#) (Altmetric score: 4056)
 - Online attention in top 0.01% of scientific articles published around the same time, including by 195 news outlets
 - Data showing higher risk of cardiac complications after SARS-CoV-2 infection compared with after mRNA vaccination informed risk/benefit analyses; results were presented or discussed at several ACIP meetings and FDA advisory meetings
- [Racial and ethnic disparities in outpatient treatment of COVID-19 – United States, January–July 2022](#) (Altmetric score: 927)
 - Within first week of publication, received online attention in the top 0.2% of scientific articles published around the same time, including by 56 news outlets.
 - Data showed lower prescriptions for most COVID-19 medications among patients of minority race or ethnicity, demonstrating ongoing gaps in care.

PCORnet data have provided insight on topics ranging from racial and ethnic disparities in COVID-19 treatment to prevalence and predictors of post-COVID-19 conditions and symptoms



PCORnet data have provided insight on the following topics:

1. Racial and ethnic disparities in COVID-19 treatment, including oral antivirals and monoclonal antibodies
2. Cardiac complications after COVID-19 compared with after mRNA vaccination
3. Chronic disease control and COVID-19 outcomes
4. Prevalance and predictors of post-COVID-19 conditions and symptoms
5. Cardiac complications after COVID-19 compared with after mRNA vaccination
6. Characteristics of patients tested and hospitalized for SARS-CoV-2 over time
7. Characteristics of patients dying after SARS-CoV-2 infection, including after use of outpatient COVID-19 medications
8. COVID-19 disease severity across the pandemic waves and SARS-CoV-2 variants

Analysis done on these topics has been disseminated as:

- Manuscript publications
 - Five published manuscripts to date
 - Four additional publications currently in development
- [COVID-19 data tracker](#)
 - PCORnet data has been used as one of three data sources to track monthly trends in COVID-19 hospitalizations, ICU admissions and invasive mechanical ventilation.

• Presentations

- Centers for Disease Control and Prevention (CDC) internal meetings, including to COVID-19 response and agency leadership
- White House COVID-19 Health Equity Task Force
- Administration for Strategic Preparedness and Response (ASPR)
- Patient-Centered Outcomes Research Institute (PCORI) Board of Governors
- National Institutes of Health Collaboratory Grand Rounds
- Academy Health Policy Conference
- Drug Information Association Annual Meeting
- PCORI Annual Meeting in October 2022
- Participating healthcare systems affiliated with PCORnet

Additional benefits from this project:

- PCORnet NIH RECOVER projects funded in 2021 utilized results from this project as preliminary data to support the grant applications; ongoing collaborative work continues with these funded projects
- Availability of COVID-19 related databases at participating sites to aide PCORnet sites in local surveillance activities
- Early and continued guidance on mapping new data elements (e.g., tests, vaccines, therapeutics) into the common data model (CDM) by PCORnet sites to make databases more accessible and usable for COVID-19 related research and surveillance
- New informatics platform to more easily capture and analyze data at participating sites and to accommodate advanced analytics

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