

COVID-19 CVD Registry Fact Sheet

The American Heart Association® (AHA) has created a Quality Improvement Registry to better understand the clinical treatment patterns and variations, including the collection of biomarkers, and cardiovascular outcomes in hospitalized COVID-19 patients across the nation. The registry focuses on real-time, granular data from acute care hospitals to better help clinicians and researchers understand and provide feedback to healthcare organizations on how to best treat COVID-19 patients. Real time reports for the individual hospital and for larger benchmark groups, including state level insights or enterprise-wide health system aggregation are available in the registry.

This fact sheet provides an overview of the descriptive, and reporting measures available in the AHA's COVID-19 CVD Registry- Powered by Get With The Guidelines® (GWTG). The COVID-19 CVD Registry is for all patients hospitalized at a facility with a confirmed diagnosis of COVID-19 by an RT PCR test, either prior to or during the hospitalization, a positive IgM antibody test, or a clinical diagnosis using hospital specific criteria. Please see below for a detailed description of inclusion criteria.

Include

All patients ≥18 years old who are hospitalized with an active COVID 19 infection (e.g. ICD 10 CM code U07.1 among discharge diagnosis).

The infection should be confirmed with: an RT PCR test either prior to or during the hospitalization, a positive IgM antibody test, or a clinical diagnosis using hospital specific criteria.

Active infection encompasses:

- Patients who are diagnosed prior to hospitalization, but still symptomatic during the hospitalization
- Patients with a positive test or diagnosis during hospital admission
- Patients who are symptomatic during the hospitalization and have a confirmed test available only after hospital discharge

Exclude

Patients < 18 years of age.

Patients who do not have a COVID 19 diagnosis

Patients with prior COVID 19 diagnosis, but without active infection as determined by COVID 19 related symptoms. This may include pts with positive IgG antibody tests without positive IgM antibody test.



Reporting Measures

Admission to ICU: Percentage of patients with active COVID-19 infection who were admitted or transferred to the ICU.

ACEI/ARB Continued During Hospitalization: Percentage of patients with active COVID-19 infection who received an Angiotensinconverting-enzyme inhibitor (ACEI) or Angiotensin II receptor blocker (ARB) during the hospital admission.

Mechanical Ventilation Required: Percentage of patients with active COVID-19 infection who required mechanical ventilation during admission.

Mean LOS and Medications During Stay: Mean Length of Stay (LOS) for patients with active COVID-19 infection grouped by medications received during admission.

Median LOS and Medications During Stay: Median LOS for patients with active COVID-19 infection grouped by medications received during admission.

Complications: Patients with active COVID-19 infections grouped by complications that occurred during admission.

Stroke or Intracranial Hemorrhage Type: Patients with active COVID-19 infections who had an ischemic stroke or intracranial hemorrhage during admission grouped by type of stroke or hemorrhage.

Type of In-Hospital Shock and Management: Patients with active COVID-19 infections with inhospital shock grouped by type of management.

Evaluation of LV Systolic Function During Admission: Percentage of patients with active COVID-19 infection whose left ventricular (LV) systolic function was evaluated during admission.

Time on Ventilator: Patients with active COVID-19 infection who required mechanical ventilation during admission grouped by time on ventilator.

V-V ECMO during Stay: Percentage of patients with active COVID-19 infection who received veno-venous (V-V) extracorporeal membrane oxygenation (ECMO) for any reason during admission.

Median Time on V-V ECMO: Median time on veno-venous (V-V) extracorporeal membrane oxygenation (ECMO) for patients with active COVID-19 infection and in-hospital shock who were placed on V-V ECMO.

Anticoagulation during Stay: Percentage of patients with active COVID-19 infection who received anticoagulation for Deep Vein Thrombosis (DVT) prophylaxis or treatment during admission.

Type of Anticoagulation: Patients with active COVID-19 infection who received anticoagulation for Deep Vein Thrombosis (DVT) prophylaxis or treatment during admission grouped by type of anticoagulant administered.

Descriptive Measures

Discharge Status: Patients with active COVID-19 infection grouped by discharge status.

Median LOS: Median Length of Stay (LOS) for all patients with active COVID-19 infection.

Means of Arrival: Patients with active COVID-19 infection grouped by means of arrival at the hospital.

Symptoms: Patients with active COVID-19 infection grouped by symptoms experienced prior to and during hospitalization.

Cause of Death: Patients with active COVID-19 infection who expired grouped by cause of death.



Measure Filtering and Advanced Reporting Capability

COVID-19 CVD Registry allows for dynamic real time reporting. Immediately after data entry, cases can be used in reports and measures within the registry platform. The enhanced reporting platform includes the capability to filter and adjust display views for all reports and measures which can be used for an in-depth comparison of LOS, Outcomes, Vent Days, or ICU Admissions. This dynamic reporting interface allows users to compare treatments with outcomes within their facility and filter by multiple user defined variables. Along with the filters, the COVID-19 CVD Registry includes extensive Benchmarking capabilities to allow sites to compare themselves with other hospitals based on the following criteria:

- Number of Beds (2019)
- ICU Beds (2019)
- Residents Involved in Care of Patients at Site (Academic):
- Critical Access Hospital
- Facility Type
- MI Volume
- Number of Ischemic Stroke Discharges
- PCI Capability
- Stroke Endovascular Therapy (EVT) Capability
- Regional Benchmark
- Custom Health System Benchmarks can be created On Demand
- State Benchmark
- National Benchmark

We look forward to releasing these enhancements soon that allow sites to evaluate treatment patterns, efficacy, and drive national and local Quality Improvement Initiatives. Refinements and additions to these measures will be implemented as we continue to evolve and learn more about COVID-19. For questions regarding the measures, please email qualityrresearch@heart.org.