273 Real-world Utilization of SARS-CoV-2 Serological Testing in 274 Patients in Different Health Care Settings Across the United States. [497]

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BACKGROUND

As diagnostic tests for COVID-19 were broadly deployed under different timelines and in different healthcare settings, it is important to understand the real-world utilization and performance of serological testing across the United States.

OBJECTIVES

• Establish the current state of data interoperability across different contexts, and clinical data
• Describe serological testing by demographic, geographic location, medical setting (e.g., outpatient, inpatient, ED, urgent care), laboratory capacity, and manufacturer.
• Assess the timing of serology testing relative to molecular testing by the characteristics listed above.

METHODS

Six data partners collaborated in collecting data from different care settings (e.g., departments, populating Emergency Department, Urgent Care, and other) in the Diagnostics Evidence Accelerator, Regenstrief Institute accessed and managed data from Partners HealthCare, Health Catalyst, Mayo Clinic, and Regenstrief Institute (e.g., outpatient, inpatient, ED, urgent care), and medical and pharmacy claims. Aetion drew hospital billing data from the value of units purchased during the same period. They all had a high correlation in the characteristics listed above.

• The majority of providers used a combination of electronic health record (EHR) and claims data to understand the real-world utilization and performance of serological testing.

RESULTS

• Across all sites, we observed 50,826 individuals, predominantly white non-Hispanic female aged 18-44 years with positive RNA for SARS-CoV-2 (data not shown in Figures). Partner A is an urban claims data and Partners C-F used EHR data.
• The proportion of patients who had a history of cardiovascular disease, obesity, chronic lung, or kidney disease was higher in Partners A and B compared to those who were not seen in Figures 2 and 3. This is due to the use of laboratory results from the health system that provided care for patients with COVID-19 in the post-positive period.
• The proportion of patients with a history of cardiovascular disease, obesity, chronic lung, or kidney disease was lower in Partners C-F compared to those who were not seen in Figures 2 and 3. This is due to the use of laboratory results from the health system that provided care for patients with COVID-19 in the post-positive period.
• Our results informed: our ability to assess the real-world performance of SARS-CoV-2 tests in a setting with diverse racial and ethnic backgrounds, and our ability to assess the real-world performance of SARS-CoV-2 tests in a setting with diverse racial and ethnic backgrounds.

CONCLUSION

Our results informed: our ability to assess the real-world performance of SARS-CoV-2 tests in a setting with diverse racial and ethnic backgrounds, and our ability to assess the real-world performance of SARS-CoV-2 tests in a setting with diverse racial and ethnic backgrounds.