June 19, 2020

COVID-19 In-House, Pre-Procedural, and Antibody Testing Updates

In-House COVID-19 Testing

First and foremost, our in-house testing capability is limited by reagent allocation. Cepheid has announced it is scaling back on production of the reagent, which will cause us to run out on July 10 at our current rate of use, having a negative impact on our ability to test in-house with a quick turnaround.

Pre-Procedural Testing

For procedures requiring anesthesia or that generate aerosol (ENT, laryngoscopy, EGD, ERCP, TEE, bronchoscopy), COVID-19 test collection must occur 4 days prior to the scheduled procedure, except for those scheduled on a Thursday that can be collected the Monday prior. Ordering providers should notify their patients that they MUST be tested for COVID-19 4 days prior to their procedure to avoid patient confusion. If a patient is unable to obtain a pre-procedural COVID-19 test for any reason, our policy and process is to mitigate risk by implementing appropriate PPE during the procedure. See the COVID-19 Specimen Collection Window and Dates Job Aid.

For the safety of patients and staff, patients should self-quarantine between their pre-procedural COVID-19 test and their procedure. This may be met with questions, especially as patients may need to take additional time off work for pre-procedural self-quarantine days. We ask that providers reinforce self-quarantining during pre-procedural consults and appointments.

There is no change in the process for providers to order COVID-19 testing. Our switch to using Spectrum and Mayo (versus just Mayo) did not change the process for ordering providers. The lab will send the specimen to the appropriate location. Please do not send patients to the ED or urgent care for COVID-19 testing. Our pre-procedure process workflow and related resources are available on our website.

We have now added symptomatic Priority 3s to our testing and encourage you to test any symptomatic patient.

For pediatric patients, it can be traumatic and difficult to obtain a sample so we recommend that pediatric patients only be tested if they are symptomatic. Use appropriate PPE during the procedure for the safety of patients and staff.

COVID-19 Antibody Testing

Antibody testing for SARS-CoV-2 is now broadly available. Antibody tests should not be used to assess for acute disease, but can play an important role in understanding the virus's epidemiology in the general population and identifying groups at higher risk for infection. For an individual patient, however, this testing does not alter medical therapy or preventive practices. In areas of low prevalence, such as northern Michigan, the results need to be interpreted with caution, as the positive predictive value is low. This means that any positive test has similar likelihood of being false positive to indicating true disease. For example, even with a prevalence of 5% and a specificity of 95%,

a positive test would mean that the chances of being a true-positive are 50/50. That same 50/50 would occur at 97% specificity if prevalence were only 2-3%. A coin flip. Test specificity would have to be 99.7% for a disease with a prevalence of 2-3% to work. Even better specificity is needed for lower prevalence.

Until further data is available, the CDC recommends that the results of antibody testing not be used to make decisions about return to work, or alter work and PPE requirements for healthcare workers.

Infectious Disease recommendations for antibody testing include just those patients participating in clinical treatment or epidemiologic studies such as the ongoing convalescent plasma trial.