**Ambulatory Negative Covid Test Algorithm—Symptomatic Patient**

Estimates of the sensitivity of covid 19 PCR testing vary widely but may be in the 70-90% range in ambulatory patients. Sensitivity highest within 3-5d after symptoms onset due to high viral loads.

**Factors that may increase false negatives:**

- Assay used:
  - Lab-based PCR (e.g. YNHH, Mayo, Quest) estimated at 85-90% sensitive
  - POC tests (e.g. Abbott ID now and others) predicted to be 10% lower—see orange box

- Other factors:
  - Poor sample quality or sampling technique
  - Advanced disease stage—viral loads are highest EARLY in disease
  - Variable viral shedding, including patient-specific factors
  - Disease severity

**NEGATIVE test result in a SYMPTOMATIC patient**

- Clinical suspicion for covid
- Advised self isolate; Consider PUI
- Mod-HIGH

*High risk patient or household member with high risk condition*

- Age > 60
- BMI > 30
- Diabetes
- Chronic Heart, Kidney, Liver or Lung Disease
- Asthma that Requires Daily Medications
- Malignancy and Undergoing Treatment
- Immunosuppressing Illness or Medication
- Smoker

**Low, or alternative diagnosis likely**

- Self isolate until 3d after resolution of symptoms

**Worsening symptoms or failure to improve**

**High risk patient* with persistent symptoms OR high risk household**

- Known covid + patient in the household

**Improving symptoms**

**Abbott ID NOW assay**

- Currently available by drive through without clinician order at Sargent Drive in New Haven
- 5-15 min TAT
- LESS SENSITIVE than lab assays—estimated at 10% less but so far actual comparative studies are limited
- Abbott is revising methodology in real time (swab type, dilution, etc) in response to experience so this info may change
- Results will be available in Epic via Care Everywhere but may not be pushed to PCPs

*Re-test for covid in 2-3d*

- If initial test was Abbott POC assay, retest using lab-based PCR test
- Ensure high quality sample
- Consider additional diagnostic testing (e.g. labs, CT scan) if can be done safely
- Consider home O2 sat monitoring
- Refer to ED if clinically warranted

**Known covid + patient in the household**

- High risk patient* with persistent symptoms OR high risk household

**Improve symptoms**

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*Approved by Ambulatory COVID-19 Task Force 4/21/20*