

Why Is Getting Covid-19 Testing So Difficult?

We need more testing. Patients, health care workers, public health officers are all repeating the same statement. So, why is it so difficult for a patient to get tested?

COVID-19 a new coronavirus, very different than the four other human coronaviruses that we've known about since the 1960's. We have easily accessible tests for those coronaviruses, but because this one is so different, those tests do not identify it. A new test had to be developed by the CDC. Initially, there were limited tests and in order to best utilize them, the first wave of patients allowed to be tested were either the sickest patients or the ones most likely to have COVID-19 based on exposure. These restrictions made it much more likely that the test would be positive, but missed a critical window where we could have identified the milder cases in the community.

Since then, the CDC has rushed to create and release more tests and commercial labs have developed their own tests and are promoting that they are available. We are also seeing new COVID-19 tests being created by individual hospital systems. So, with all these new tests, why is it still so hard to get tested for COVID-19?

There are two more issues that have limited testing in the US. The first is the potential exposure of healthcare workers when doing a test. We believe that COVID-19 is spread mostly through droplets, similar to influenza. In order to prevent healthcare workers from getting the disease, they need appropriate personal protective equipment (PPE) when examining patients with probable COVID-19. To complicate matters, there's a shortage of PPE in the US and almost all of it is appropriately being diverted to hospital systems for ER and ICU use. That means that outpatient physicians do not have the PPE to protect themselves. The early guidance from the department of health has been that if a physician sees a patient with COVID-19 without the appropriate PPE, they have to quarantine themselves for fourteen days, which would further reduce the ability of healthcare workers to provide care. The net result is that without the appropriate PPE, which outpatient providers cannot get, they cannot safely test for COVID-19. That limits testing to mostly hospital settings.

The second issue is that hospitals are now reporting a lack of the other unique supplies to perform the tests. Specifically, they need certain swabs to do the test and certain medium to transport them in. Both the swabs and the medium are on back-order from the manufacturers (they are predominantly made in Europe and China). So even as commercial labs advertise that they have the capability to the tests, hospitals do not have the complete test kits. Without it, testing capacity is further limited.

So that's the current status of where we stand as of this writing. We are starting to see reports of the federal government and FEMA creating mass testing sites. There will hopefully be one in Bergen County soon and others to follow. Hopefully the supply of the swabs and media will increase over time, further increasing the ability of hospital facilities to test, but that endpoint is unclear. Hospital systems and some private enterprises will continue to try to arrange

outpatient testing of patients in controlled areas and that will help too. In a few weeks, we might see significant improvements in our ability to do testing as a society, but for now, the healthcare systems are limited by supplies.