

Will COVID-19 Kill the Routine Physical Exam? A long-standing staple of conventional medical practice looks increasingly outdated

- By [Lala Tanmoy Das, Eric J. Kutscher](#) on June 5, 2020 [Scientific America](#)



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A physical exam during a doctor's appointment is a familiar ritual. After taking a history of the patient's symptoms, if any; checking off medication lists; and asking about social habits, among other things, the doctor will step away from the computer screen to perform this time-honored task. It leverages the powers of observation, palpation, percussion and auscultation (that is, listening to the body through a stethoscope) to understand the patient more fully. As an added benefit, it also fosters an element of trust through intimate human touch.

What many people may not realize, however, is that the physical has been on the decline for nearly two decades – with some referring to it as a “dying art.” Doctors have instead become increasingly reliant on blood tests and imaging technologies to

diagnose and treat. Although many reasons exist for this change in medical practice, one of the biggest drivers is the time pressure imposed by insurance companies to keep exams brief. It is further exacerbated by bureaucratic strictures such as “efficiency and productivity reports” that track visit lengths and ding doctors for going over time. The advent of cutting-edge technology has also opened a wealth of visualization capabilities that can reveal problems that are invisible to the naked eye. This could be why there appears to be a generational decline in physical exam skills. Some of our clinical masters embarrassedly admit their inability to observe an elevated jugular venous pressure as well as *their* clinical masters did, despite being in practice for over 15 years. Others frown at their inability to distinguish the lung sounds known as crackles (or rales) as prognostic of heart failure or secondary to pulmonary diseases – unlike their own attendings who could apparently do so instantaneously.

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With atrophying skills and dependence on technology, the future of the physical exam has been in a constant state of flux with institutions taking divergent approaches. Stanford and Yale have aimed to revive the frequent practice of these skills as part of preclinical didactics and clinical clerkships, whereas the University of California, San Francisco, has invested more time in refining technology-driven approaches to complement the physical.

But now, the advent of COVID-19 has thrown a curveball into the physical exam’s already shaky trajectory. Within a few weeks of the first confirmed COVID-19 case in the United States, most medical schools canceled in-person patient interactions. Clinical rotations were put on hold, objective structured clinical exams (OSCEs) were postponed, and physical exam sessions were canceled. While the basic science material could easily be accessed online, learning the physical exam without patient contact was going to be a challenge.

Meanwhile in hospitals, performing physical exams has become nearly impossible. Patients with COVID-19 are isolated per protocol, and doctors are advised to maximally leverage telephone and video technologies to communicate with them unless absolutely necessary. For one of us (Eric Kutscher), as an internist, not being able to visualize accessory muscle usage or auscultate lung sounds in person has made assessing shortness of breath incredibly difficult. Ad-hoc methods without any scientific evidence

to support them, such as asking a patient to recite the alphabet over the phone and documenting how far they can go before needing a break, have emerged instead.

These temporary changes to clinical workflows have inadvertently made us even more reliant on technology. As the physical exam is now considered a high “exposure risk,” we have to depend on telemetry readings and pressure monitors, x-rays and CT scans to understand every patient’s complete clinical picture. And on the outpatient side, large insurers like Cigna and the Centers for Medicare & Medicaid Services have temporarily dropped the physical exam as a requirement for billing purposes in telehealth appointments, recognizing the difficulty of performing it virtually.

In medical education, meanwhile, the temporary adoption of virtual learning platforms has made it nearly impossible to learn and practice the physical exam – potentially compromising a skill set that is already in decline. If the virus resurges in the fall, as many predict, it is possible that medical schools will continue to teach virtually for the remainder of the calendar year, and maybe even beyond that. Given these logistic limitations – albeit temporary – could we have reached a new tipping point in the utility of physical diagnosis, making it potentially obsolete in the future?

Before attempting to answer that question, there are additional factors to consider. The most commonly reported disadvantage of physicals is that even though the comprehensive physical exam may have a relatively high sensitivity it can often have a specificity as low as 15 percent – that is, many positive results in asymptomatic patients can be false positives. This can be distressing for patients. While lab tests and technologies also have variable specificity, the routine ones typically perform better in comparison. Additionally, physical exam findings can often be inaccurate and have significant variability from one examiner to the next.

However, the physical also has advantages that cannot be overlooked. It can provide valuable information for initial diagnosis and management of some clinical conditions. It can be especially useful for evaluating illnesses that do not necessarily have a focalized lesion, such as in psychiatry. Additionally, it is cheaper than a battery of tests; proves useful in situations when there are no technologies available; and provides an innately *human* element to an otherwise machine-dependent visit.

With rusty skills in the short term, and increased technology workarounds, we will have to wait and see if the health delivery changes caused by the COVID-19 pandemic

have a lasting effect. Will this lead to a new kind of patient care based on gadgets alone, sidelining the physical exam completely? Or will it make us nostalgic to connect with patients and spur us to deliver the physical exam more skillfully? Will patients have different expectations of us, given that telemedicine is more accessible and time-efficient than a traditional office visit? It's too soon to tell, but it may be that, thanks in part to the pandemic, the traditional physical exam will go the way of other outdated medical practices