Is telehealth as good as in-person care? A telehealth researcher explains how to get the most out of remote health care

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COVID-19 has led to a boom in telehealth, with some health care facilities seeing an increase in its use by as much as 8,000%.

This shift happened quickly and unexpectedly and has left many people asking whether telehealth is really as good as in-person care.

Over the last decade, I've studied telehealth as a Ph.D. researcher while using it as a registered nurse and advanced practice nurse. Telehealth is the use of phone, video, internet and technology to perform health care, and when done right, it can be just as effective as in-person health care. But as many patients and health care professionals switch to telehealth for the first time, there will inevitably be a learning curve as people adapt to this new system.

So how does a patient or a provider make sure they are using telehealth in the right way? That is a question of the technology available, the patient's medical situation and the risks of going—or not going—to a health care office.

Telehealth technologies

There are three main types of telehealth: synchronous, asynchronous and remote monitoring. Knowing when to use each one—and having the right technology on hand—is critical to using telehealth wisely.

Synchronous telehealth is a live, two-way interaction, usually over video or phone. Health care providers generally prefer video conferencing over phone calls because aside from tasks that require physical touch, nearly anything that can be done in person can be done over video. But some things, like the taking of blood samples, for example, simply cannot be done over video.

Many of the limitations of video conferencing can be overcome with the second telehealth approach, remote patient monitoring. Patients can use devices at home to get objective data that is automatically uploaded to health care providers. Devices exist to measure blood pressure, temperature, heart rhythms and many other aspects of health. These devices are great for getting reliable data that can show trends over time. Researchers have shown that remote monitoring approaches are as effective as—and in some cases better than—in-person care for many chronic conditions.

Some remaining gaps can be filled with the third type, asynchronous telehealth. Patients and providers can use the internet to answer questions, describe symptoms, refill prescription refills, make appointments and for other general communication.

Unfortunately, not every provider or patient has the technology or the experience to use live video conferencing or remote monitoring equipment. But even having all the available telehealth technology does not mean that telehealth can solve every problem.

Ongoing care and first evaluations

Generally, telehealth is right for patients who have ongoing conditions or who need an initial evaluation of a sudden illness.

Because telehealth makes it easier to have have frequent check-ins compared to in-person care, managing ongoing care for chronic illnesses like diabetes, heart disease and lung disease can be as safe as or better than in-person care.

Research has shown that it can also be used
effectively to diagnose and even treat new and short-term health issues as well. The tricky part is knowing which situations can be dealt with remotely.

Imagine you took a fall and want to get medical advice to make sure you didn't break your arm. If you were to go to a hospital or clinic, almost always, the first health care professional you'd see is a primary care generalist, like me. That person will, if possible, diagnose the problem and give you basic medical advice: "You've got a large bruise, but nothing appears to be broken. Just rest, put some ice on it and take a pain reliever." If I look at your arm and think you need more involved care, I would recommend the next steps you should take: "Your arm looks like it might be fractured. Let's order you an X-ray."

This first interaction can easily be done from home using telehealth. If a patient needs further care, they would simply leave home to get it after meeting with me via video. If they don't need further care, then telehealth just saved a lot of time and hassle for the patient.

Research has shown that using telehealth for things like minor injuries, stomach pains and nausea provides the same level of care as in-person medicine and reduces unnecessary ambulance rides and hospital visits.

Some research has shown that telehealth is not as effective as in-person care at diagnosing the causes of sore throats and respiratory infections. Especially now during the coronavirus pandemic, in-person care might be necessary if you are having respiratory issues.

And finally, for obviously life-threatening situations like severe bleeding, chest pain or shortness of breath, patients should still go to hospitals and emergency rooms.

**Balancing risk**

With the right technology and in the right situations, telehealth is an incredibly effective tool. But the question of when to use telehealth must also take into account the risk and burden of getting care.