

ADVANCES IN IBD

Current Developments in the Treatment of Inflammatory Bowel Disease

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Management of Inflammatory Bowel Disease With Telemedicine



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G&H What are some of the forms of telemedicine that have been used in the management of inflammatory bowel disease?

CS There are many different forms of telemedicine, which refers to the delivery of care remotely. When the term telemedicine is used, most people think of a patient and a provider communicating via video as an alternative to an office visit. Another form of telemedicine in the management of inflammatory bowel disease (IBD) is the monitoring of patients with devices or applications to keep track of symptoms and signs of disease. There are many wearable devices, including smartphones, currently available that monitor different things, from sleep to physical activity that might reflect the patient's disease activity to physiologic changes that are measurable. There are also numerous smartphone applications available that allow patients to track their own symptoms. In some cases, these applications can communicate directly to the patient's provider to determine whether changes are occurring that require an in-person visit or at least a discussion with the provider for further examination or adjustment of treatment.

G&H What research has been conducted on the telemonitoring of IBD patients? Has telemonitoring been shown to improve patient outcomes?

CS Dr Raymond Cross at the University of Maryland has conducted extensive research on the telemonitoring

of IBD patients for signs of inflammation or changing symptoms over time. I wrote an editorial that accompanied the results of his recent randomized, controlled trial on telemedicine in IBD patients. He and his colleagues found that telemedicine did not improve disease activity and quality of life as compared to standard care. However, I thought they had a successful study. They were able to show that they could monitor their patients remotely as well as they could in person. To me, telemedicine does not necessarily need to be better; it just needs to be at least as good as in-person care and provide a service at a decreased cost. Value is an equation: it is quality divided by cost. Thus, if the quality of care is the same or higher but cost decreases, then the value of care increases. Sometimes, I think that the bar for telemedicine has been artificially set so high that doctors feel that they have to improve care while doing it virtually. I would argue that if doctors are giving at least as good care virtually and are making it easier and cheaper for patients and the health care system, value is being added to their care.

G&H Has there been any other research on whether telemedicine can provide high-value care for IBD?

CS My colleagues and I published an article on this issue in *Inflammatory Bowel Diseases* in 2017. We followed patients over time and measured quality outcomes that we thought were important (eg, how often patients were hospitalized and health care utilization in general). We also measured costs, specifically out-of-pocket costs, for

patients. Even when patients have insurance, there are many out-of-pocket costs involved with seeing a doctor. If patients live far away, they have to pay for gas, which is not insignificant. They might have to take the day off from work and lose a day of wages. They might have to obtain childcare, which is not free. We assessed that the same quality of care was being given with telemedicine as

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with in-person care, yet at a lower cost, which, therefore, increased the value of the care. In addition, telemedicine was preferred and appreciated by patients.

There have also been a number of other studies on the impact of various telemedicine modalities on outcomes of IBD patients, but I think the results have been mixed and there is still room for understanding.

G&H Have different telemedicine platforms been compared?

CS I am unaware of any research on the differences between telemedicine platforms. At the end of the day, as long as a platform works consistently and is easy for patients and providers, it is a good platform. My institution recently changed its telemedicine platform to one through Epic, which works quite well. There is a free application for providers called Doximity. This application is known for connecting health care providers through social media, but it also has a function that is free of charge that allows providers to conduct telemedicine visits.

G&H How can telemedicine be used in rural communities?

CS There is an underserved population in rural areas in the United States and likely around the world. In large cities, where there may be 3 or 4 IBD centers, it is fairly easy to obtain great care. However, if patients live many hours away from a specialty center, they may not

be receiving the same comprehensive level of care that they would in a large city. My institution has recently received a grant from the Leona M. and Harry B. Helmsley Charitable Trust to develop the Rural Health Virtual IBD Center for Northern New England. This allows us to serve patients who do not have easy access to our medical center. Many of them would have to drive 6 or more hours in one direction to come to our center for an office visit. This grant allows us to work closely with patients' local providers to offer all of the services of our IBD center, including specialist providers, a dedicated telemedicine nurse, research opportunities, and holistic care (eg, a psychologist and dietitian who specialize in IBD). We will be studying whether all of this care can be offered as effectively virtually as our in-person care. There are excellent gastroenterology providers in rural northern New England, but many IBD patients require a full team to optimize all facets of their management. We are optimistic about the partnerships we are building with these patients and their local providers to learn how we can most effectively deliver IBD care to this region.

G&H How receptive have patients been to using telemedicine?

CS Almost all patients have been receptive and have embraced telemedicine. At first, I was concerned that there might be an age gap in terms of which patients would like telemedicine vs which would not. However, our older patients have become familiar with video platforms to communicate with their families, and younger patients are very technologically savvy. People are so busy that they appreciate the opportunity to just take out their smartphone to do a virtual visit wherever they are, even while they are at work. There are, however, some people who simply do not like using technology or do not have access to it. We are looking into ways to bridge this gap.

G&H How receptive have physicians been to using telemedicine?

CS Initially, there was slow uptake. Before coronavirus disease 2019 (COVID-19), not many IBD providers were offering telemedicine, and I think it was a leap of faith for many at first to believe that it is possible to adequately take care of patients virtually without seeing them in person and performing a physical examination. We were all taught in medical school how important physical examination is to care, and it is in many situations. However, when it comes to management of a chronic disease such as IBD, most of what doctors do can be performed remotely. There are certainly times when patients need to come into the office—for example, when they are having a fever or

abdominal pain, and a doctor needs to examine them and perform further testing. However, for the most part, as doctors are managing these patients chronically over time, the patients do not need to be seen in person every time, and virtual visits have appeared to be more than adequate in most situations. One of the few good things that has come out of the COVID-19 pandemic is learning that telemedicine is a very effective tool that can be used. Doctors who were resistant beforehand were somewhat forced into using telemedicine, and many of them want to continue using it. In my practice, for instance, nearly all of my colleagues want to continue using telemedicine even after the COVID-19 pandemic comes to an end.

G&H Could you provide some more details on the use of telemedicine during the COVID-19 pandemic?

CS Telemedicine has been a tremendous help in allowing routine care to continue during the pandemic. We were able to keep up our clinical volume and see patients as they needed to be seen at almost the same pace during the pandemic as beforehand. The fact that we were able to keep seeing patients clinically at a time when it was not known whether it was safe to come into the hospital was remarkable to me. It is impressive that doctors around the world have embraced telemedicine. There have been a number of articles written during the COVID-19 pandemic about the utilization and acceptance of telemedicine as an alternative way to see patients. I believe we have all learned something from this experience.

G&H Are there any other benefits to using telemedicine in the management of IBD?

CS Telemedicine makes it easier for family members or friends to join visits. Many patients like to have someone with them during a doctor's visit, which can be inconvenient when having to drive to the doctor's office. Many of the telemedicine platforms allow family members or friends to listen in on visits. In addition, with telemedicine, it is easier to perform short, quick check-ins. Many patients do not want to take off from work and drive for a short or long time to the doctor's office for only a 15- to 20-minute check-in. Now, staying in close contact with patients is easier.

G&H What are the main challenges associated with telemedicine?

CS The main challenges involve reimbursement and licensing. During the COVID-19 pandemic, providers

have been able to cross state borders and bill for telemedicine visits just as we have for in-person visits. There is concern that this will change as the pandemic comes to an end, but hopefully private payers and the government will recognize the benefits for patients and continue their support from a regulatory standpoint and in terms of financial reimbursement.

In addition, as noted previously, some people live in areas where they do not have Internet or Wi-Fi access, or they do not have the resources to have an electronic device. A possible solution, which we plan to use in our Rural Health Virtual IBD Center, is to ask patients to drive to their local provider's office to do a telemedicine visit from there with a device that is waiting for them. This is not quite as convenient as doing the telemedicine visit from home, but it is better than driving many hours to an IBD center.

G&H What are the most important questions that remain in this area?

CS To me, it is most important to confirm that benefits exist and to make sure that there are no unexpected consequences or risks. In other words, are doctors able to successfully manage patients and keep their clinical outcomes as good or better over the long term? Are doctors missing anything by not seeing patients in person, for example, a physical examination finding that would have been noticed if patients were seen in person?

Disclosures

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Suggested Reading

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