

# The Future of Telemedicine in Oncology

Presented by Lucy R. Langer, MD, MSHS; Amye J. Tevaarwerk, MD; and Robin Zon, MD;  
and moderated by Travis Osterman, DO, MS

## ABSTRACT

The COVID-19 pandemic has led to a massive surge in the use of telemedicine services in oncology. However, although telemedicine usage is not as high as it was early in the pandemic, it is not as low as it was before the pandemic, either, indicating that patients have a desire to receive care when, where, and how they want. Most oncology providers agree that telemedicine is beneficial and here to stay, but barriers hinder equitable delivery, such as racial/ethnic affiliations, older age, residing in a rural area, and lower socioeconomic status. The momentum created by the pandemic can serve to show the benefits of telemedicine and solidify its place in oncology care. However, addressing these disparities—and increasing widespread access to broadband and educating both patients and providers on how to use these technologies—is paramount.

*J Natl Compr Canc Netw* 2022;20(5.5):e225020  
doi: 10.6004/jnccn.2022.5020

### The Clinician Perspective

*Telemedicine* refers to a remote clinical service between a patient and healthcare professional. Although it may seem that telemedicine was not widely used until the onset of the COVID-19 pandemic, the concept is hardly new and actually stretches as far back as the 1920s,<sup>1</sup> according to Amye J. Tevaarwerk, MD, Associate Professor, Mayo Clinic Cancer Center, at the NCCN 2022 Annual Conference. “But what clinicians largely think of in the near-post-COVID era is a billed and synchronous telephone-based (audio alone) or video-based (both audio and visual) visit,” she noted.

Telemedicine visits were used extensively before the pandemic by certain specialists (ie, those in psychiatry and tele-ICU), but until recently have been relatively limited in the oncology realm.

Data from ASCO PracticeNET show a sharp and precipitous decline in face-to-face oncology visits around March and April 2020 and a sharp uptick in telemedicine visits, which was somewhat sustained throughout the summer of 2020.<sup>2</sup> However, by December 2021, approximately 5% to 6% of the volume of oncology visits were being conducted via telemedicine, although this figure can vary significantly from practice to practice. From both the clinician and patient perspectives, research shows that telemedicine has certain pros and cons, briefly summarized in Figure 1.

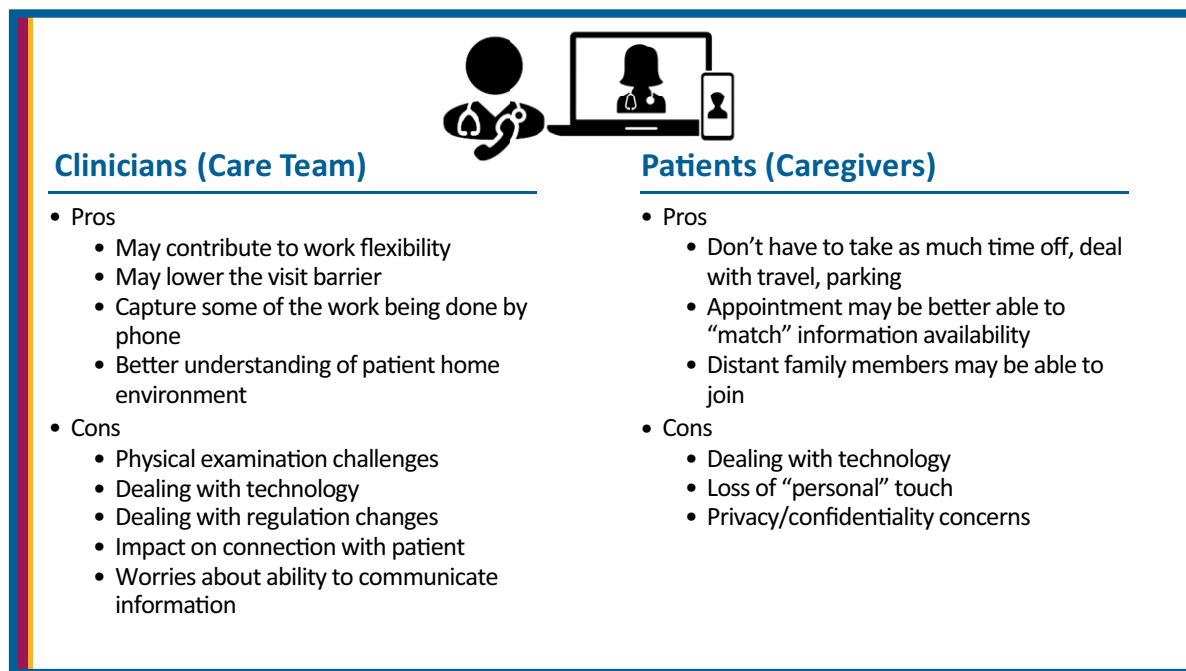
“From a clinician perspective, a lot of our data are survey data, and since much of it was actually collected in 2020, it’s not really mature from a COVID experience standpoint,” she noted. However, one of the largest surveys of cancer providers to date (>1,000 providers), conducted by NCCN between July and August 2020, revealed

that telemedicine visits resulting in an urgent in-person visit were an occasional occurrence (27% for phone and 24% for video).<sup>3</sup> Unplanned diagnostic studies and medication changes were reported with greater frequency, although not outside the norm of what providers would expect. Additionally, adverse outcomes arising because of a telemedicine visit versus an in-person visit were uncommon, with 93% reporting that these events happened “never or rarely.”<sup>3</sup>

Furthermore, the 2020 survey data revealed that providers intended to continue using telemedicine for certain types of visit. Estimates suggest that up to 46% of visits going forward could be conducted via telemedicine. However, according to Dr. Tevaarwerk, as of late 2021, the field of oncology has seen lower rates of persistence with telemedicine delivery than was indicated on these surveys, raising questions as to why. “Perhaps this is due to regulatory uncertainties, lack of support and clinical integration, or potentially patient preference,” she suggested.

From both the patient and caregiver perspective, 2020 data showed that responses varied widely in terms of satisfaction with telemedicine in the United States. In one study, 81.4% of patients indicated they would prefer in-person visits after the pandemic,<sup>4</sup> and another study indicated that 83% were satisfied with the telemedicine experience.<sup>5</sup>

However, the continued implementation of telemedicine highly depends on a variety of contextual features surrounding the virtual delivery of care. For example, in certain patient populations (eg, those with head and neck cancer), the appropriateness of telemedicine should be weighed carefully, on a case-by-case basis, and with consideration of social circumstances.<sup>6</sup> “In my personal



**Figure 1.** Pros and cons of telemedicine from the patient and provider perspectives.

experience, [these patients] were some of the most challenging individuals to care for during the toughest parts of the COVID pandemic," she said. "Telephone calls often didn't work because these patients weren't able to speak or use the phone properly."

### Challenges Associated With Telemedicine

"Potential pitfalls associated with telemedicine have been broadly identified, but more outcomes data are needed (eg, association of telemedicine visits with emergency department visits). According to Dr. Tevaarwerk, more focus should be placed on patient and clinician education about the appropriateness and timing of telemedicine and training on how to effectively use the technology; privacy/confidentiality concerns (including regulatory protection for providers); and the role of local clinics.<sup>7,8</sup>

"And certainly there's also an elephant in the room in terms of equity," she said. A number of factors are negatively associated with having telemedicine visits, including increasing age, rural residence, certain racial and ethnic affiliations, and self-pay/uninsured status. Higher socioeconomic status was also profoundly linked with an increased likelihood of having a telemedicine visit within 30 days of a cancer diagnosis.

Further elucidating the so-called digital divide are disparities in broadband and device access for White versus Black and Hispanic adults in the United States, as well as levels of digital literacy.<sup>9</sup> "It's probably not realistic for us to expect that every patient will want to or will be able to participate in telemedicine, but we somehow

might have to account for that inability or lack of desire by having resilient workflows that honor their needs and preferences," said Dr. Tevaarwerk.

"When I think about the future of telemedicine, I think about the profound need for more data," she added. Future research might explore topics such as caregiver engagement, improving access to ancillary support, reducing delays in cancer care, and extending specialist expertise through telemedicine. However, key considerations in the study of telehealth outcomes will remain patient attitudes/support, provider attitudes/healthcare system support, decreasing examination limitations, and licensing/regulatory and reimbursement support, she said.

### The Policy Perspective

Since the COVID pandemic, telehealth is certainly playing a larger role in care delivery, but there is work to do—on both the legislative and regulatory levels—to permanently increase access, according to Robin Zon, MD, a medical oncologist and Past President, Michiana Hematology Oncology, and a past Co-Chair of an ASCO expert panel on telemedicine. "However, it goes beyond legislative and regulatory changes," she said. "We need education and to be able to provide the technology, as well as the broadband necessary for telemedicine."

In March 2020, the Coronavirus Preparedness and Response Supplemental Appropriations Act became law,<sup>10</sup> waiving the Centers for Medicare & Medicaid Services (CMS) telehealth restrictions that were in place and expanding the types of originating sites at which patients

could receive telehealth. “In other words, patients in rural areas, and any patients for that matter, could access telemedicine from their home without having to visit a healthcare site,” Dr. Zon explained.

In August 2020, an Executive Order on Improving Rural Health and Telehealth Access was issued (Figure 2).<sup>11</sup> As it stands, the public health emergency (PHE) was set to expire in mid-April 2022, but it was extended another 151 days. At the end of the PHE, Medicare telehealth flexibilities will also end, pending congressional and/or regulatory action. “Interestingly, no smartphones or popular applications were previously allowed, but with CMS and the Office of Civil Rights—which has jurisdiction over HIPAA—smartphones and popular applications were permitted,” she pointed out.

Following the federal waiver that expanded Medicare payments for telehealth services, states refined and expanded telehealth reimbursement policies through changes in Medicaid program policies, including temporarily easing restrictions for state-regulated health plans.

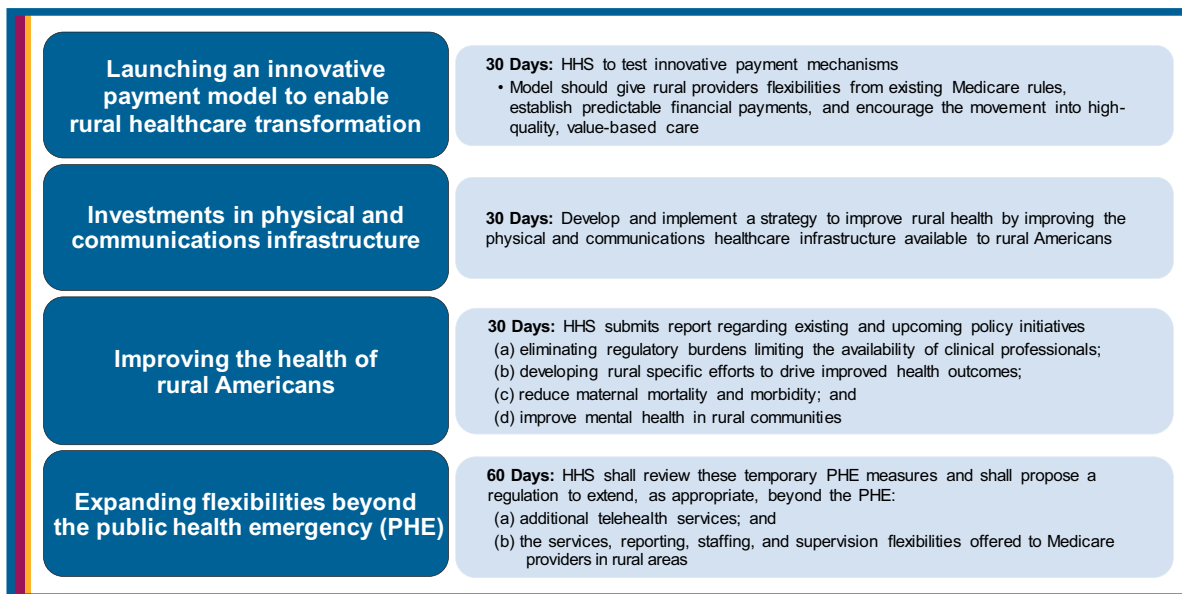
Currently, cross-state licensure requires physicians to obtain multiple licenses in multiple states, adhering to licensing rules and regulations based on the state in which a patient is located. However, the Interstate Medical Licensure Compact (IMLC) established a voluntary, expedited pathway to licensure for physicians wishing to practice in multiple states.

The ASCO Position Statement on Telemedicine Cross-State Licensure recommendations, published in May 2021,<sup>12</sup> urges CMS to maintain expanded telemedicine policies after the expiration of the PHE. It also encourages all states to participate in the IMLC but notes that

state and federal policies permitting telemedicine to cross state lines should include a provision requiring that the doctor–patient relationship be established prior to the provision of any telemedicine service. Furthermore, Dr. Zon stated that “Physicians should verify that their medical liability insurance covers comprehensive coverage of telemedicine services—including data security—across state lines,” she said. “We know that malpractice law does vary considerably from state to state.”

Finally, ASCO recommends that the Federal Trade Commission monitor telehealth practice patterns to prevent unfair methods of competition (hence, the recommendation that a doctor–patient relationship be established prior to the provision of telemedicine), as well as unfair or deceptive acts or practices.

From a policy perspective, Dr. Zon echoed the concern that telehealth could widen the existing socioeconomic divide and perhaps worsen the current state of healthcare equity and access. “Despite the promises to try to improve equity, there is a digital divide,” she said. “And this divide is reflected in 3 major barriers: limited access to technology, low levels of digital literacy, and inadequate or nonexistent broadband.” Populations experiencing one or all of these barriers are often the elderly, individuals with lower socioeconomic status and limited health literacy, and non–native English speakers, and that policy solutions are needed to address these disparities. According to Dr. Zon, these solutions should focus on support for marginalized populations to help them make full use of the digital options available (including digital visits and access to patient portals), payment parity for audio-alone visits to ensure telehealth services (Dr. Zon noted that



**Figure 2.** Details of the Executive Order on Improving Rural Health and Telehealth Access, launched in August 2020.

they can be time-consuming), as well as delivery of a promised broadband infrastructure.

She pointed out the potential merit of reinstating some older programs, such as the Department of Education's Community Technology Centers program, which provides space for individuals in underserved locations to access and learn about technology, or the Affordable Connectivity Program, which helps low-income households pay for broadband and Internet services.

"We need more data," she said. "We need to better understand not only what happened but also what we can do in the future, and how we can use telemedicine as part of the solution for some of the issues that we're facing, including diversity and equity."

### The Payer Perspective

Regardless of which direction the CMS rulings may swing, many payers have expressed interest in continuing to support and reimburse telemedicine across multiple specialties and primary care while also investing in virtual care options, according to Lucy R. Langer, MD, MSHS, National Medical Director of Oncology and Genomics, UnitedHealthcare. "To put it bluntly, COVID changed everything," she said. However, some "silver lining side effects" were produced due to lifting telehealth regulations. Of note, although telehealth utilization has fallen off since the onset of the pandemic, it has remained well above prepandemic levels—somewhere in the ballpark of 10% utilization on an ongoing basis, she reported. "This shows us there's an appetite for telemedicine, for expanding the way we interact with patients and the way patients interact with a variety of different doctors," she said.

The pandemic made us all more familiar with and dependent on technologic advancements, which help in many areas of our lives, not only telehealth (ie, food delivery, video calls, activity trackers). Although smartphones have undoubtedly become almost ubiquitous, Dr. Langer again emphasized the importance of pursuing telehealth strategies that consider the fact that not everyone has access to smartphones, the technologies, or broadband.

Dr. Langer argued that payers and providers share the same goal: to deliver the best cancer care that remains affordable and accessible. "Beyond a pandemic substitute for the doctor you already know, telemedicine may be thought of as a way to expand access to high-quality oncologists for patients," she suggested.

In the United States, 22 states currently have parity laws, but Dr. Langer noted coverage parity is not the same as payment parity; in the states with payment parity, private payers are required to reimburse telemedicine service at the same rate as a comparable in-person service.<sup>13</sup> Variations in coverage are classified by the line of business (ie, commercial, Medicare Advantage, community, or state), so

payers are acutely aware of the different policies and provisions that guide the way benefit designs are constructed, she explained.

According to Dr. Langer, payers are focused on expanding telehealth to allow members to connect with their doctors in the way they prefer and to connect with doctors they may not otherwise have been able to connect with, and to use telehealth to improve the overall quality of care.

A virtual care program offered at UnitedHealthcare, called the Cancer Support Program, might represent the future of telemedicine support for payers, according to Dr. Langer. Key elements include identifying patients at higher risk of adverse outcomes, providing patients with tools (including telephonic case management and app-based symptom reporting tools), enabling direct interaction between patients and their oncologists, and providing patients with asynchronous educational materials. "This process is multidirectional—the patient can initiate the interaction or vice versa—and it's iterative," she said.

On a larger scale, UnitedHealthcare and other payers have committed to building benefit designs that support broader access to telehealth (through the expansion of 24/7 virtual visits as well as virtual tools). She added that programs such as the Lifeline program (part of the Universal Service Fund managed by the Federal Communications Commission) offer discounted or free phone and broadband service for qualifying low-income consumers. According to Dr. Langer, payers can potentially further support oncology telehealth with a suite of services offered through the Virtual Centers of Excellence, where patients can access second opinion consultations and be directed to real-time telehealth services.

"My objective as Medical Director for Oncology is partnering with any and all oncologists who are interested in building this, curating the resources, and figuring out how we can build a 2-way street together, to help support patients," she said.

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**Disclosures:** Dr. Langer has disclosed being employed by UnitedHealthcare. Dr. Tevaarwerk has disclosed no relevant financial relationships. Dr. Zon has disclosed having equity interest/stock options in AC3 HC Technology Com. RCM, Cytosorbents Corporation, Moderna, Oncolytics Biotech, Inc. Select Sector Health Care, and TG Therapeutics Equity; receiving honoraria from L-NUTRA, Inc. and sanofi-aventis; and receiving consulting fees from and serving as a scientific advisor for New Century Health. Dr. Osterman has disclosed receiving consulting fees from and serving as a scientific advisor for AstraZeneca Pharmaceuticals LP, Bidesix, COTA Healthcare, eHealth, Flagship Biosciences, Inc., GenomOncology LLC, MDoutlook, and Outcomes Insights, Inc; receiving grant/research support from GE Healthcare and Microsoft; and having equity interest/stock options in Infostratix, LLC.

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