

# Telemedicine as patient-centred oncology care: will we embrace or resist disruption?

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Telemedicine represents the practical embodiment of patient-centred oncology care, a concept that has become increasingly popular in the past few years. Yet despite the demonstrated benefits of telemedicine, its longitudinal adoption remains limited. Herein we discuss some of the potential challenges that telemedicine faces, as we underutilize this approach relative to its anticipated value.

Patient-centred care has emerged as an important concept in cancer care delivery and involves a multifaceted transition towards prioritizing the patient's values, focusing predominantly on the physical, financial and quality-of-life burdens of treatment. Since the start of the COVID-19 pandemic, telemedicine has become a prominent platform for delivering cancer care. Telemedicine has not only proven its utility as a feasible alternative to in-person care but has also been recognized by patients as an option that they might prefer for a wide range of reasons. Telemedicine provides a suitable mechanism for moving beyond just paying lip service to being patient focused and instead delivering truly patient-centred health care.

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In contrast with the traditional health-care delivery model, in which the patient physically presents to a clinic optimized for the function of the physician, telemedicine finds the patient in their home or work environment. In this way, telemedicine potentially offers the physician a glimpse into the hobbies, pets and health concerns that are invisible in the examination room. These insights have the potential to improve not only patient care but also the patient–physician relationship. The ability to easily incorporate friends, family and caregivers in conversations, regardless of their physical location, can also improve real-time communication, adherence to treatment plans and integrate critical perspectives, otherwise missed during an in-person-only model of care. Ultimately, the ability to ‘meet’ patients and their family within

the comfort of their home can facilitate challenging conversations, such as advanced care planning, and promote open dialogue from both patients and clinicians.

Telemedicine confers additional practical advantages over in-person care. By increasing flexibility in scheduling appointments and reducing the need for travel, telemedicine broadens access for vulnerable patients who might be too frail to travel, lack specialized oncology care close to home and/or cannot afford the costs associated with frequent on-site visits. Remote genetics<sup>1</sup>, palliative care<sup>2</sup> and survivorship clinics<sup>3</sup> have already demonstrated the utility of telemedicine and have brought specialized care to underserved communities in the USA. Telemedicine enables more home time for patients and their families, who are often burdened by frequent time-intensive health-care visits, and offers potential savings from transportation, tolls and even parking fees. Beyond this reduction of non-medical out-of-pocket costs, telemedicine also decreases lost wages from days off work for both patients and caregivers<sup>4</sup>. All of the seen and unseen costs of in-clinic visits contribute to the financial toxicity of cancer care and preclude some patients from receiving optimal treatment and/or survivorship care for their cancer.

Of course, the ultimate arbiters of the value of telemedicine are the patients themselves. In this regard, the limited available evidence indicates that most patients find telemedicine to be an acceptable, and sometimes preferable, option<sup>3,5,6</sup>. In a qualitative study, patients describe telemedicine as “convenient” and “comfortable”, with substantial benefits that include saving money and time<sup>3</sup>. A survey with results published in 2021 revealed that telemedicine did not affect patient confidence in their physician (90%) or their understanding of the treatment plan (88%)<sup>5</sup>. Among respondents, 45% and 34% preferred telemedicine or in-person care, respectively. In a retrospective study involving ~39,000 patients with cancer who received treatment at the Moffitt Cancer Center from April 2020 to June 2021, those who had a telehealth visit were more likely to rate care access as highly satisfying relative to those with an in-person visit (75.8% versus 62.5%)<sup>6</sup>. Although telemedicine might not be suited to all patients or clinical settings in cancer care, many patients consider it a viable alternative that is preferable rather than a suboptimal option that should only be considered in extenuating circumstances.

Telemedicine has the potential to reduce geographical, educational and socioeconomic barriers, but some studies that have evaluated patterns of telemedicine in practice indicate that it could heighten disparities<sup>7</sup>. The sensory, hardware and technical skill set required to navigate telemedicine can widen the ‘digital divide’<sup>7</sup>. Unequal access is a greater concern for patients with physical and cognitive disabilities as well as non-English speakers, all of whom already face challenges when participating in cancer care. Other valid concerns pertain to the ability of clinicians to deliver high-quality culturally competent care in telemedicine visits, especially in the setting of important or sensitive clinical conversations. In a survey of > 1,000 oncologists from the

National Comprehensive Cancer Network, respondents estimated that 46% of clinical encounters after the pandemic could be virtual, leaving just over half of them as better suited for in-person visits<sup>8</sup>. Clearly, telemedicine constitutes an optimal patient-centred approach for some, but not all, visits.

Available data on the implementation of and satisfaction with telemedicine after the beginning of the pandemic provide proof of principle that this approach is an effective strategy for a wide range of patients with cancer during an acute but transient time of need. At present, telemedicine has a sustained presence far greater than its essentially negligible role before the pandemic and, although its current uptake is variable across centres, it remains far below peak levels during the pandemic<sup>9</sup>. Telemedicine can never be a panacea for the medical access issues of many individuals, and a central tenet of patient-centred care is that patients should not be expected to share the same priorities; no strategy is best suited for each clinical scenario or individual. Nevertheless, even if telemedicine should not be expected to be the dominant paradigm in most areas of medicine, current usage numbers fall well below what would be anticipated on the basis of indications of patient satisfaction with<sup>5,6</sup> or oncologist estimates for<sup>8</sup> telemedicine. We believe that the inconvenient truth for telemedicine is that promoting its inherent patient-centredness displaces the stakeholders who currently jostle for control as the centre of medical care: health-care institutions, insurers and physicians.

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Although interstate licensing requirements for telemedicine and integration into current reimbursement policies as a longitudinal policy remain uncertain, an arguably greater concern for the long-term success of telemedicine is the historical pattern in which the broad adoption of changes is only a realistic possibility if the stakeholders in power benefit from those changes. The loss of institutional facility fees and inpatient admission charges should be expected to create very powerful headwinds. Insurers might purport to be committed to providing access to specialist care for their patients, but this principle is likely to be translated into practice only if physicians are similarly reimbursed when seeing patients remotely or in person. Moreover, physicians express many justifications for being wary of telemedicine<sup>8,9</sup> but another plausible, yet unacknowledged, reason among these is the prioritization of physician efficiency over patient convenience and costs.

The limited available evidence indicates that the majority of non-reimbursed multidisciplinary tumour boards – a practice that, similar to telemedicine, leads to improved patient access and participation

of physicians – remain entirely or substantially virtual<sup>10</sup>, whereas telemedicine has reverted to being conducted generally for only a small number of patients with cancer<sup>9</sup>. This situation exemplifies the disparity in how key players can preserve virtual interactions when it serves them best. The disparity in practice patterns, largely associated with the distinction of who would benefit from using a virtual platform, arguably represents a ‘good for me, not for thee’ mindset.

Patient-centred care is a transformation that is highly beneficial for patients and would ideally include greater use of telemedicine as a leading element. Although several practical hurdles remain to be overcome to enhance the utility and reduce the barriers to accessing telemedicine, we consider the long-term success of this approach ultimately as a question of whether the most powerful stakeholders in the current US health-care system will go beyond adopting ‘patient-centred care’ as a virtue-signalling catchphrase and willingly sacrifice their current position in the centre of care.

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Published online: 26 June 2023

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### Acknowledgements

E.B. and F.C. receive support from the NIH/NCI (Grant P30 CA008748). E.B. receives support from the NCI MATCHES P50 Grant (P50 CA271357).

### Competing interests

H.J.W. and F.C. declare no competing interests. E.B. has received consulting fees from Flatiron Health.