Immuno-oncology (IO) is not only an innovative treatment modality but also a driver of innovative cancer care delivery, as oncology teams manage the unique needs of IO patients, educate a broader constituency of healthcare providers about IO and potential immune-related adverse events (irAEs), and help patients access the latest IO therapies. Telehealth is a natural innovation partner for IO when applied to patient-reported outcomes (PROs), provider education, and clinical trial enrollment.

How is your cancer program using telehealth in IO now or planning to use it in the future?

PROs garnered attention at the 2017 ASCO plenary session when Ethan Basch, MD, MSc, presented evidence that PROs improve survival when used to monitor patient symptoms and provide timely intervention.1 At ASCO 2018, Fabrice Denis, MD, PhD, presented data showing improved survival in lung cancer patients who tracked their post-treatment symptoms using PROs.2 However, during the discussion session, speakers acknowledged that current PROs do not capture symptoms specific to IO.

This gap presents an opportunity to explore telehealth solutions that help providers and patients manage IO treatment. While patient portals and smartphone applications are familiar to many patients and healthcare professionals, optimal use of such technology is not fully realized. Currently, cancer programs may use educational materials or ID cards to help raise awareness of IO treatment and irAEs, and to streamline communication between non-oncology providers and the treating oncologist. Others utilize nursing experts who focus on IO patients’ needs. With PRO platforms similar to those Dr. Denis studied, patients regularly “push” symptom information via a web-based system that triggers a response from their care team when a threshold is crossed. An advantage of this monitoring system is a regular cadence that captures worrisome symptoms before they become advanced and encourages patients to actively participate in their care.

A similar PRO system for IO could ask patients about their bowel habits, shortness of breath, or fatigue. With current technology, patients could submit photos of physical findings, such as a rash, for visual evaluation by their care team. Using IO-focused PROs in this way would capture troublesome symptoms earlier and allow busy oncology practices to triage patients who can be managed over the phone versus those who need to be seen in person.

Telehealth is also an exciting solution for provider-to-provider education. Virtual tumor boards are one example used by many health systems. Experts can use telehealth to render second opinions and to aid in side effect management. Using store-and-forward technology allows sharing of records and images with IO experts who can advise general oncologists and other specialists in the management of patients. Finally, telehealth can enhance access to clinical trials by providing patients access to portfolios of IO studies and, ultimately, allowing them to share health information to determine their eligibility without traveling for an appointment.

Certainly, barriers to deploying telehealth in IO remain; however, as barriers are removed, more practices will embrace telehealth.

2. Denis F. ASCO 2018 Abst. 6500.