THE STATE OF VIDEO-BASED TELEMEDICINE FOR KIDNEY DISEASE CARE

Review highlights the evolution of telemedicine use over time.

Highlights

- Video-based telemedicine is used to facilitate care across all stages of chronic kidney disease.
- Video-based telemedicine has evolved in recent years to be less reliant on specialized equipment and has allowed patients to receive kidney care in a location of their choice.
- Further work is needed on approaches to sustainable integration and minimizing barriers to access.

Washington, DC (December 7, 2021) — Video-based telemedicine provides an alternative way to deliver care for patients and rapidly became a dominant model for chronic disease management during pandemic restrictions. A recent review of published studies provides an overview of the available evidence on the implementation and outcomes of using video-based telemedicine for adults across the spectrum of kidney disease over time. The research is published in CJASN.

A team led by Ann Young, MD, PhD (St. Michael’s Hospital of Unity Health Toronto, in Ontario, Canada) and Stephanie W. Ong, BScPhm, MSc (University Health Network, in Ontario, Canada) identified 24 studies published between 1997 and 2020 across 10 countries. The investigators found that video-based telemedicine has been used to facilitate care across all stages of chronic kidney disease (earlier stage kidney diseases, dialysis, and transplantation). While earlier studies used institution-specific technologies that linked main hospital sites to more remote healthcare locations, recent studies saw the use of consumer-based platforms on personal devices that further removed geographic barriers.

Video-based care was well received with studies reporting acceptable clinical outcomes, improved efficiencies, and high patient satisfaction.
“This is encouraging, but as the latest technologies are streamlined into routine health care, the ‘digital divide’ will become more pronounced, negatively impacting those without access to broadband internet connections, video-capable devices, and those with limited technology literacy. This is an area that deserves further study,” said Ms. Ong.

On October 13th, three Canadian health officials—Ontario’s chief medical officer of health, the Assistant Deputy Minister for Ontario Health Insurance Planning in the Ministry of Health, and the registrar and chief executive officer of the College of Physicians and Surgeons of Ontario—sent a joint letter to physicians urging them to resume more in-person visits and to cut back on virtual appointments, noting that while virtual visits were encouraged earlier in the COVID-19 pandemic, pressures on the healthcare system have since eased.

“The nature of CKD care makes it particularly amenable to virtual care given that relevant history, review of laboratory investigations, and counselling can all be conducted via virtual platforms,” said Dr. Young. “The main obstacle of virtual care is the lack of a physical exam. Virtual visits are a powerful tool, but in certain clinical settings, a physical exam is necessary. Finding the appropriate balance between virtual visits and in-person visits is key.”

Study authors include Ani Orchanian-Cheff, BA, MISt, Christopher T. Chan, MD, FRCPC, and Ron Wald, BSc, MD, MPH, FRCPC.

An accompanying editorial notes that telehealth will remain an effective and important means of providing health care, but it is not an appropriate option for every patient for every visit. The authors also stress that ongoing research will be important as the field progresses. “Additional observational and interventional studies will be needed to measure telehealth outcomes as its use evolves and technology continues to advance,” they wrote.

An accompanying Patient Voice editorial provides the perspective of a patient with lupus nephritis who has had numerous encounters with clinicians through both in-person and telehealth visits.

Disclosures: The authors reported no relevant financial disclosures.


The content of this article does not reflect the views or opinions of The American Society of Nephrology (ASN). Responsibility for the information and views expressed therein lies entirely with the author(s). ASN does not offer medical advice. All content in ASN publications is for informational purposes only, and is not intended to cover all possible uses, directions, precautions, drug interactions, or adverse effects. This content should not be used during a medical emergency or for the diagnosis or treatment of any medical condition. Please consult your doctor or other qualified health care provider if you have any questions about a medical condition, or before taking any drug, changing your diet or commencing or discontinuing any course of treatment. Do not ignore or delay obtaining professional medical advice because of information accessed through ASN. Call 911 or your doctor for all medical emergencies.

Since 1966, ASN has been leading the fight to prevent, treat, and cure kidney diseases throughout the world by educating health professionals and scientists, advancing research and innovation, communicating new knowledge, and advocating for the highest quality care for patients. ASN has more than 21,000 members representing 131 countries. For more information, visit www.asn-online.org.