Medical Xpress

The state of video-based telemedicine for kidney disease care

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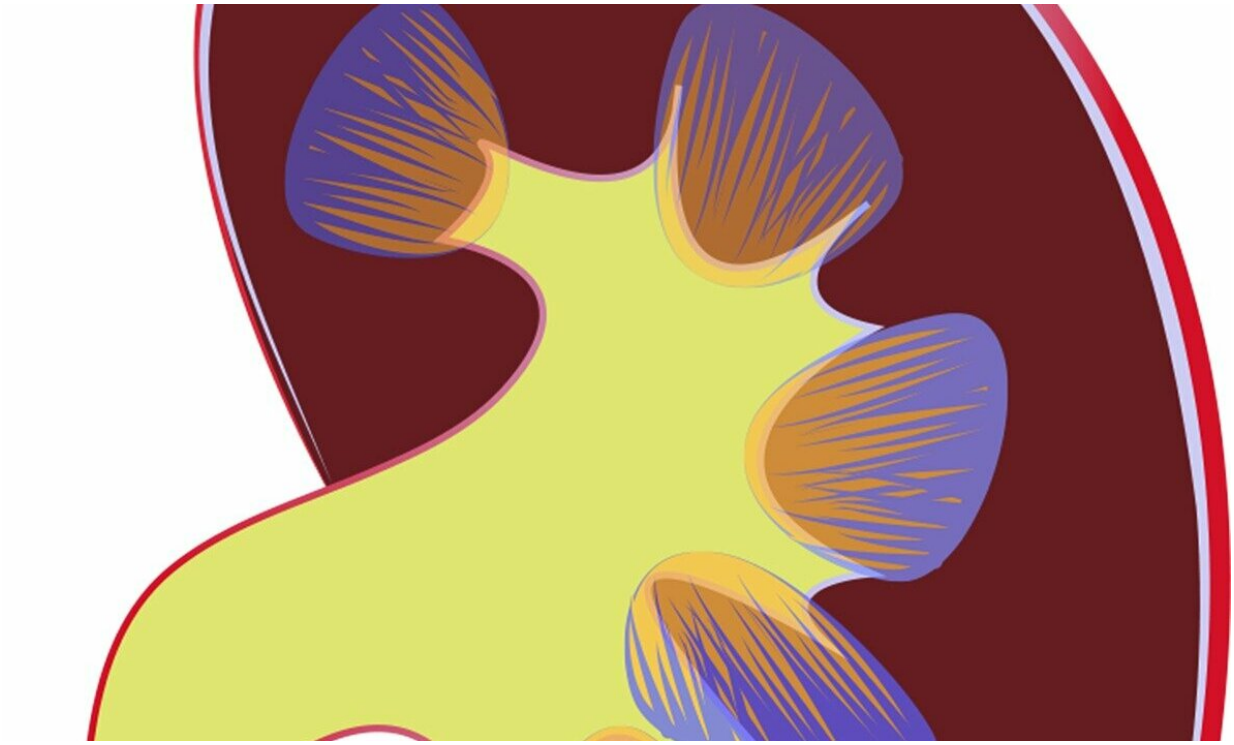

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Video-based telemedicine provides an alternative way to deliver care for patients and rapidly became a dominant model for chronic disease management during pandemic restrictions. A recent review of published studies provides an overview of the available 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, Ph.D. (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.

More information: "Video-based Telemedicine for Kidney Disease Care: A Scoping Review," *CJASN*, DOI: 10.2215/CJN.06660521

"Telehealth and Kidney Disease Care: Role After the Public Health Emergency," *CJASN*, DOI: 10.2215/CJN.13651021

"Patient Views on Telehealth for Kidney Disease Care," *CJASN*, DOI: 10.2215/CJN.11250821