

# Video-Based Telehealth Visits Decrease With Increasing Age

Bharati Kochar, MD, MSCR<sup>1,2</sup>,  
Nneka N. Ufere, MD<sup>1,2</sup>, Ryan Nipp, MD, MPH<sup>2,3</sup>,  
Jenna L. Gustafson, MS<sup>1</sup>, Peter Carolan, MD<sup>1</sup>  
and Christine S. Ritchie, MD, MSPH<sup>2,4</sup>

*Am J Gastroenterol* 2020;00:1–2. <https://doi.org/10.14309/ajg.0000000000000961>

The coronavirus disease (COVID-19) pandemic resulted in rapid adoption of telehealth across the United States. Telehealth holds the potential for unintended consequences that may disadvantage patients who have reduced digital literacy, lack consistent Internet access, and have

visual and/or hearing impairments. As the population ages and patients seeking gastrointestinal (GI) care are older, we must investigate the impact of shifts in the practice of medicine on our older patients. Older adults comprise a substantial portion of patients seeking subspecialty care, even in gastroenterology (1,2). To guide the future of telehealth in gastroenterology, it is imperative for us to understand the current dissemination of various forms of telehealth. Therefore, we aimed to describe use of telehealth during the COVID-19 pandemic in our practice.

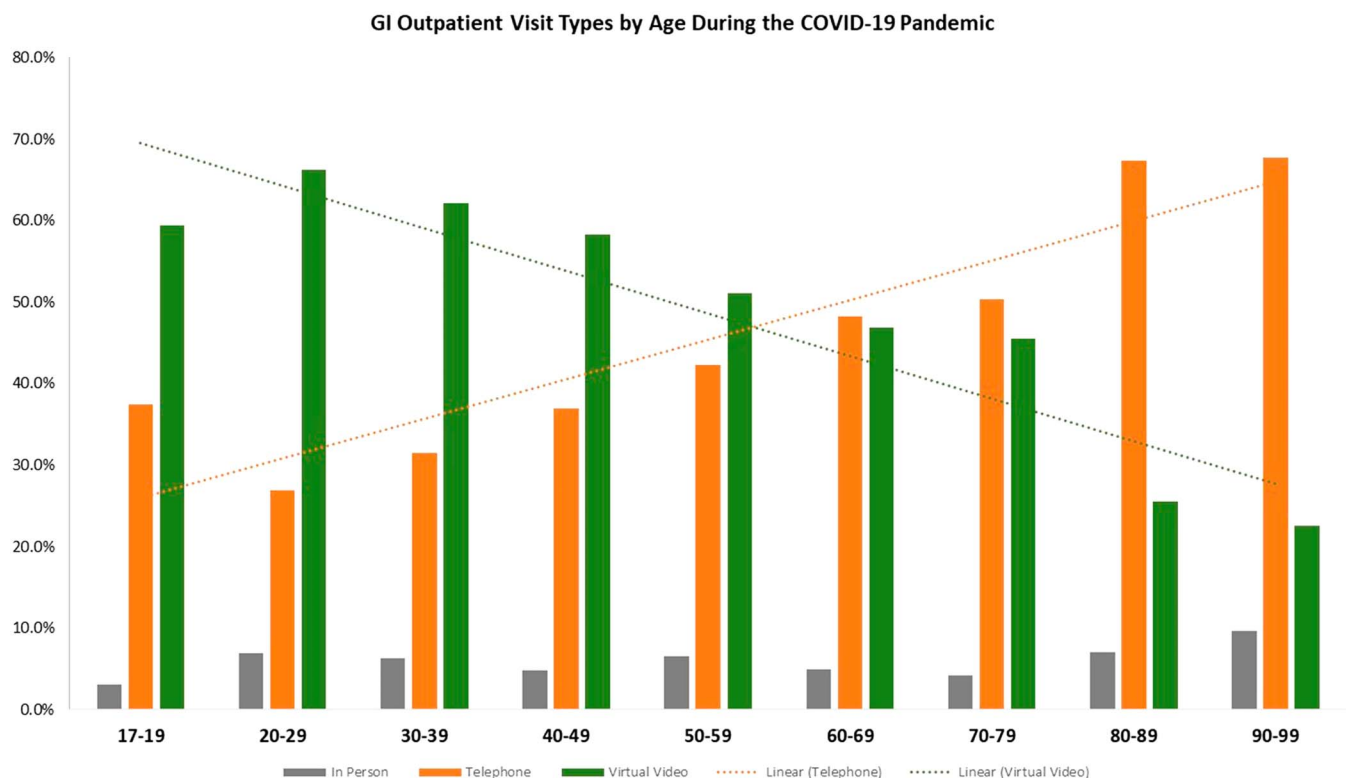
In a large GI practice at a tertiary care academic medical center, we conducted a retrospective cohort study using billing data from outpatient encounters during COVID-19 surge operations. This study was approved by the MassGeneral Brigham Institutional Review Board (IRB #2020P001961).

During the 11-week COVID-19 surge operations, we had 6,171 outpatient GI encounters with a primary billing code. Most encounters had a primary diagnosis

of a general GI condition (57%), followed by hepatology (21%) and inflammatory bowel disease (19%). Patients were informed at scheduling that all virtual visits would be billed similarly. During this period, 53% were virtual video visits, 41% were telephone-based, and 6% were in-person. For the same dates in 2019, we had 6,368 outpatient encounters, demonstrating that 97% of the previous year's outpatient volumes were sustained during the pandemic.

During the pandemic, 39% of patients who had an outpatient encounter with our GI division were 60 years or older at the time of their visit. For the same period in 2019, 41% of outpatients were 60 years or older ( $P = 0.991$ ). GI patients aged 60 years and older were significantly more likely to have a telephone visit (51% vs 35%,  $P < 0.001$ ) and significantly less likely to have a virtual video visit (44% vs 59%,  $P < 0.001$ ) than those younger than 60 years (Figure 1).

Video visits offer clinicians the benefit of conducting a virtual physical examination



**Figure 1.** Gastroenterology outpatient visit types by age during the COVID-19 pandemic.

and assessing verbal and nonverbal cues. Furthermore, older adults are more likely to have complex medical concerns related to medications and comorbidities as well as atypical presentations that may be more difficult to assess over the phone. Video visits allow for a more complete assessment of patients' general health condition, which is an important factor in clinical decision-making.

Furthermore, satisfaction with telehealth corresponds with the ability to participate in video visits (3). Although older adults are often characterized as averse to adapting to new technologies, a national survey of older adults before the pandemic revealed that most older adults were interested in using telehealth (4). In fact, if implemented thoughtfully, telehealth has the potential to substantially benefit older adults because they may be more likely to have difficulty with mobility and transportation (5). However, rapid and uniform implementation of telehealth in response to a global pandemic resulted in older adults less often having video-based telehealth than younger adults, which can negatively impact their quality of care and satisfaction with care (3).

Our data highlight the importance of developing strategies to avail older adults of improved access to telehealth. Additional

research is urgently needed to develop solutions for this disparity in care by age. One potential solution may be investing in "technology navigators," who could compensate for the lack of appropriate technology by providing devices with reliable Internet connection. Such approaches might also benefit other populations disadvantaged in the modern Internet-based healthcare environment. Telehealth holds great potential to enhance access to health care for older adults. However, tailored implementation strategies accounting for the various patient populations will be required to develop sustainable and equitable telehealth programs.

#### CONFLICTS OF INTEREST

**Guarantor of the article:** Bharati Kochar, MD, MSCR.

**Specific author contributions:** B.K.: designed the study, analyzed data, and drafted the manuscript. N.N.U. and R.N.: designed the study, analyzed data, and critical revision of the manuscript. J.L.G. and P.C.: obtained data and critical revision of the manuscript. C.S.R.: designed the study, critical revision of the manuscript, and study supervision.

**Financial support:** B. Kochar is supported by CCF CDA (568735).

**Potential competing interests:** None to report.

#### REFERENCES

1. Anderson G, Horvath J, Zeffiro T, Johnson N. Chronic Conditions: Making the Case for Ongoing Care. The Robert Wood Johnson Foundation: Princeton, NJ, 2004.
2. Peery AF, Crockett SD, Murphy CC, et al. Burden and cost of gastrointestinal, liver, and pancreatic diseases in the United States: Update 2018. *Gastroenterology* 2019;156:254–72.e1.
3. Serper M, Nunes F, Ahmad N, et al. Positive early patient and clinician experience with telemedicine in an academic gastroenterology practice during the COVID-19 pandemic. *Gastroenterology* 2020 Jun 18;S0016-5085(20)34834-4.
4. Kurlander JK, Singer J, Solway D, et al. National Poll on Healthy Aging. University of Michigan: Ann Arbor, MI, 2019.
5. Dewar S, Lee PG, Suh TT, et al. Uptake of virtual visits in a geriatric primary care clinic during the COVID-19 pandemic. *J Am Geriatr Soc* 2020;68(7):1392–1394.

---

<sup>1</sup>Division of Gastroenterology, Massachusetts General Hospital, Boston, Massachusetts, USA; <sup>2</sup>The Mongan Institute, Boston, Massachusetts, USA; <sup>3</sup>Division of Hematology & Oncology, Massachusetts General Hospital, Boston, Massachusetts, USA; <sup>4</sup>Division of Palliative Care & Geriatrics, Massachusetts General Hospital, Boston, Massachusetts, USA. **Correspondence:** Bharati Kochar, MD, MSCR. E-mail: bkochar@mgh.harvard.edu.