Topic Brief: Telehealth for Digestive Disorders

Date: 5/13/2023
Nomination Number: 1040

Purpose: This document summarizes the information addressing a nomination submitted on November 18, 2022 (link to nomination) through the Effective Health Care Website. This information was used to inform the Evidence-based Practice Center (EPC) Program decisions about whether to produce an evidence report on the topic, and if so, what type of evidence report would be most suitable.

Issue: The nominators are interested in the effectiveness of telehealth for people of color living with digestive disorders.

Findings: The EPC Program will not develop a new systematic review because we found a systematic review addressing the concerns of this nomination.

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Background

Telemedicine is the use of electronic information and telecommunications technologies, including videoconferencing and phone calls, for clinical communication between patients and providers. Telehealth also encompasses remotely-delivered support activities for providers, such as training.[1] Telehealth has been demonstrated to be as effective as, if not more effective than, usual care.[2]

The use of telehealth increased globally during the COVID-19 pandemic.[3] In 2021, during the pandemic, 37% of American adults had used telemedicine in the past 12 months. Variables associated with greater telehealth use included gender (women), race/ethnicity (non-Hispanic white and Native Americans), education (higher education levels), and setting (more urban areas).[4]

The nominators are interested specifically in the role of telehealth for digestive disorders in communities of color. Digestive disorders include conditions such as irritable bowel syndrome, Crohn's disease, celiac disease, fecal incontinence, gas, lactose intolerance, diarrhea, diverticulosis and diverticulitis, and acid reflux. Approximately 60 to 70 million Americans have digestive disorders. In 2009, digestive disorders were associated with over 200,000 deaths, and, in 2004, cost $141.8 billion.[5]

Scope

Key Questions:
1. What are the characteristics of patients, providers, and health systems using telehealth during the COVID-19 era? Specifically:

a. What are the characteristics of patients (e.g., age, race/ethnicity, gender, socioeconomic status, education, geographic location [urban vs. rural])?
b. What are the characteristics of providers and health systems (e.g., specialty, geographic location, private practice, hospital-based practice)?
c. How do the characteristics of patients, providers, and health systems differ between the first 4 months of the COVID-19 era versus the remainder of the COVID-19 era?
2. What are the benefits and harms of telehealth during the COVID-19 era?
a. Does this vary by type of telehealth intervention (e.g., telephone, video visits)?
b. Does this vary by patient characteristics (e.g., age, gender, race/ethnicity, type of clinical condition or health concern, geographic location)?
c. Does this vary by provider and health system characteristics (e.g., specialty, geographic location, private practice, hospital-based practice)?
3. What is considered a successful telehealth intervention, and what are the barriers and facilitators of these interventions during the COVID19 era:
a. From the patient or caregiver perspective?
b. From the provider perspective?
4. What strategies have been used to implement telehealth interventions during the COVID-19 era?

Table 1. Questions and PICOT (population, intervention, comparator, outcome, timing)

Questions	Telehealth during COVID-19

Population	KQs 1 and 2:
	    • Patients of any age
	    • Health systems
	    • Hospitals
	    • Providers
	KQ 3:
	    • Patients or their caregivers
	    • Providers
	KQ 4:
	    • Hospitals
	    • Community-based clinics
	    • Private practices
	    • Mental health services
	    • Federally Qualified Health Centers
	    • Rural clinics
	    • Healthcare systems

Interventions	KQs 1-3:
	    • Remotely delivered synchronous medical services (e.g., telephone, video visits) between a patient and a healthcare provider in an ambulatory setting (e.g., outpatient and community-based clinics) or ED providing acute/urgent care (e.g., symptom management); routine/chronic care (e.g., preventive services, chronic disease management); mental health services; wellness visits; post-hospital discharge care (e.g., routine follow up and care for nonacute issues)
	    • Patient and specialist communications facilitated by an ED physician in an ED (particularly important in rural care settings)
	KQ 4: Implementation strategies for telehealth

Comparators	KQs 1-3: In-person care, no care, no comparison KQ 4: Implementation strategies for telehealth
Outcomes	KQ 1: N/A KQ 2:

	• System outcomes
	• Healthcare access (e.g., insurance coverage, Wi-Fi, and smartphone access)
	• Healthcare utilization (e.g., hospitalization, readmission, ED visit)
	• Healthcare performance and quality measures (e.g., adhering or meeting HEDIS standards or other validated quality measures), e.g.,
	    o Practice efficiency
	    o No-show rates
	    o Staffing hours
	    o Cycle times
	    o Communication
	    o Clinical outcomes (any)
	    o Medication adherence
	    o Up-to-date lab values
	    o Adverse effects/patient safety issues
	    o Inappropriate treatment
	• Misdiagnosis/delayed diagnosis/care
	• Case resolution/Duplication of services (telehealth followed immediately by in-person visit)
	• Privacy/confidentiality breaches
	• Cost (see Appendix A for detailed cost outcomes)
	KQ3:
	    • Patient/provider-level outcomes
	    • Patient satisfaction/perceptions
	    • Physician /provider satisfaction/engagement/burnout
	    • Barriers and enablers
	KQ4:
	    • Implementation strategies

Timing	All KQs: The era of COVID-19 (March 2020-present) KQ 1d: During the first 4 months or beyond the initial phase

Abbreviations: ED=emergency department; HEDIS=healthcare effectiveness data and information set; KQ=key question.

Assessment Methods
See Appendix A.

Summary of Literature Findings
In 2023, AHRQ produced a systematic review that included an assessment of the nominated topic. Specifically, the review included a stratification of studies on telehealth during COVID by medical condition (including gastrointestinal patients) and patient characteristics (including race/ethnicity). While studies of gastrointestinal patients were included and analyzed, there were no conclusions drawn regarding this patient population. The conclusions did include a report on race/ethnicity, with the authors noting that, both before and during the COVID-19 pandemic, people of color were not among the highest users of telehealth. They further concluded that the cost of telehealth can be a barrier to care due to limitations on insurance reimbursement, which could have race/ethnicity implications.[6]

See Appendix B for detailed assessments of all EPC selection criteria.

Summary of Selection Criteria Assessment
The nominators were interested in determining the effectiveness of telehealth for digestive disorders in communities of color. A 2023 AHRQ systematic review on telehealth that was

published during the COVID-19 era includes an assessment of the benefits and harms of telehealth, stratified by health condition and race/ethnicity. This review addresses the nomination.

Please see Appendix B for detailed assessments of individual EPC Program selection criteria.

References

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Author
Emily Gean
Lisa Winterbottom

Conflict of Interest: None of the investigators have any affiliations or financial involvement that conflicts with the material presented in this report.

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Appendix A: Methods

We assessed the nomination for priority for a systematic review or other AHRQ Effective Health Care report with a hierarchical process using established selection criteria. Assessment of each criteria determined the need to evaluate the next one. See Appendix B for detailed description of the criteria.

Appropriateness and Importance
We assessed the nomination for appropriateness and importance.

Desirability of New Review/Absence of Duplication
In 2023, AHRQ produced a systematic review that included an assessment of the question posed in the nomination. [6] Since this recent systematic review addressed the nomination, no search for systematic reviews or primary studies was conducted.

Appendix B. Selection Criteria Assessment

Selection Criteria	Assessment
1. Appropriateness	
1a. Does the nomination represent a health care drug, intervention, device, technology, or health care system/setting available (or soon to be available) in the U.S.?	Yes.
1b. Is the nomination a request for an evidence report?	Yes.
1c. Is the focus on effectiveness or comparative effectiveness?	Yes.
1d. Is the nomination focus supported by a logic model or biologic plausibility? Is it consistent or coherent with what is known about the topic?	Yes.
2. Importance	
2a. Represents a significant disease burden; large proportion of the population	The use of telehealth increased globally during the COVID-19 pandemic.[3] In 2021, during the pandemic, 37% of American adults had used telemedicine in the past 12 month. Variables associated with greater use included gender (women), race/ethnicity (non-Hispanic white and native Americans), education (higher education levels), and setting (more urban areas).[4] Approximately 60 to 70 million Americans have digestive disorders. In 2009, digestive disorders were associated with over 200,000 deaths, and, in 2004, cost $141.8 billion.[5]
2b. Is of high public interest; affects health care decision making, outcomes, or costs for a large proportion of the US population or for a vulnerable population	Yes. The use of telehealth increased globally during the COVID-19 pandemic.[3] In 2021, during the pandemic, 37% of American adults had used telemedicine in the past 12 month. Variables associated with greater use included gender (women), race/ethnicity (non-Hispanic white and native Americans), education (higher education levels), and setting (more urban areas).[4] Approximately 60 to 70 million Americans have digestive disorders. In 2009, digestive disorders were associated with over 200,000 deaths, and, in 2004, cost $141.8 billion.[5]
2c. Incorporates issues around both clinical benefits and potential clinical harms	Yes.
2d. Represents high costs due to common use, high unit costs, or high associated costs to consumers, to patients, to health care systems, or to payers	Yes. The use of telehealth increased globally during the COVID-19 pandemic.[3] In 2021, during the pandemic, 37% of American adults had used telemedicine in the past 12 month. Approximately 60 to 70 million Americans have digestive disorders. In 2009, digestive disorders were associated with over 200,000 deaths, and, in 2004, cost $141.8 billion.[5]
3. Desirability of a New Evidence Review/Absence of Duplication	
3. A recent high-quality systematic review or other evidence review is not available on this topic	No. In 2023, AHRQ published a systematic review that addresses the nominator's question.

Abbreviations: AHRQ=Agency for Healthcare Research and Quality.