



# Topic Brief: Telehealth Utilization in Communities of Color

**Date:** 5/13/2023

**Nomination Number:** 1041

**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 whether the use of telehealth can improve health outcomes in communities of color.

**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.<sup>1</sup> In certain situations, telehealth has been demonstrated to be as effective, if not more effective than usual care.<sup>2</sup>

The use of telehealth increased globally during the COVID-19 pandemic.<sup>3</sup> In 2021, during the pandemic, 37% of American adults had used telemedicine in the past 12 months. 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).<sup>4</sup> The nominators are interested specifically in the role of telehealth for communities of color.

## 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
<b>Population</b>	KQs 1 and 2: <ul style="list-style-type: none"> <li>• Patients of any age</li> <li>• Health systems</li> <li>• Hospitals</li> <li>• Providers</li> </ul> KQ 3: <ul style="list-style-type: none"> <li>• Patients or their caregivers</li> <li>• Providers</li> </ul> KQ 4: <ul style="list-style-type: none"> <li>• Hospitals</li> <li>• Community-based clinics</li> <li>• Private practices</li> <li>• Mental health services</li> <li>• Federally Qualified Health Centers</li> <li>• Rural clinics</li> <li>• Healthcare systems</li> </ul>
<b>Interventions</b>	KQs 1-3: <ul style="list-style-type: none"> <li>• 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)</li> <li>• Patient and specialist communications facilitated by an ED physician in an ED (particularly important in rural care settings)</li> </ul> KQ 4: Implementation strategies for telehealth
<b>Comparators</b>	KQs 1-3: In-person care, no care, no comparison KQ 4: Implementation strategies for telehealth
<b>Outcomes</b>	KQ 1: N/A KQ 2: <ul style="list-style-type: none"> <li>• System outcomes</li> <li>• Healthcare access (e.g., insurance coverage, WIFI, and smartphone access)</li> <li>• Healthcare utilization (e.g., hospitalization, readmission, ED visit)</li> <li>• Healthcare performance and quality measures (e.g., adhering or meeting HEDIS standards or other validated quality measures), e.g.,               <ul style="list-style-type: none"> <li>o Practice efficiency</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>o No-show rates</li> <li>o Staffing hours</li> <li>o Cycle times</li> <li>o Communication</li> <li>o Clinical outcomes (any)</li> <li>o Medication adherence</li> <li>o Up-to-date lab values</li> <li>o Adverse effects/patient safety issues</li> <li>o Inappropriate treatment</li> </ul> <ul style="list-style-type: none"> <li>• Misdiagnosis/delayed diagnosis/care</li> <li>• Case resolution/Duplication of services (telehealth followed immediately by in-person visit)</li> <li>• Privacy/confidentiality breaches</li> <li>• Cost (see Appendix A for detailed cost outcomes)</li> </ul> <p>KQ3:</p> <ul style="list-style-type: none"> <li>• Patient/provider-level outcomes</li> <li>• Patient satisfaction/perceptions</li> <li>• Physician /provider satisfaction/engagement/burnout</li> <li>• Barriers and enablers</li> </ul> <p>KQ4:</p> <ul style="list-style-type: none"> <li>• Implementation strategies</li> </ul>
<b>Timing</b>	<p>All KQs: The era of COVID-19 (March 2020-present)</p> <p>KQ 1d: During the first 4 months or beyond the initial phase</p>

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. The authors reported that, both before and during the COVID-19 pandemic, people of color were not among the highest users of telehealth. The cost of telehealth can be a barrier to care due to limitations on insurance reimbursement.<sup>5</sup>

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

**Summary of Selection Criteria Assessment**

The nominators were interested in determining if the use of telehealth has increased healthcare outcomes in communities of color. A 2023 AHRQ systematic review on telehealth during the COVID-19 era includes an assessment of the benefits and harms of telehealth, stratified by race/ethnicity. This review addresses the nomination.

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

**References**

1. HealthIT.gov. doi: <https://www.healthit.gov/faq/what-telehealth-how-telehealth-different-telemedicine#:~:text=While%20telemedicine%20refers%20specifically%20to,in%20addition%20to%20clinical%20services>.
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3. Shaver J. The State of Telehealth Before and After the COVID-19 Pandemic. *Prim Care*. 2022 Dec;49(4):517-30. doi: <https://doi.org/10.1016/j.pop.2022.04.002>. PMID: 36357058.
  4. Telemedicine Use Among Adults: United States, 2021. Centers for Disease Control and Prevention. doi: [https://www.cdc.gov/nchs/products/databriefs/db445.htm#:~:text=Key%20findings-.Data%20from%20the%20National%20Health%20Interview%20Survey,compared%20with%20men%20\(31.7%25\)](https://www.cdc.gov/nchs/products/databriefs/db445.htm#:~:text=Key%20findings-.Data%20from%20the%20National%20Health%20Interview%20Survey,compared%20with%20men%20(31.7%25).).
  5. Hatem E WR, Hannum SM, Zhang A, Kharrazi H, Weiner JP, Davis SA, Robinson KA. Use of Telehealth During the COVID-19 Era. Systematic Review. January 2023. doi: <https://doi.org/10.23970/AHRQEPSCSRCOVIDTELEHEALTH>.
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**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 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.<sup>5</sup> 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
<b>1. Appropriateness</b>	
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.
<b>2. Importance</b>	
2a. Represents a significant disease burden; large proportion of the population	The use of telehealth increased globally during the COVID-19 pandemic. <sup>3</sup> 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). <sup>4</sup>
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. <sup>3</sup> 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). <sup>4</sup>
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. <sup>3</sup> In 2021, during the pandemic, 37% of American adults had used telemedicine in the past 12 month.
<b>3. Desirability of a New Evidence Review/Absence of Duplication</b>	
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.