MERCATUS CENTER
George Mason University

**PUBLIC INTEREST COMMENT**

# STUDYING AND DEPLOYING TELEHEALTH: PROMOTING TELEHEALTH FOR LOW-INCOME CONSUMERS

**JARED RHOADS**
*Visiting Research Fellow, Mercatus Center at George Mason University*
*Instructor, The Dartmouth Institute for Health Policy & Clinical Practice*

Proposed Rule
Agency: Federal Communications Commission
Comment Period Opens: July 30, 2019
Comment Period Closes: August 29, 2019
Comment Submitted: August 26, 2019
WC Docket No. 18-213; FCC 19-64

I appreciate the opportunity to submit a public interest comment to the Federal Communications Commission (Commission) regarding the proposed rule titled "Promoting Telehealth for Low-Income Consumers." I am a visiting research fellow at the Mercatus Center at George Mason University and an instructor at The Dartmouth Institute for Health Policy & Clinical Practice, where I teach health policy with a focus on technology and innovation. Mercatus is a university-affiliated policy research center. In pursuit of its mission, Mercatus scholars conduct independent, nonpartisan analyses of proposals and rules.

Although I agree that telehealth provides promising opportunities for supporting the care of low-income Americans and veterans, and that such services deserve attention and development, I have reservations about whether the pilot program as described in the Commission's proposed rule is a prudent way forward in this area. My main points are as follows:

1. At $100 million, the cost of the proposed pilot is high for the research question it seeks to answer, which can be summarized as, "Does subsidizing broadband internet service improve connected care?"
2. The pilot proposal is not specific about what it wants to study and how it critically adds to what has already been studied and reported on in the telemedicine literature.
3. The program is being pitched as a pilot, which implies the potential for broader implementation if successful, but it is not clear how financially feasible it would be to expand this program nationally.

For more information, contact
Mercatus Outreach, 703-993-4930, mercatusoutreach@mercatus.gmu.edu
Mercatus Center at George Mason University
3434 Washington Blvd., 4th Floor, Arlington, VA 22201

*The ideas presented in this document do not represent official positions of the Mercatus Center or George Mason University.*

4. The reason for including the Veterans Health Administration (VA) as part of this pilot is unclear. In many ways, the VA is already a leader in telehealth. Also, including veterans as part of the pilot could confound the results and make the findings less generalizable.

## THE OPPORTUNITY OF TELEMEDICINE AND TELEHEALTH

Telemedicine is typically defined as the provision of medical care or services at a distance using information technologies or electronic communications.[1] Telehealth is sometimes defined in essentially the same way,[2] but the term in recent years has evolved to indicate broader consumer-based applications, such as in "home telehealth."[3] In paragraph 12 of the proposed rule, the Commission defines telemedicine and telehealth and seeks comment on its definitions. The definitions contained in the proposed rule are in basic agreement with the definitions used in industry and in academic medicine, and they need not be revised or expanded.

The Commission's interest in understanding and promoting telemedicine and telehealth is commendable. Teleservices in general hold great promise for improving patient outcomes, enhancing patient experiences, and reducing costs. Many telemedicine and telehealth programs have been successful in achieving one or more of these endpoints.[4][5] Identifying which *specific* tele-technologies or programs are best for which patients and in which settings has long been a challenge for practitioners, and it is the reason why studies and pilot programs are so common and in general have facial validity.

## CONCERNS WITH THE COMMISSION'S PILOT

The main question that the pilot seeks to answer is whether people who currently do not have access to the internet could benefit from various forms of telehealth if that barrier were lifted. This is a good research question that deserves study. However, it is not clear that the Commission's present proposal is a good way to go about conducting this important work. Four concerns that I wish to raise are as follows:

1. *All things considered, the proposed pilot is very expensive.* The pilot is a three-year program with a budget of $100 million that would, in the words of the Commission, "provide support for eligible health care providers to obtain universal service support to offer connected care technologies to low-income patients and veterans." This is a very high price tag for a program that mainly seeks to offer subsidized internet access and connected care services to consumers and then to evaluate the benefits. Paragraph 87 suggests that the Commission is considering requiring all studies to be randomized controlled trials. This study design is best for inference making, but it is far more expensive than other study designs that could be

[1] Office of the National Coordinator for Health Information Technology, "Telemedicine and Telehealth," September 28, 2017, https://www.healthit.gov/topic/health-it-initiatives/telemedicine-and-telehealth; John Craig and Victor Patterson, "Introduction to the Practice of Telemedicine," *Journal of Telemedicine and Telecare* 11, no. 1 (2005): 3–9.
[2] Annette M. Totten et al., "Telehealth: Mapping the Evidence for Patient Outcomes from Systematic Reviews" (Technical Brief No. 26, Agency for Healthcare Research and Quality, Rockville, MD, 2016).
[3] Sabine Koch, "Home Telehealth—Current State and Future Trends," *International Journal of Medical Informatics* 75, no. 8 (2006): 565–76.
[4] Bahram Delgoshaei et al., "Telemedicine: A Systematic Review of Economic Evaluations," *Medical Journal of the Islamic Republic of Iran* 31, no. 113 (2017): 1–8.
[5] Anne G. Ekeland, Alison Bowes, and Signe Flottorp, "Effectiveness of Telemedicine: A Systematic Review of Reviews," *International Journal of Medical Informatics* 79, no. 11 (2010): 736–71.

considered. Also, the number of individuals enrolled in these studies is a major cost determinant. The Commission is evidently considering very large study enrollments, but valid results can be obtained with far fewer enrollees. Such a large budget invites the potential for waste and abuse. Even if funds are not specifically wasted or abused in any egregious way, the overall design described in the proposal is far bigger than it needs to be in order to demonstrate whether telehealth works for various types of consumers.

2. *The pilot is not specific enough about what it seeks to study*. The pilot is not very specific about what it wants to study and why the object of this study is different from what has already been studied in this area. The Commission writes that it wants to collect "meaningful data about the use of connected care sources," but what that means is not detailed in the document. In the telemedicine academic literature, studies report on telemedicine experiences with very narrowly specified patient-condition combinations, not on telemedicine in general. For example, three telemedicine programs that have been conducted in recent years to evaluate cost-effectiveness include (1) a telepsychiatry program for the delivery of cognitive behavioral therapy for women with bulimia nervosa,[6] (2) a program of outpatient pulmonary consultations via telemedicine for patients living in rural areas,[7] and (3) the use of telemedicine for remote diagnosis of congenital heart disease for patients with atopic dermatitis.[8] There is reason to be concerned that the intent is to offer subsidized internet access and teleservices for a period of time and "see what happens," instead of carefully prespecifying what is hoped to be accomplished for consumers. It is possible that the findings would be unhelpful and would not contribute meaningfully to the academic literature.

3. *There is no realistic implementation path for this pilot if it succeeds*. The purpose of a pilot is to test an idea on a small scale prior to implementing the idea on a much larger scale.[9] It is not clear, however, how any of the teleservices being tested in the Commission's pilot are to be rolled out on a larger basis if they are deemed successful or feasible. The subsidization of internet access and of connected care services is arguably the key component of this pilot, yet it does not easily lend itself to real-world application to a much larger population of millions or tens of millions of households. It is unlikely that the federal government would be able to afford this as a continuing line item beyond the size and scope of a pilot. The pilot as described in the proposal lacks a direct and immediate pathway for implementing any telehealth service that this study finds to be a success. The concern, therefore, is that this pilot is an end in itself—either to offer a potentially beneficial service to patients for a limited amount of time, or to conduct in essence a very large research study for the benefit of the employed researchers.

---

[6] Scott J. Crow et al., "The Cost Effectiveness of Cognitive Behavioral Therapy for Bulimia Nervosa Delivered via Telemedicine versus Face-to-Face," *Behavior Research and Therapy* 47, no. 6 (2009): 451–53.
[7] Zia Agha, Ralph M. Schapira, and Azmaira H. Maker, "Cost Effectiveness of Telemedicine for the Delivery of Outpatient Pulmonary Care to a Rural Population," *Telemedicine and e-Health* 8, no. 3 (2002): 281–91.
[8] Ignatios Ikonomidis et al., "Cost-Effectiveness of Telemedicine for Remote Diagnosis and Management in Congenital Heart Disease during Two Years of Practice," *European Heart Journal* 22, Abstract Supplement (2001): 77.
[9] Andrew C. Leon, Lori L. Davis, and Helena C. Kraemer, "The Role and Interpretation of Pilot Studies in Clinical Research," *Journal of Psychiatric Research* 45, no. 5 (2011): 626–29.

4. *The VA already has extensive experience in telehealth.* The two main patient populations that the pilot names as recipients of the provided services are low-income consumers and veterans. There is little doubt that the VA would welcome inclusion in a large, generously funded program, but the VA already has a well-functioning telemedicine program and is in fact already considered a leader in the field. According to the VA's own telehealth fact sheet, "VA provided care to more than 702,000 patients via the three telehealth modalities," amounting to "over 2.17 million telehealth episodes of care."[10] More than 12 percent of veterans already receive some telehealth services, and 45 percent of those veterans live in the kinds of rural areas that the Commission's pilot is most concerned with.[11] With a strong foundation of current telemedicine programs, VA is well positioned to conduct its own pilot tests of new programs.

## CONCLUSION

Telemedicine and telehealth present exciting opportunities for healthcare, and it is encouraging to see an effort to develop and realize this long-held potential—including one that examines the role of expanded internet access. However, the Commission's pilot is expensive, vague, and not well positioned to make "go or no-go" implementation determinations as a pilot program should be prepared to do. The pilot could find that subsidizing internet access improves certain aspects of healthcare, but that expanding such subsidies nationwide likely would be prohibitively expensive. This pilot is thus more akin to a large research effort, which is good for researchers and patients during the study period but provides questionable lasting benefit. The public should be concerned about the cost of this proposal and the level of oversight that would be required to ensure good stewardship of public funds. Equivalent knowledge about the feasibility of various teleservices potentially could be obtained by removing regulatory barriers that slow telehealth development and letting private health systems test their ideas in a more decentralized way using their own funds. Approaches that do not rely so heavily on subsidized internet access will likely be more scalable in the long run.

---

[10] US Department of Veterans Affairs, "VA Telehealth Services," 2016, https://www.va.gov/COMMUNITYCARE/docs/news/VA_Telehealth_Services.pdf.
[11] US Department of Veterans Affairs, "VA Telehealth Services."