

Implementing AHRQ Effective Health Care Reviews

Helping Clinicians Make Better Treatment Choices

Effectiveness of Telehealth for Women's Preventive Services

Practice Pointers by Sarah E. Stumbar, MD, MPH, and Suzanne Minor, MD

Florida International University Herbert Wertheim College of Medicine, Miami, Florida

Key Clinical Issue

Does telehealth allow for the effective delivery of preventive services for women, and how can it best be used to address these needs?

Evidence-Based Answer

Telehealth interventions alone had similar outcomes compared with in-person visits for women presenting for care related to contraception and interpersonal violence (IPV). (Strength of recommendation [SOR]: B, inconsistent or limited-quality patient-oriented evidence.) Telehealth interventions used to supplement usual care resulted in similar outcomes for contraceptive use at six months and had similar rates of sexually transmitted infections (STIs) and pregnancy. (SOR: B, inconsistent or limited-quality patient-oriented outcomes.) Outcomes related to abortion rates were unclear. There were no studies addressing telehealth services for family planning or STI counseling. There is insufficient evidence for factors related to health equity and health care access or potential harms.^{1,2}

Practice Pointers

Research conducted before the COVID-19 pandemic suggests women are more likely than men

to choose telehealth, even when the overall uptake of telemedicine is low.³ This may be because the time savings and virtual convenience are particularly attractive to caregivers, a role traditionally filled by women.³ The number of clinics reporting telehealth capabilities increased with the start of the COVID-19 pandemic, thereby presenting new opportunities for health care delivery, including preventive services.⁴

Research on telehealth effectiveness and acceptability has been proliferating. An Agency for Healthcare Research and Quality (AHRQ) review published before the COVID-19 pandemic found that telehealth visits improved clinical outcomes for wound care, psychiatry, and some chronic conditions. They may increase patient satisfaction, reduce costs, and decrease health care use.⁵

The most recent AHRQ review included 16 studies evaluating the effectiveness of telehealth for women's preventive services, specifically contraceptive care and IPV. Two studies assessed telehealth as a supplement to in-person visits, and 14 studies compared in-person consultations with telehealth alone.

There was enough evidence to assess the effectiveness of telehealth on clinical outcomes for

The Agency for Healthcare Research and Quality (AHRQ) conducts the Effective Health Care Program as part of its mission to produce evidence to improve health care and to make sure the evidence is understood and used. A key clinical question based on the AHRQ Effective Health Care Program systematic review of the literature is presented, followed by an evidence-based answer based on the review. AHRQ's summary is accompanied by an interpretation by an AFP author that will help guide clinicians in making treatment decisions. For the full review, go to <https://effectivehealthcare.ahrq.gov/sites/default/files/product/pdf/cer-256-telehealth-women-preventive-services.pdf>.

This series is coordinated by Joanna Drowos, MD, MPH, MBA, contributing editor.

A collection of Implementing AHRQ Effective Health Care Reviews published in *AFP* is available at <https://www.aafp.org/afp/ahrq>.

CME This clinical content conforms to AAFP criteria for CME. See CME Quiz on page 458.

Author disclosure: No relevant financial relationships.

Summary of the Effectiveness of Telehealth Interventions vs. Comparator

Preventive service	Outcome	Intervention	Comparison	Number of studies (participants)
Family planning	—	—	—	No studies
Contraception	Contraceptive use	Supplemental telephone counseling; structured telephone support	Four-month supply of OCs and condoms and in-person counseling; general advice for follow-up as needed	2 RCTs (n = 1,724)
	Sexually transmitted infection rates	Supplemental telephone counseling	Four-month supply of OCs and condoms and in-person counseling	1 RCT (n = 1,155)
	Pregnancy rates	Supplemental telephone counseling	Four-month supply of OCs and condoms and in-person counseling	1 RCT (n = 1,155)
	Abortion rates	Structured telephone support	General advice for follow-up as needed	1 RCT (n = 569)
Sexually transmitted infection counseling	—	—	—	No studies
Interpersonal violence	Interpersonal violence rates	Interactive online tools	Noninteractive online tools	2 RCTs (n = 1,132)
	Depression scores	In-person interviews, followed by phone calls; interactive online tools	Referral; noninteractive online tools	5 RCTs (n = 2,322)
	Posttraumatic stress disorder scores	Interactive online tools	Noninteractive online tools	2 RCTs (n = 1,182)
	Fear, coercive control	Interactive online tools	Noninteractive online tools	2 RCTs (n = 884)
	Self-efficacy	Interactive online tools; computerized encounters; in-person interviews followed by telephone calls	Noninteractive online tools; in-person encounters; referral	3 RCTs (n = 919)
	Safety behaviors	Telephone calls; computerized encounters; in-person interviews followed by telephone calls	Usual care; in-person encounters; referral	4 RCTs (n = 1,175)
	Harms	Interactive online tool	Noninteractive online tool	1 RCT (n = 231)

Strength-of-evidence scale

- **High:** High confidence that the evidence reflects the true effect. Further research is very unlikely to change the confidence in the estimate of effect.
- **Moderate:** Moderate confidence that the evidence reflects the true effect. Further research may change the confidence in the estimate of effect and may change the estimate.
- **Low:** Low confidence that the evidence reflects the true effect. Further research is likely to change the confidence in the estimate of effect and is likely to change the estimate.
- **Insufficient:** Evidence either is unavailable or does not permit a conclusion.

Overall effect	Strength of evidence
—	—
Similar rates of OC continuation and condom use at three, six, and 12 months; similar rates of long-acting reversible contraception use at six months	●○○
Similar rates of sexually transmitted infections	●○○
Similar pregnancy rates	●○○
Similar rates of abortion in both groups of postabortion patients at one year; reduction of subsequent abortion in both groups within two years	○○○
—	—
No difference in repeat interpersonal violence between interactive vs. noninteractive online tools in two RCTs	●○○
Telehealth is at least as effective as usual care alternatives for improving measures of depression	●○○
No difference in posttraumatic stress disorder symptoms between interactive vs. noninteractive online tools	●○○
No difference between interactive vs. noninteractive online tools	●○○
Telehealth is at least as effective as usual care alternatives for improving self-efficacy scores	●○○
Telehealth is at least as effective as usual care for increasing safety behaviors	●○○
No difference in patient-reported anxiety using a tailored, online safety tool vs. a static version	○○○

OC = oral contraceptive; RCT = randomized controlled trial.

Adapted from Cantor A, Nelson HD, Pappas M, et al. Effectiveness of telehealth for women's preventive services. Comparative effectiveness review no. 256. (Prepared by Pacific Northwest Evidence-Based Practice Center under contract no. 75Q80120D00006.) AHRQ publication no. 22-EHC024. Agency for Healthcare Research and Quality; June 2022. Accessed July 26, 2022. https://effectivehealthcare.ahrq.gov/sites/default/files/related_files/cer-256-telehealth-women-preventive-services-executive-summary.pdf

some women's health preventive services. In assessing telehealth interventions for contraceptive care, two studies concluded that the rates of STIs were similar between the in-person consultation group and the group that received care supplemented with telephone counseling, although the strength of evidence is low. Based on one study, continuation of oral contraceptives and long-acting reversible contraception was similar among these two groups with low strength of evidence. Pregnancy rates were similar between the two groups with low strength of evidence. There was insufficient evidence to support conclusions about abortion rates in the groups. No studies compared the effectiveness of telehealth alone with in-person consultations alone.

In assessing telehealth interventions related to IPV, six studies found no differences between women randomized to telehealth compared with usual care in relation to the clinical outcomes of repeat episodes of IPV, depressive symptoms, posttraumatic stress disorder, fear of partner, coercive control, self-efficacy, and safety behaviors. The strength of evidence for these outcomes is rated as low because of a lack of consistency in the nature and type of telehealth intervention across studies.

There were no studies evaluating the effectiveness of telehealth in the delivery of STI counseling or family planning, defined as preconception counseling or birth spacing. An American Academy of Family Physicians position paper on preconception care does not offer recommendations about telemedicine care.⁶ Effectiveness of telehealth for medical abortion consultation was not included in the AHRQ review, although abortion rates were a patient-centered outcome of some of the included studies. No studies addressed telehealth outcomes related to health care access, health equity, or health disparities. There were insufficient data for harms related to IPV care via telehealth, and harms were not addressed in any studies of contraceptive care.

Based on limited evidence, telehealth interventions for contraceptive care and IPV have similar clinical outcomes as in-person care. The most effective approaches for delivering these telehealth services remain unclear, as does the impact of telehealth on women in marginalized and underserved communities.

The American Academy of Family Physicians recommends that family physicians continue to leverage telehealth to provide access for patients

to meet their needs.⁷ Evidence supports the use of telehealth interventions alone for preventive care relating to contraception and IPV; however, supplemental telehealth interventions did not appear to impact contraceptive use, STIs, and pregnancy rates over usual care.

Editor's Note: *American Family Physician* SOR ratings are different from the AHRQ Strength-of-Evidence ratings.

Address correspondence to Sarah E. Stumbar MD, MPH, at sstumbar@fiu.edu. Reprints are not available from the authors.

References

1. Cantor A, Nelson HD, Pappas M, et al. Effectiveness of telehealth for women's preventive services. Comparative effectiveness review no. 256. (Prepared by Pacific Northwest Evidence-Based Practice Center under contract no. 75Q80120D00006.) AHRQ publication no. 22-EHC024. Agency for Healthcare Research and Quality; June 2022. Accessed July 26, 2022. https://effectivehealthcare.ahrq.gov/sites/default/files/related_files/cer-256-telehealth-women-preventive-services-executive-summary.pdf
2. Cantor AG, Nelson HD, Pappas M. Telehealth for women's preventive services for reproductive health and intimate partner violence: a comparative effectiveness review [published online January 17, 2023]. *J Gen Intern Med*. Accessed April 4, 2023. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9845023/>
3. Reed ME, Huang J, Graetz I, et al. Patient characteristics associated with choosing a telemedicine visit vs office visit with the same primary care clinicians. *JAMA Netw Open*. 2020;3(6):e205873.
4. Demeke HB, Merali S, Marks S, et al. Trends in use of telehealth among health centers during the COVID-19 pandemic – United States, June 26–November 6, 2020. *MMWR Morb Mortal Wkly Rep*. 2021;70(7):240–244.
5. Agency for Healthcare Research and Quality. Telehealth for acute and chronic care consultations. April 2019. Accessed July 26, 2022. <https://effectivehealthcare.ahrq.gov/topics/telehealth-acute-chronic/research>
6. American Academy of Family Physicians. Preconception care (position paper). December 2015. Accessed July 25, 2022. <https://www.aafp.org/about/policies/all/preconception-care.html>
7. American Academy of Family Physicians. Integration of primary care and public health (position paper). 2015. Accessed July 25, 2022. <https://www.aafp.org/about/policies/all/integration-primary-care.html> ■