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A Study of Telecontraception

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### Authors

Jain, Tara  
Schwarz, Eleanor B  
Mehrotra, Ateev

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## CORRESPONDENCE



## A Study of Telecontraception

**TO THE EDITOR:** Telecontraception — the provision of contraception through a website or smartphone app — has recently emerged as an alternative to provision at clinic visits. Telecontraception companies advertise the convenience of their services, which allow patients to complete an online questionnaire and receive a prescription for contraception at a local pharmacy or by mail. Although telecontraception may improve access, there are concerns regarding the quality of these services,<sup>1,2</sup> including the potential for gaps in the online questionnaires used to screen patients for contraindications.<sup>3</sup> We conducted a “secret shopper” study to assess the process and safety of telecontraception for patients.

We recruited seven standardized patients who had characteristics that represented a range of relative and absolute contraindications to oral contraceptives according to the Medical Eligibility Criteria for Contraceptive Use from the Centers for Disease Control and Prevention (CDC MEC)<sup>4</sup> or who had difficulty adhering to a regimen that required daily ingestion of a pill. Patients “presented” to nine telecontraception vendors that provided care in the United States as of March 2018 and completed a total of 63 visits in which they requested oral contraceptives between October 2018 and March 2019 (for details, see the Supplementary Appendix, available with the full text of this letter at NEJM.org).

At least two vendors were available to choose from in each state. Each visit lasted a mean of 7.5 minutes, during which patients completed an online questionnaire. Two vendors provided a video call during the visit immediately after patients completed the questionnaire (see Fig. S2 in the Supplementary Appendix). In 20 visits (32%),

a follow-up interaction occurred in the form of text messaging with three vendors, a phone call with two vendors, and a video call with one vendor. Three vendors did not require patient-provider interaction (see Table S1 in the Supplementary Appendix). A prescription was sent electronically to a local pharmacy on the same day as the visit or mailed to the patient’s home within a mean of 7 days (range, 3 to 14 days). The mean total cost (including the initial visit and any required follow-up visits) for a 12-month prescription for an uninsured patient was \$313 (range, \$67 to \$519).

In the 45 visits in which there was a medical contraindication to oral contraceptives, adherence to CDC MEC guidelines was 93% (95% confidence interval, 86 to 100). Oral contraceptives were prescribed when contraindicated in 3 of 45 visits (Table 1). None of the companies screened for patient ability to ingest a pill daily, and only two of the nine companies mentioned the avail-

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**Table 1. Characteristics of the Standardized Patients.**

Patient No.	Medical History	Age (yr)	Contraindication to Oral Contraceptives*	Contraindication to Combination Oral Contraceptives*	Visits in Which Contraindicated Oral Contraceptive Was Prescribed
1	No medical condition	25	None	None	0 of 9
2	Deep-vein thrombosis with low risk of recurrence†	21	None	Relative	1 of 9
3	Deep-vein thrombosis with low risk of recurrence†	21	None	Relative	0 of 9
4	15 Days post partum and breast-feeding	22	None	Absolute	0 of 9
5	Migraine with aura	20	None	Absolute	0 of 9
6	Unresected hepatocellular adenoma	22	Relative	Absolute	2 of 9
7	No medical condition but may not be adherent to instructions to take oral contraceptive daily	29	None	None	0 of 9

\* Contraindications are based on the Medical Eligibility Criteria for Contraceptive Use from the Centers for Disease Control and Prevention, updated in 2017. Relative contraindication indicates that the theoretical or proven risks associated with the method usually outweigh the advantages. Absolute contraindication indicates that the method represents an unacceptable health risk.

† Patients 2 and 3 were assigned to report the same contraindication to oral contraceptives in order to assess whether similar patients may be treated differently by the same vendor.

ability of long-acting reversible contraceptive methods.

These findings suggest that telecontraception may reduce barriers to contraception because vendors are convenient and accessible. In addition, adherence to guidelines among telecontraception vendors may be higher than it is among clinics that provide in-person visits.<sup>5</sup> Telecontraception vendors could increase the quality of their services by improving screening for patient adherence to the regimen of ingesting a pill daily and for rare contraindications to oral contraceptives. Vendors should also make sure that patients are aware of more effective, long-acting, reversible contraceptives.

Tara Jain, A.B.

Harvard Medical School  
Boston, MA

Eleanor B. Schwarz, M.D.

University of California, Davis  
Davis, CA

Ateev Mehrotra, M.D., M.P.H.

Harvard Medical School  
Boston, MA  
mehrotra@hcp.med.harvard.edu

Disclosure forms provided by the authors are available with the full text of this letter at NEJM.org.

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