

RESEARCH INSIGHTS



How Can the Full Potential of Telemedicine Be Unlocked?



An intervention in Argentina that sent periodic emails to households about available telemedicine services effectively increased the adoption of and demand for telemedicine.



Patients who were part of the intervention were significantly more likely to use telemedicine services. The number of virtual consultations by the group that received the email intervention was six times larger than those of the control group after eight months.



The study found that the intervention had lasting effects, suggesting that getting patients to try telemedicine for the first time can lead to continued use over time.

CONTEXT

Telemedicine can potentially lower costs and increase the convenience of health services by shifting care from hospitals and clinics to homes and mobile devices. Telemedicine can provide primary and specialized care to the geographically disconnected, during times of crisis in response to natural disasters and humanitarian responses, and when mobility is restricted by a pandemic or war. Telemedicine is, however, an “experience good” that can only be fully evaluated after it has been used, and patients have shown reluctance to adopt telemedicine services, possibly due to lack of familiarity with the technology or resistance to change from traditional in-person visits.

PROJECT

In an effort to increase the use of telemedicine, a randomized field experiment was conducted in collaboration with a health insurance company and a telemedicine provider in Argentina. During the intervention, about 3,500 households that had access but had never used the system were randomly allocated to a treatment and a control group. Households in the treatment arm received a series of eight messages that presented simple and actionable information about the benefits of telemedicine and how to use the service. These messages were designed to increase the downloads of the telemedicine app and its use.

RESULTS

The intervention proved effective in increasing awareness of telemedicine, as well as uptake and demand. During the first week, 35% of the treatment sample opened the e-mail. While the opening rate gradually decreased to only 25% during the last week, 51% of the treatment sample had opened at least one of the e-mails by the end of the campaign.

Likewise, there was a significant increase in the number of downloads of the app during the days the emails were sent. While the pattern was stable before the campaign began, with only a handful of downloads a day, the first day of the campaign the number of mobile application downloads jumped to 107.

These developments were in turn followed by an increase in telemedicine use. Within the first eight months of the experiment, patients assigned to the treatment group were 6 percentage points more likely to have used the service at least once. This likelihood was even higher—at 12 percentage points—for those who opened at least one email. This initial use led to a considerable cumulative effect over time. After eight months, the number of virtual consultations by the treatment group was six times larger than that of the control group.

Key Concept



EXPERIENCE GOOD

A product or service that can only be evaluated after it has been used or consumed.

POLICY IMPLICATIONS

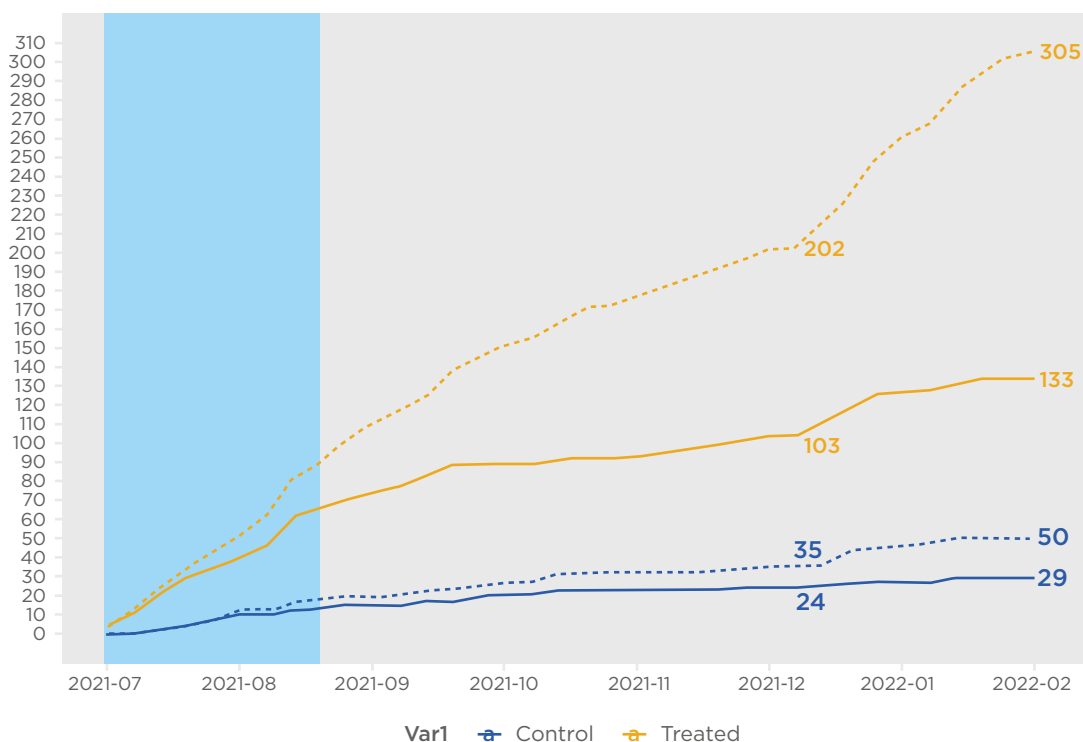
The use of telemedicine faces demand-side as well as technological restrictions. Increasing access to the population is a must because it can increase access to health care, reduce healthcare costs, and expand service, particularly to geographically remote and underserved population. Because telemedicine is an experience good, service providers cannot charge for accessing the service. As such, health systems should find ways to incorporate telemedicine into existing health provision models.

This may not be enough. Behavioral tools can help lower barriers to the service and nudge people into using it. Policymakers and health service providers should consider implementing information interventions similar to those considered in this study to increase the uptake of telemedicine and other health technologies, which can greatly enhance the accessibility and convenience of healthcare services.

IDB RESEARCH ON TELEMEDICINE AND HEALTH SERVICES

This paper is part of a series of IDB studies and efforts to understand health systems and their response capabilities before, during, and after the pandemic. The IDB Behavioral Economics Group has also studied ways to promote the use of telemedicine, access to vaccination and doctor care, and the promotion of healthy behaviors.

Figure 1. Cumulative Calls and First-Time Telemedicine Users



Note: This figure shows the number of cumulative calls and new users of the mobile application by control and treatment group. The yellow lines represent the demand growth of the treatment group, the dashed line indicated number of calls, and the solid line indicates number of first-time users. Similarly, the gray lines represent the demand of the control group, with the dashed line indicating the number of calls and the solid line indicating the cumulative number of first-time users. The light blue panel indicates the period of the communication campaign.

Key Concept



TELEMEDICINE

The use of digital information and communication technologies, like computers and mobile devices, to access health care services remotely and manage health care.



FULL STUDY

[González, María P., and Carlos Scartascini. 2023. "Increasing the Use of Telemedicine: A Field Experiment." IDB Working Paper No. 1471. Washington, DC: Inter-American Development Bank.](#)

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Authors: María P. González and Carlos Scartascini.

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