

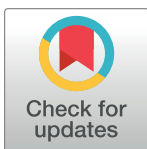
## OPINION

# Video text messaging is needed to deliver patient education about preventive care in the United States

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The penetration of smart phones and apps has revolutionized modern life, from education to scientific data collection to interpersonal communication. One area of contemporary life where smart phone use has failed to live up to its revolutionary potential, however, is in health-information messaging. Despite the very high penetration of smart phones—97% of people in the United States now own a cell phone of some type—most health care systems are not taking full advantage of cell phones to deliver health messages. [1] Those that do rely primarily on texting or calling (a practice that was further spurred by the COVID-19 pandemic), and not on linked video messaging. [2–4]

While text messaging can reach far more people than in-person educational sessions or live phone calls, for a fraction of the cost, text messaging alone has limitations. The conversion rate for getting people to complete a screening test, for example, is higher with a live call than with texting alone. [3,5] This lower conversion rate is one of many reasons to expand the use of health text messaging to include a video component. Video messaging can help overcome language and health-literacy barriers, is more engaging, and can demonstrate how to do a task that might be difficult to explain solely using words.

Messaging directly to patients' cell phones shifts away from relying on clinic-specific patient portals that are unequally used across population subgroups. [6] This inequity of access to health care and to patient portals is one of the reasons that the Centers for Medicaid and Medicare (CMS) is driving efforts to use app-based health information portals rather than relying solely on EMR- or web-based health portals. The rule CMS released in October 2022 stated specifically that a major aim of the new set of data standards is to create “processes . . . to help ensure that patients remain at the center of their own care.” [7] Cell-phone based apps that use video could help health systems meet this goal.

One example to look to is a program taking place at AltaMed Health Services Corporation, which is a large urban federally qualified health center that operates clinics in Los Angeles and Orange Counties in California. The program sends short (<1 min) animated videos for both English- and Spanish-speakers about the importance of colorectal cancer (CRC) screening and instructs patients on how to complete a fecal immunochemical test (FIT). The videos address common errors in FIT completion (e.g., too much/too little sample collected, collection date omitted; videos available on the project website. [8]) The videos address health messages about routine screening for average-risk adults and can be sent without privacy concerns. Clinic staff

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**Fig 1. Image of Standard Text Message and Video Text Message.**

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incorporated these videos into a multi-component intervention that uses text messages to boost participation in CRC screening among patients aged 45–75. AltaMed serves nearly 250,000 patients each year, 75,000 of whom are aged 45–75.

Screening rates of all races are also dramatically low among adults aged 45–49, who became eligible for screening in May 2021 (only 1.4% of eligible 45–49-year-olds had completed CRC screening at AltaMed Health Services Corporation). This is troubling given that CRC is 90% curable with timely detection and appropriate treatment of precancerous polyps, and increased screening could reduce CRC incidence by up to 50%. [9] Over 80% of adults who receive care at AltaMed are Latinx ethnicity. Compared to younger Latinx adults, Latinx adults who are age-eligible for CRC screening tend to have less English fluency, worse access to the internet, and lower health literacy, making them ideal candidates for video messaging. [10]

Between February and July 2021, AltaMed's centralized outreach staff sent an introductory text message to a list of patients due for CRC screening asking whether the patient would like to be mailed a FIT test to screen for CRC (opt in). Patients who opted in ( $n = 2,509$ ) were mailed a FIT and texted a link to an animated educational video (Fig 1). Patients who did not return their FIT after a month were sent a text reminder and delivered a live phone call from a health center outreach staff, as needed.

The program yielded a 40% FIT return rate, nearly double the average return rate reported in systematic reviews of mailed FIT outreach. [11–13] Feedback to date suggests that the

program is popular with patients as well as with the health professionals delivering the program. One health professional noted: “. . . patients that click on the link really like the video and it has helped them properly complete the test.” Patients reported sharing the video with friends and family members. Importantly, health care professionals also noted that the program is sustainable without any additional funding beyond standard text messaging fees, which average \$0.04 per text message.

In future work we plan to obtain direct feedback from patients and health care professionals about how to improve the program and conduct a robust evaluation of the program to test its effectiveness overall and among population subgroups, including patients whose language preference is English vs. Spanish, and among patients with and without prior CRC screening history. This could allow message content to be tailored to patients' preferred language, and personal experience with screening.

Video-texting is a low-cost, digital solution that can be used by clinics to educate community members they serve about evidence-based preventive health services. Previous research has delivered text message reminders or used videos in clinic waiting rooms or exam rooms. [3,4,14] The current program uniquely combines these two approaches as a resource-efficient strategy to increase awareness about CRC and the need for screening.

More broadly, video text messaging delivered by trusted sources may prove useful to counter misinformation and myths about any health topic. Disseminating accurate health information can support healthful lifestyle behaviors and appropriate and timely care practices, improve decision-making about health, build resilience to misinformation, and restore public trust in evidence-based medicine. Now is the time for health care systems in the United States (and in other countries where smartphone ownership rates are high) to make use of cell phones to deliver health messages.

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