

# Responding to Pandemic-Associated Changes in Cancer Prevention and Screening

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*Pandemic-associated changes in healthcare delivery, access, and receipt call for innovative strategies to reengage patients and families in cancer prevention.*

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**T**he COVID-19 pandemic continues into spring 2022. Vaccination levels are relatively flat, and movement toward recommending a second booster is occurring. Many are now acknowledging that the pandemic is likely to continue for years to come. Waiting for the end of the pandemic to return to “normal” life and assume prepandemic activities is a less viable strategy as the virus continues to mutate and infect individuals across the world. A burgeoning literature is examining short- and long-term societal changes resulting from the pandemic. One change of note is the effect of the pandemic on habits, including wide-scale changes in health-seeking behaviors—changes that have occurred across multiple levels from a system-level perspective in large healthcare organizations to individual health-seeking behaviors. In the early months of the pandemic in spring 2020, there was a general lack of in-person, nonacute healthcare visits during the intensive lockdown phase of the pandemic. Consequently, telehealth modalities were implemented quickly in many organizations. Although this change may have been a temporary measure, much of the research supports that access was improved for some types of healthcare

services and that consumers adapted quickly. Most reports have noted favorable opinions on the ease of access and quality of select healthcare services.

The prolonged pandemic and related adaptations have important implications for cancer prevention and treatment. In addition to the expansion of telehealth, how can pandemic-associated healthcare trends positively affect future cancer screening and prevention? We know that cancer screenings declined significantly during the pandemic because of the delays of elective procedures and in-person visit restrictions (Printz, 2020). Alarming, preventive cancer screenings decreased 86%–94% in mid-2020 as compared to equivalent weeks from 2017 to 2019. Cervical cancer screenings, which declined by 94%, were the most affected, whereas colorectal cancer screenings were down 86% as compared to the same time period in previous years (Epic Health Research Network, 2020).

For both cervical and colorectal cancer, several innovations in screening may be ready for more wide-scale adaptation because of changes brought to the fore by the pandemic. Increasing the use of multiple modalities of certain cancer health screenings may be indicated. Most self-directed cancer screenings have some limitations compared to today’s gold standards. However, we have learned from the pandemic that provider and in-person clinics may not be accessible and that individuals prefer choices. For colorectal cancer, one expert suggested that after one year of the pandemic, colorectal cancer epidemiology could

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quickly move back to the prescreening era. However, recommended strategies for colorectal cancer screening can be used without in-person encounters. Although stool-based colorectal screening strategies, including fecal immunochemical testing and fecal DNA testing, have been endorsed by the U.S. Preventive Services Task Force since 2016, colonoscopy is still considered by some providers to be the gold standard because it can offer diagnosis and therapy. With uptake lagging during the pandemic (Millien & Mansour, 2020), further consideration of increasing testing by using noninvasive strategies for colorectal screening may be warranted. Similarly, self-sampling human papilloma virus (HPV) testing has been used in lower-resourced geographic areas for patient-centered cervical cancer screening. In studies conducted from the mid-1990s through the first two decades of the 2000s, HPV self-sampling in cervical cancer screening has been shown to be feasible, acceptable, and a viable approach to screening in never-screened and underscreened populations (Fontham et al., 2020). Given the pandemic-associated decreases in cancer screenings, the definition of underscreened needs to be adapted for the foreseeable future, and self-sampling strategies could move into the mainstream in higher-resourced countries.

One of the most important issues in healthcare delivery is accelerating a more rapid understanding of patient-consumer and healthcare provider adaptations to pandemics or other wide-scale societal changes. How do we continue to assess and use adaptive strategies in cancer care? Learning from data engineers to assess search trends may be an early indicator of particular types of healthcare interest. One prepandemic study using Google Trends found that a decrease in public interest in breast and colon cancer screenings only slightly underestimated actual screening usage numbers, suggesting that Google Trends may be an indicator for human behavior regarding cancer screening. Further use of artificial intelligence to understand and predict behaviors may lead to more rapid realignment of healthcare services to match patient-consumer preferences (Vasconcellos-Silva et al., 2017).

In all, pandemic-associated changes in healthcare delivery, access, and receipt call for innovative strategies to reengage patients and families in cancer screening and prevention. Using higher levels of information technology and self-directed screening strategies may be useful to promote prepandemic habits that support cancer prevention and early detection in a changing and changed healthcare landscape. With the changes to health systems and patient-consumer orientation, increasing consumers' options and providing more accessible methods could provide better access and equity in cancer screening and early detection.



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