

Trends and Disparities in Patient Portal Use

Patient portals are digital health tools that provide patients with convenient, secure access to personal health information (such as laboratory results and medication lists), resources, and services such as appointment scheduling and secure messaging with providers. Patient portals have the potential to improve patient engagement with health and health care, decrease costs, and increase health care quality by facilitating health care system transactions (e.g., prescription refills), supporting patient-provider communication, and expediting access to medical records and relevant educational materials. Research indicates that patient portal use can increase patients' understanding of their health conditions, improve patient safety, reduce caregiver burden, increase medication adherence, and improve the quality of both preventive and follow-up care. There is also some evidence to suggest that patient portal use can improve clinical outcomes.

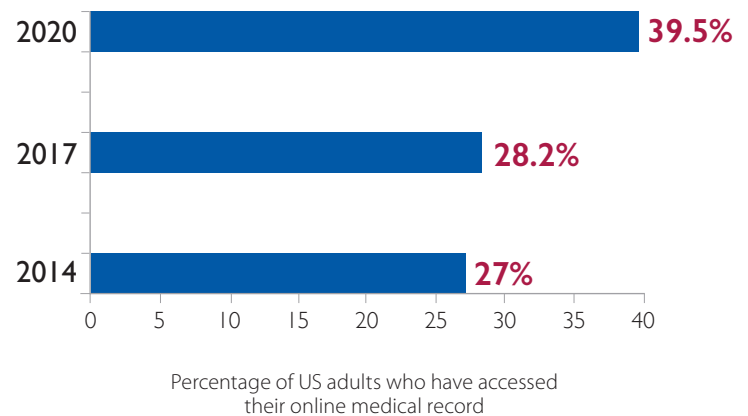
As a result of substantial investments in telehealth infrastructure and legislation mandating meaningful use of electronic health records, by 2015 most health care organizations in the United States offered patient portals. The COVID-19 pandemic has further increased reliance on technologies like patient portals to facilitate virtual visits, remote monitoring, and electronic communication with providers. However, by making these technologies more central to care, the pandemic has also highlighted the inequalities that exist in their use.

Although there was initially hope that portals would reduce health disparities by increasing access to care and supporting disease self-management, studies have consistently shown that racial and ethnic minority groups, older patients, and people of lower socioeconomic status (SES) are less likely to access online portals. Research also shows that patients with lower health literacy are less likely to use portals, and that technology barriers, such as lack of home internet access and concerns about information security, can impede their use as well.

Quick Facts

- A patient portal is a digital tool that enables patients to securely access their medical records and interact with the health care system through the internet.
- Patient portals have the potential to enhance health care quality, increase patient engagement, and improve clinical outcomes.
- Use of patient portals has not always been equal, with racial and ethnic minorities, older patients, and those with lower SES, lower health literacy, and limited internet access being less likely to access portals.
- In 2020, 39.5% of US adults reported accessing their online medical record at least once in the previous year.

Percentage of US adults who have accessed their online medical record at least once in the previous 12 months, 2014–2020



Source: HINTS 5 Cycle 4, 2020; HINTS 5, Cycle 1, 2017; HINTS 4, Cycle 4, 2014

Change in Patient Portal Use, 2014–2018

A recently published study used three cycles of HINTS data to examine changes in patient portal use among American adults from 2014 to 2018 and identify factors associated with patient portal adoption during that time. The analysis found that patient portal use increased modestly, from 25.6% in 2014 to 31.4% in 2018. However, despite the observed increase, patient portal use in the general population remained low and notable disparities persisted.

Sex, income, and education were found to be significant predictors of patient portal use in all years (with men and individuals with lower SES being less likely to use patient portals than women and those of higher SES). Several non-demographic factors were also found to be significantly associated with patient portal use from 2014 to 2018, including high-speed internet access and confidence in data safety, suggesting that technology barriers related to both access and perceptions about privacy remain important. The association between patient portal use and prior experience with online patient-provider communication (through e-mail, video conferencing, mobile apps, or social media) was also significant at all time points, which may indicate that patients who are actively engaged in their health care are also more likely to use patient portals.

How Can This Inform Your Work?

HINTS data suggest that many people are not currently benefiting from patient portals as part of their health care experience. Although structural solutions are needed to ensure greater and more equitable access (e.g., broadband expansion), public health practitioners can help increase patient portal use and decrease disparities by developing interventions to guide patients from patient portal awareness to enrollment, activation, and ultimately utilization and engagement. Efforts to promote knowledge of portals and their benefits could help increase portal use overall, but programs that teach patients how to navigate their patient portals and help them better understand important information contained in their records (like laboratory results and medication lists) could be especially important to ensure that individuals with lower health literacy and less comfort with technology get the most out of their patient portals. Other potentially effective interventions to increase patient portal use include giving informal care providers co-access to portals and sending automated emails to patients reminding them to view their record whenever it is updated. Furthermore, research suggests that a universal access policy where every patient is offered portal enrollment can help reduce disparities in patient portal use.

Health care providers can also play a role in increasing patient portal use by taking time to discuss and recommend patient portals to their patients. Providers can encourage their patients to use portals by highlighting their features and benefits, providing specific recommendations for how patients can use the portal to improve their health, and addressing specific concerns, such as those related to privacy and confidentiality. Providers and health care organizations could also work to ensure that the information entered into patient portals is transparent and easy to understand, and make a concerted effort to more closely integrate patient portals into their workflows so patients can obtain maximum benefit from engaging with these tools.

About HINTS

hints.cancer.gov

The National Cancer Institute (NCI) created the Health Information National Trends Survey (HINTS) to monitor changes in the rapidly evolving field of health communication. The survey data can be used to understand how adults use communication channels to obtain health information for themselves and their loved ones. HINTS data can also help practitioners create more effective health communication strategies. The HINTS survey has been fielded 13 times to date.

HINTS Briefs provide a snapshot of noteworthy, data-driven research findings. They introduce population-level estimates for specific questions in the survey and summarize significant research findings resulting from analyses of how certain demographic characteristics influence specific outcomes. Many Briefs summarize research findings from recent peer-reviewed journal articles that have used HINTS data.

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