Use of Patient Portals by People with Long-Term Health Problems

Principal investigator
Mary Reed, DrPH

Organization
Kaiser Foundation Research Institute

What was the research about?
Patient portals are secure websites where patients can view their health records, view test results, send messages to their doctor, and ask for prescription refills. Patients with chronic, or long-term, health problems such as asthma, diabetes, or heart disease must often coordinate their care across different doctors in multiple locations. Patient portals may be especially helpful for these patients.

This study focused on a patient portal that a large health system in California uses. The research team wanted to learn

- What are the characteristics of patients with chronic health problems who use or don't use the portal?
- Why do patients use—or why do they not use—the portal?
- How does patients’ use of the portal relate to their use of healthcare services?

What were the results?
The research team found that patients with chronic health problems who were younger or white were more likely than others to use the patient portal. Among patients who said they didn't use the portal, the most common reasons were

- Wanting to get care in person or by phone (54 percent)
- Not often using a computer with access to the internet (41 percent)
- Being unsure of what was available on the portal (15 percent)

Patients who used the portal said it

- Helped them get health information (92 percent)
- Helped them manage their health care (92 percent)
- Was convenient (90 percent)

Compared to portal users who didn't report any of these benefits, those who reported benefits were more likely to also report that using the portal improved their health.

Patients who used the portal had more doctor office visits, fewer emergency room visits, and fewer preventable hospital visits than patients who didn't use the portal.

Who was in the study?
The study included adults with chronic health problems. In the first part of the study, the research team surveyed 1,824 patients. Of these patients, 56 percent were white, 13 percent were Asian, 10 percent were black, and 10 percent were Hispanic. About 12 percent of patients were 18–44 years old, and the rest were older.
In the second part of the study, the team reviewed patient portal and health records from 273,815 patients. Of these patients, 54 percent were white, 18 percent were Asian, 17 percent were Hispanic, 9 percent were black. About 43 percent of patients were 18-64 years old, and the rest were older.

What did the research team do?
The research team worked with patients, doctors, and other health system staff to design a patient survey. The survey asked patients about the reasons they did or didn’t use the portal. The team mailed the survey to patients in the health system and analyzed the results.

The research team also looked at the patient portal and health records of patients in the health system. Using these records, the team saw which patients used the portal. The team also compared the use of healthcare services by patients who did and didn’t use the portal.

What were the limits of the study?
The study took place in a single health system in California with an established, free patient portal. Results may be different in other health systems. Also, results may be different for patients who must pay to use a portal. Results may also differ for patients who don’t have chronic health problems. Finally, the research team can’t say for sure if patients’ use of the portal caused the differences in how patients used healthcare services.

Future research could look at patient portal use in different places or with different patients. Researchers could also explore ways to reduce barriers to using portals.

How can people use the results?
Patients can use the results to learn more about how using a patient portal might affect healthcare experiences. People who run healthcare systems could use the results to help decide whether to provide portals for patients with chronic health problems.

To learn more about this project, visit www.pcori.org/Reed127.