

Increasing Patient Use of Health IT

Clear action steps promote access to online patient portals

Agency Objective. Increase patients' access to online patient portals and health information technology.

Background. The Office of the National Coordinator for Health Information Technology (ONC) is charged with nationwide implementation and advancement of health IT. The use of electronic health records (EHRs) has the potential to yield benefits for patients and operational benefits for both patients and providers.⁵⁷ The Medicare and Medicaid EHR Incentive Programs provide financial incentives for providers to adopt and demonstrate "meaningful use" of EHRs (for example, by having patients view, download, or transmit their health records). ONC, OES, and a local health care system partnered to identify low-cost and scalable solutions to encourage patients to enroll and use the patient portal component of the health care system's EHR.

Methods. The local health care system has an EHR system that it owns and maintains. When a patient visits a provider, the patient receives a paper After Visit Summary (AVS) that contains the medical details of the visit. On the last page of the AVS, patients that do not already have an active online patient portal account will find an activation code and instructions on how to activate their online patient portal account. OES worked with ONC and the local health system to revise the AVS to make benefits of EHR salient, highlight clear action steps, and encourage immediate action. The revised AVS was implemented for all primary care clinics within the local health care system on August 25, 2015, while system non-primary care providers and affiliates continued to use the original AVS.

Office operations made random assignment by patients or providers infeasible, so the new AVS was tested using a difference-in-differences estimation approach. The difference in activation rate for system primary care patients before and after August 25, 2015 was compared to the difference in activation rate of two separate patient groups during the same time periods: 1) non-primary care providers of the local health care network, and 2) primary care providers of a different health care system that uses the same online patient portal system as our partner health care system.

Results. A difference-in-differences estimate suggests that the revised AVS instructions lead to a 9.98 percentage increase in the probability of online patient portal account activation ($p=0.07$, 95% CI = [-0.69, 20.66]).⁵⁸

Conclusions. There are promising signs that clear actions steps may encourage patients to access the online patient portal component of their health care system's EHR. However the study can be improved with better ability to identify the study population and having more comparable treatment and comparison sites.

⁵⁷ Congressional Budget Office, *Evidence on the Costs and Benefits of Health Information Technology*, (2008); Beverly Bell and Kelly Thornton, "From Promise to Reality: Achieving the Value of an EHR: Realizing the Benefits of an EHR Requires Specific Steps to Establish Goals, Involve Physicians and Other Key Stakeholders, Improve Processes, and Manage Organizational Change," *Healthcare Financial Management* 65 (2011): 51-57.

⁵⁸ The regression includes indicators for when the AVS code was generated relative to the office visit, and standard errors are clustered at the facility level.