

Data-Driven Diffusion of Innovations: Successes and Challenges in 3 Large-Scale Innovative Delivery Models

SYNOPSIS

Electronic health information has had only a limited impact on how health care is delivered, a *Health Affairs* study of three different delivery models finds, despite experts' hopes that such data would improve quality of care and reduce costs. Public policy efforts, the authors say, should focus on helping providers use data more effectively to improve information-sharing and patient care.

THE ISSUE

The United States is experimenting with different ways to improve health care quality while reducing costs. Many health care delivery models are collecting and incorporating data from patients' electronic health records (EHRs), though little is known about how effectively health systems and providers use these data. Commonwealth Fund–supported researchers examined three health care delivery models to find out more.

HOW CARE DELIVERY MODELS USE DATA

- ▶ **Accountable care organizations (ACOs)** are networks of doctors and hospitals that take on financial risk for treating a group of patients. The researchers found that 97 percent of ACOs have an EHR system in place, making it the most widely adopted data tool. ACOs also use measurement data on providers' performance, often reporting feedback directly to physicians. But ACOs find it difficult to obtain complete health data for patients who receive care outside the ACO.
- ▶ **Comprehensive primary care (CPC)** practices seek to expand access to care, improve quality, and reduce costs through population health management and other methods. These practices have adopted a wide range of new health IT systems, using EHRs and health information exchanges for care management referrals, care planning, and communication with patients and care team members. By 2016, 81 percent of CPC practices were also using health data for quality improvement and "risk stratification," or categorizing patients according to the level of care they require.
- ▶ **EvidenceNOW**, a federally funded effort run by regional cooperatives, promotes the use of evidence-based preventive care for cardiovascular disease among small and medium-sized primary care practices. More than half of

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At a time when many stakeholders expected that the substantial national investment in health IT and electronic data would be paying off in the successful adoption of data-driven innovation models in health care delivery, evidence from three large-scale and diverse innovations suggests that this is not yet the case.

practices reported participating in the Centers for Medicare and Medicaid Services' meaningful-use EHR incentive program, and more than half indicated they could use their EHR systems to produce reports on quality of care. Technological limitations, however, prevented many other practices from doing so.

THEMES AND CHALLENGES

- ▶ **Most of the innovations involve some health information technology, but there's room for growth.** EHRs are commonly used, but other types of health IT are deployed relatively infrequently. For instance, while nearly all ACOs use EHRs, only 65 percent draw from disease registries and 53 percent from personal health records. Meanwhile, just 39 percent take advantage of secure messaging technology.
- ▶ **Health data are difficult to access and share.** Sixty-two percent of ACOs reported that exchanging health information between inpatient and outpatient settings was "very challenging." While physician practices successfully gathered certain types of health data, their ability to apply these data to improve performance was hindered by cost, workforce limitations, and system functionality.
- ▶ **Practices need assistance.** External experts can help physicians and practices learn how to compare their own data against performance benchmarks. But such technical assistance can consume a large amount of staff time and resources.

THE BIG PICTURE

As the innovative models profiled in this study show, the impact of health IT systems can fall short of expectations. To improve use of data, the authors suggest that health care practices seek more one-on-one assistance, obtain and review feedback reports from data aggregators, and hire practice facilitators to help them exploit the data they have on hand. Public policy should aim to support these goals.

ABOUT THE STUDY

The researchers used evidence from surveys, qualitative analyses, and direct observation at ACOs, CPCs, and EvidenceNOW practices.

THE BOTTOM LINE

Health care delivery models are increasingly adopting health information technology systems, but they have struggled to fully use the data these systems produce. Providers need better support in using data to improve patient care.

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This summary was prepared by Joel Dodge.