The new health-care paradigm calls for greater health-plan-member engagement, satisfaction, and empowerment. To meet this challenge, a growing number of employers are searching for new strategies and the right tools to help them fulfill new obligations and expectations. One strategy that is quickly gaining ground is mHealth, the use of mobile software and devices for health-care purposes. In particular, smartphone technology has emerged as a revolutionary way for physicians and patients to communicate, access medical records and claims data, and improve compliance—all to the benefit of the employer’s bottom line. The goal is to implement a mobile-technology platform with apps that enable members to gain the greatest possible benefit from the health-care services available to them.

The impact of this revolution is expected to grow. In fact, a recent study found that nearly 17 million consumers were accessing health information on mobile devices in 2011, representing a 125 percent increase from 2010. It was predicted that health-care and medical-app downloads would reach 44 million for 2013, and 142 million by 2016. Add to this the increasing number of remote health-monitoring apps being designed to help simplify the management of chronic diseases, while also presenting a new and effective means for reducing the cost burden of unhealthy lifestyles and aging populations.

One key driver for this trend is the large number of health consumers who regularly search for health information online—and on their smartphones—to find answers to their health questions. For the most part, they are looking for action-oriented information. Many health-care organizations already have personal health records and/or patient portals that can easily be adapted to smartphone technology.

Health-care organizations increasingly want to connect more directly with patients as a means of providing efficient, high-quality care. With features such as mobile scheduling, the ability to check wait times in offices and emergency rooms, and mobile prescription refills, mHealth apps make it easy for plan members to be more engaged in their own health care.

**HOW HEALTH APPS WORK**

Health apps engage members with tools that enhance wellness, diet, and exercise; provide actionable alerts; and help to prevent chronic diseases that lead to costly ER visits. For companies that have mobile tools for work, integrating mHealth apps can be easily adapted into the workflow. Some of these tools have associated social communities where employees can increase bonding if they take part in them. Utilization of these types of tools can further enhance employee satisfaction and teamwork.
For some companies, health coaches are too costly. Apps can be geared toward workers with unique health challenges or issues related to a particular population. Blue Cross and Blue Shield and Aetna offer apps that allow members to connect with health-care providers, as well as the insurer. A mobile-technology platform can be customized to meet a particular company’s needs, and the associated health-care apps offer plan members easy access to essential medical- and pharmacy-benefit-related information, including:

- In-network provider directories and directions to offices,
- Pharmacy- and medical-benefit summaries and claims history,
- Drug formularies and drug prior-authorization status,
- Deductible summaries and cost-sharing requirements,
- Drug prices of nearby pharmacies and expected out-of-pocket costs with generic and therapeutic alternatives,
- Self-diagnosis tools with symptom- and disease-lookup features,
- Daily wellness tracking tools for achieving health-related goals,
- Health-related symptom checkers,
- Reminders and alerts for prescription-drug compliance, and
- Options for in-home monitoring and in-home care.

Currently, health-related apps are used primarily for information retrieval, with some mobile devices providing more one-on-one interaction. For example, RxManager, which is available to employers supported by Physicians Plus in Madison, Wisconsin, has personal drug-utilization information for each covered employee and his or her dependents, including specific money-saving suggestions for better pharmacy-benefit use. They also offer patients a number of features, including the ability to:

- Record past immunizations and health screenings and list immunizations and screenings that are recommended based on the individual’s profile;
- Track health and wellness, including weight, HgA1c (blood glucose level), headache log, blood pressure, cholesterol, and more (the date and time selector supports multiple tracker measurements per day); and
- Create a list of questions to ask the doctor.

**CHRONIC-DISEASE MANAGEMENT**

For plan members with chronic health conditions, such as asthma, diabetes, or heart disease, making sound health decisions every day is critical. Smartphone apps facilitate this process when and where decisions are made, preventing health situations from escalating to the point where more costly and time-consuming interventions are required. Take, for example, a plan member with chronic obstructive pulmonary disease (COPD) who experiences a sudden weight gain, an early indicator of congestive heart disease (CHD). An app that tracks that information and communicates it to the physician can raise an alarm that enables intervention before the member has to be hospitalized.

Some apps connect patients with caregivers on a continuous basis. Examples of sensor technologies that can be combined with smartphones to track health measurements and monitor patients with chronic conditions include:

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• Peak-flow meters and pulse oximeters for respiratory conditions,
• Digital blood-pressure monitors for hypertensive patients, and
• Glucometers to measure blood glucose for those with diabetes.

With this wealth of information, employers can empower employees to make better, more well-informed choices that can increase prescription-drug adherence, reduce costs associated with emergency care, and improve the overall quality of health care. Apps can also serve as decision-support tools for health-care providers and pharmacy-benefit managers (PBMs), allowing them to quickly suggest additional prescription-drug-purchasing channels, such as mail-order and retail discount options.

Health insurers have developed mobile applications that allow members to use smartphones to access commonly used tools like ID cards and physician directories. Examples from a few plans, including Health Net, Blue Cross and Blue Shield of Florida, Humana, and OptumHealth [a UnitedHealth Group subsidiary], include an array of features, such as:

• Display an electronic ID card;
• Access a physician directory and get directions to network facilities and physician offices;
• View past claims;
• Access eligibility and cost-sharing requirements for a given visit;
• See the balance of a health savings account;
• View coverage and out-of-pocket totals;
• Look up drug prices at nearby pharmacies and find generic alternatives and therapeutic alternatives;

• See allergy and weather information;
• Buy insurance coverage; and
• Track fitness and nutrition challenges and achievements, sharing accomplishments with friends via social media.

A thoughtful and engaging mobile-access and mobile-platform-technology strategy can make it easier for employers and health plans to meet their employees where they want to meet—which is increasingly at the employees’ convenience. In addition, this new strategy will greatly simplify the management of chronic diseases and reduce the cost burden of unhealthy lifestyles and aging populations.

Given the ability to provide instant access to information, employers have an opportunity to influence individual employee behaviors in order to lower rates and improve overall workforce health and productivity. Additionally, health apps can help streamline the flow of information between health plans, physicians, and patients—facilitating one-on-one exchanges that close gaps in care, shorten medical response times, and improve the overall health-care system.

HEALTH APPS AT WORK

Designing an effective mobile strategy begins by partnering with a service provider that can offer web-based platforms that automate labor-intensive processes, such as gathering, integrating, and accessing drug-claim
A unified approach to mobile access through an integrated suite of applications gives employers and employees the best approach to informed and personalized decision making. The ideal PBM tool relies on a pharmacy-utilization and reporting application to support member care and enable clinical pharmacists and staff members to improve member pharmacy utilization by encouraging adherence to medications for chronic-health conditions, such as diabetes and asthma. This kind of solution can cut costs by identifying preferred brands and generic drugs and by enabling pharmacists to work collaboratively with members who are at risk for adverse drug events.

**EMPLOYEES TAKING HEALTH INTO THEIR OWN HANDS**

Research shows that 25 percent of patients prescribed medications for a new illness fail to fill their initial prescription. Half of patients taking maintenance medication for chronic disease stop taking their medication within a year of starting therapy, costing the healthcare system billions of dollars in unnecessary medical care. The goal is to ensure that each member is using the appropriate medication in a timely and efficient way.

Once an effective mobile strategy is in place, employees can take greater control of their own health and work more closely with their in-network health-care providers. This is especially true for those who are incentivized by the possibility of saving money and reducing out-of-pocket health-care expenses.

Smartphone-technology apps and systems are the ideal tool for self-insured employers, in particular, who are focused on developing new health-benefit strategies and shaping...
their choices based on the needs of their employee workforce.

Another app, the Patient Portal for physician practices, allows patients to access documents via their smartphone devices, retrieving forms and information prior to office visits. As more hospitals and provider networks begin to develop networked apps for their providers, physicians will be able to extend their clinical tools—and reach—to more people. Along these same lines, apps designed for physicians are expected to become increasingly better connected to patients’ clinical records so that information can be readily shared between health-care providers. At the point of care, they create an ecosystem of web applications and services that work collaboratively and are designed to connect and support patients, caregivers, and providers.9

Recently, Wallenius Wilhelmsen Logistics, a large, self-funded shipping company, participated in a pilot project involving a new mobile health app. Preliminary reports show that 42 percent of employees who used the voluntary benefit reported saving money on their prescription-drug costs.10 The software-as-a-service platform put information about the prescription-drug plan in the hands of employees via their desktops or smartphones. The tool was then populated with information about the employer’s specific drug plan, as well as drug information from the US National Library of Medicine. Users entered the name of a particular drug in the search engine and could review the suggested alternatives—lower-cost drugs or generics, for example.

Based on a survey of 54 employees who used the app, 71 percent would recommend the service, with estimated savings for employees ranging from $49 to $82 per app user per year. Company savings, based on current cost sharing, are estimated to range between $174 and $366 per user per year.11

CAVEATS

For all of the promise of smartphone apps, however, care must be taken in choosing the right ones. According to a recent study measuring the performance of smartphone apps that evaluate photographs of skin lesions and provide the user with feedback about the likelihood of malignancy, the results are highly variable—and three of four smartphone apps incorrectly classified 30 percent or more of melanomas as “unconcerning.”12

Reliance on these apps in lieu of medical consultation can delay the diagnosis of melanoma and harm users.13 Only the application that utilized dermatologists to actually review user images provided a high degree of sensitivity; only one of the 53 melanomas was diagnosed as “benign” by the experts reading the images. Therefore, when reviewing health apps that are not, as yet, subject to regulatory oversight or validation, employers should rely on expert mobile-technology advisers to make the right choices.

Employee privacy is another issue that has not yet been adequately addressed. For now, most mobile phones on the market meet only about 40 percent of the security requirements cited by the Health Insurance Portability and Accountability Act, according to the Office of the National Coordinator for Health Information Technology (ONC).14 To rectify this problem, the
ONC is conducting extensive research for the development of a set of “best practices” to help small and medium-sized provider organizations “secure” the growing number of mobile devices that process health data with the overall goal of protecting patients’ health records.

mHEALTH GOING FORWARD

If or when the health-insurance market begins to move toward more individual purchasing of coverage (e.g., the uninsured and/or small-employer groups that move employees to insurance-exchange purchasing), more people may rely on comparison shopping in order to lower their premium costs and to purchase better benefit packages.

With six out of ten employers expecting the Patient Protection and Affordable Care Act to increase their health-care costs, a thoughtful and engaging mobile-access and mobile-platform technology strategy can streamline health-care administration, reduce staff, and facilitate health-behavior change by connecting employees to convenient, cost-effective health care.

NOTES

2. Ibid.
5. See note 2.
11. Ibid.
13. Ibid.
Robert Oscar, R.Ph., has more than 25 years of experience in health care. Throughout much of his career, Oscar has developed and implemented successful programs to effectively manage pharmacy-benefit risk, including pioneering work in the Medicare HMO market. Before founding RxEOB more than a decade ago, Oscar worked in the medical information-systems industry, designing, developing, and implementing several different claims-analysis tools. He is licensed in Virginia and certified in pharmacy-based immunization. For more information, he may be contacted at info@rxeob.com.