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Internet, mobile applications, texting offer support for patient care

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New technologies such as mobile phone applications and patient-targeted websites may provide novel solutions to enhance diabetes self-management, several presenters said here.

“Innovative technology affords low-cost, flexible means to supplement formal health care and provide access to patients,” **Linda M. Siminerio, RN, PhD, CDE**, associate professor at the University of Pittsburgh School of Medicine and Nursing, said during a presentation. “[These technologies are] powerful ways to improve provider practice and help patients live more successfully with chronic diseases. It is central to reshaping chronic care.”

Reaching the community

Siminerio noted that popular technologies fit well into the framework of the chronic care model and the concept of the patient-centered medical home. For instance, they can help engage patients as well as reach large communities and educate consumers about what services are best for them. Social media, including Facebook, Twitter and chat rooms, are also especially relevant to this communication. Moreover, these websites and technologies hold the key to connecting with younger generations who receive the majority of their information from the Internet.

“Diabetes is a lifestyle disease and decisions are usually made by the patient,” Siminerio said. “They are responsible for 98% of the effect on glycemic outcomes whereas physical factors contribute only 2%. We need to figure out ways to deliver support services that enhance self-management.”

[Electronic health records](#), sensors and monitoring devices can also be integrated into this structure, which can be helpful in tracking a patient’s health, according to Siminerio. This information may be made available to patients as well, so they can see what changes need to be made to their management and why.

Rural populations or people whose visits to clinics are limited may benefit from telemedicine for educational purposes and behavioral health, Siminerio said. Further, nurses can offer support to busy primary care providers in areas without specialized diabetes clinics using telemedicine.

On-the-spot treatment

The Internet, mobile applications and text messaging also aid in delivering the help, support and information that a specific patient requires at that moment, **Neal Kaufman, MD, MPH**, founder and CEO of DPS Health, said during the presentation. Services such as patient portals, which have all of the patient’s health information and link to other websites pertaining to diabetes management, can also serve the same purpose.

“The advantages to this system are the capacity to save money; improve outcomes at the individual and the public levels; efficiently manage a large number of patients at one time; and integrate these technologies into the health care ecosystem,” he said. In addition, the nature of diabetes educators’ jobs may change and the opportunity for creating new positions will expand.

Naturally, barriers exist, he noted, including reimbursement issues and providers’ fear about offering constant access to patients. These can be overcome, however, as evidence supporting the benefits of technology in health care emerges and providers experiment with what works best for their own practices.

Benefits of mHealth

Malinda Peebles, RN, MS, CDE, vice president of clinical advocacy at WellDoc, also pointed out that many people, despite economic circumstances, own cellphones. Consequently, [mobile technologies](#) should expand providers’ ability to reach those at high risk for diabetes, such as urban youth and minority populations.

“Mobile health, or mHealth, a term used for the practice of medicine, is supported by mobile communication devices,” Peebles said. “It is a segment of e-health that includes applications that collect community and clinical health data; deliver health care information; and provide real-time monitoring of patient data and real-time direct care through text messages.”

Peebles noted that the FDA is currently considering whether these mobile applications qualify as medical devices and therefore require premarket approval. Regardless, it seems inevitable that health care is moving in this direction, the speakers said.

“Mobile technologies or mobile platforms are about more than just taking care of patients through blood sugar control, depression or sleep apnea,” Peebles said. “It is about how to build technology that lets patients customize their care ... The whole area is very exciting, patient-centered and is an amazing opportunity for us to provide better care.”