

Mobile Diabetes Management

Pilot integrates diabetes self-management information into EHR

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Two Washington, D.C. clinics, Chartered Family Health Center (CFHC) and George Washington Medical Faculty Associates (GWMFA), have begun using an innovative mobile solution to manage their diabetic patients. Both pilot programs are utilizing DiabetesManager software from Baltimore, Md.-based chronic disease technology solution provider WellDoc. DiabetesManager captures, stores, and transmits in real-time the blood glucose data and other diabetes self-management information via a patient's mobile device.



About a year and half ago, CFHC, a primary care health center emphasizing in family medicine, OB/GYN services, and pediatrics, received a grant from the District of Columbia Department of Health to pilot a diabetes mobile health program. CFHC doesn't have an EMR yet, so clinicians analyze on a monthly basis a print-out from the diabetes tool on blood sugars and other diabetes care measures that they then place into the patients' charts.

GWMFA, a physician group practice of 280 George Washington Medical Center clinical faculty members, is in the eight-month interface period of its pilot, which is funded by the Air Force. Currently, the organization is designing a diabetes management tab in its EHR (from the Chicago-based Allscripts).

Richard Katz, M.D., a cardiologist at GWMFA, meets with an internal IT group to help design the EHR tab and improve clinical workflows. The team is designing alerts that fire when the patient is seen by the physician, and also creating a two-way interface with a summary of hemoglobin, A1C, and lipid levels all populated by the mobile management software. This interface will allow physicians to see a patient's blood sugar trend to get a full view of patient engagement.

Katz and his team is also creating a checklist of standards of care for diabetes patients to be maintained in the WellDoc system that includes annual feet and eye checks, immunization information, smoking status, and cholesterol levels. "We query the patients on a regular basis," says Katz. "There is a really easy field to look at, so when the physician sees the patient, they'll say, 'hmm you haven't had your eyes checked this year.' So you're refining these standards of care." Dedicated case managers then check a dashboard of enrolled patients to look for outliers beyond the care standards and contact them.

Katz foresees this pilot will lift the administrative burden from physicians at his organization. Initially, the physician will be spending more time with patients to educate them on the system, but "then the frequency of interactions can ratchet down considerably," he says.

Before GWMFA embarks on its two-year clinical trial, Katz's staff has to finish recruiting patients and making sure they have compatible cell phones. For those who don't have a data plan, GWMFA provides "medical minutes" incentives to allow them to access the WellDoc system for as long as they use it to monitor their blood sugars. "Each of these pieces are definite challenges, especially when you're dealing

with a community clinic, getting the phones up and running, getting the patients engaged, and getting the case managers educated," Katz says.

Katz finds the immediacy of feedback and patient engagement in their own care as this pilot's true boon. For example, one of Katz's patients barely checked her blood sugars before using the system, but now checks her sugars 10 to 15 times a week. "At the end of the day you want to get patients better understanding self management because they get better feedback. Patients really like to see their numbers and know that they are doing well," Katz concludes.