How certified EHR technology can transform prediabetes care

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Timothy M. Smith
Senior News Writer

The statistics on prediabetes never fail to astound. To wit: About 96 million people in the U.S. have prediabetes, but only about 15% know it. You might think—given that diabetes is the seventh-leading cause of death in the United States—that we would be amid a diabetes moonshot. Yet we’re not.

But the medical profession is, in fact, working on solutions to address this stubborn issue. One example is a recent prediabetes clinical program partnership between the AMA and Henry Ford Health System—an AMA Health System Program member—that tested whether certified electronic health record technology (CEHRT) can be used to identify and refer patients with prediabetes to lifestyle change programs (LCP) recognized by the National Diabetes Prevention Program (National DPP).

A study of the project, published in *JAMIA Open*, looked at how 36 primary care physicians and other health professionals cared for nearly 5,000 patients over roughly a year—between March 2017 and June 2018. Data on outcomes was also collected one year after the intervention.

**Sevenfold growth**

The AMA and Henry Ford Health System worked with an EHR vendor to design and build the components, which included a prediabetes registry and report generation to identify and monitor patients eligible for diabetes prevention services.
The project provided guideline-based clinical decision support with prompts to order lab tests, document a prediabetes diagnosis and offer treatment, including referral to a National DPP lifestyle change program. It also included standardized documentation and patient education materials, and guided engagement in the patient portal by prompting patients to complete screening questionnaires before their appointments.

“By the end of the study period, the rate of DPP LCP referrals increased seven-fold, from a baseline of 20 to 293,” wrote the authors, who included staff from the AMA and Henry Ford Health System. “The number of patients screened and tested for prediabetes was 2.5 times higher and the number eligible for DPP LCP was two times higher when utilizing the CEHRT between the first and last months of the pilot.”

Read about how COVID-19 boosted enrollment in a diabetes prevention program.

**Lasting impact**

“There were two things that were particularly exciting about this study,” said AMA Director of Chronic Disease Prevention and Programs Kate Kirley, MD, one of the authors along with Tamkeen Khan, PhD, a senior economist at the AMA. “The first is that it started from asking, ‘What’s supposed to happen clinically?’ and then the technology supported that.

“As physicians, we complain a lot about how having to work around our technology to take care of our patients. This was a good example of a time when we were able to focus first on what should happen for our patients and then the technology came in to facilitate it.”

The second is how Henry Ford Health System has continued to use the technology.

Referral-to-enrollment conversion rates were 41% in the study period, and they grew to 69% in the one-year post-study period. This is much higher than typical conversion rates that run around 10–20%. In addition, while the pilot focused on just 36 primary care physicians, by one year after completion, 85 clinicians had begun using elements of the program with minimal or no training.

“That suggests to us that what we created was the right thing for the situation,” Dr. Kirley said. “For comparison, we figured out how to use our iPhone without a lot of instructions because it's intuitive. Likewise, this set of CEHRT functionalities seems to be intuitive to clinicians. Word is spreading about it, and the health system has continued to see improvements and referrals to the National DPP after the study time period ended.”
Learn about three ways doctors can expand reach to help patients with prediabetes.

The AMA’s Diabetes Prevention Guide supports physicians and health care organizations in defining and implementing evidence-based diabetes prevention strategies. This comprehensive and customized approach helps clinical practices and health care organizations identify people with prediabetes and manage the risk of developing type 2 diabetes, including referring people at risk to a National DPP lifestyle-change program based on their individual needs.