Optimize your EHR to prevent type 2 diabetes

Below you will find suggestions and guidance on how to use your electronic health record (EHR) and technology to improve the care you provide patients with prediabetes. Functionalities will vary depending on which EHR system (and/or version of that system) you use. You may need to share this information with others in your health care organization to determine how to best use your EHR for diabetes prevention.

**Population health tools**

**Screening and diagnosis reports**
Generate reports to share with care teams and providers that track patients who are due for abnormal glucose screening to target via patient outreach or during patient encounters

- These reports should be based on an evidence-based guideline or screening protocol—your institution can create its own protocol or use any established clinical practice guideline

**Management reports**
Generate reports to share with care teams and providers (in compliance with applicable federal and state privacy laws) that identify patients who are eligible for prediabetes management (e.g., referral to a CDC-recognized organization offering the National Diabetes Prevention Program lifestyle change program or referral to medical nutrition therapy) to target via patient outreach or during patient encounters

- These reports can be based on available laboratory testing results
- Reports can also be used to monitor individuals who require follow-up of laboratory testing or monitoring of medications

**Registry**
Consider creating a registry (in compliance with applicable federal and state privacy laws) to track individuals with a diagnosis of prediabetes and related health factors (e.g., lipid panel data, blood pressure). The registry may be used to identify patients who require specific interventions, including:

- Referral to a lifestyle change program, specifically a CDC-recognized organization offering the National DPP lifestyle change program

- Follow-up to verify enrollment and participation in a program
- Follow-up after metformin initiation
- Laboratory monitoring (people with prediabetes should undergo regular laboratory testing and monitoring)

**Provider or clinic dashboards**
If your organization uses a dashboard for quality measures or population health initiatives, consider incorporating metrics for abnormal glucose screening and/or prediabetes management. You may be able to create individualized provider dashboards, as well as site-level and/or institutional-level dashboards to provide feedback to clinical care teams and providers.

**Clinical decision support**

**Point-of-care advisories**
Develop point-of-care advisories that notify clinical care teams and providers if a patient is eligible for abnormal glucose screening or prediabetes management during a patient encounter. Ideally, that advisory will link to a relevant order set

- Example: A patient who meets United States Preventive Services Task Force criteria for abnormal glucose screening is checked into the EHR. The advisory will then be triggered and prompt the provider to access an order set with the appropriate laboratory testing orders (e.g., fasting plasma glucose) and ICD-10 diagnosis codes
- Consider incorporating abnormal glucose screening recommendations into the health maintenance or prevention feature of the EHR
Order entry/order sets

Develop order sets for abnormal glucose screening and prediabetes management.

Depending on your EHR, your order set may be able to include other relevant activities or documentation, such as relevant ICD-10 diagnosis codes, patient education or instructions, and provider documentation templates.

For abnormal glucose screening, some example orders to include are:
- Fasting plasma glucose
- Basic metabolic panel
- Hemoglobin A1c
- Two-hour oral glucose tolerance test

For prediabetes management, some example orders to include are:
- Referral to a CDC-recognized lifestyle change program
- Metformin medication order
- Referral to medical nutrition therapy
- Future laboratory order for monitoring in 6–12 months

Some key information to include in a referral order to a CDC-recognized lifestyle change program is:
- Patient demographic and contact information
- Referring provider and office contact information
- Clinical information establishing eligibility for lifestyle change program
  - BMI
  - Laboratory test result and date
  - History of gestational diabetes
- Requested time interval (e.g., every three months or every major milestone) and preferred delivery method (e.g., phone, fax or email) for feedback on patient progress

Office encounter templates

Consider incorporating questions that assess risk and eligibility for abnormal glucose laboratory testing or prediabetes management into standard rooming questionnaires. These can be linked to alerts and order sets that prompt providers to take the appropriate action, such as order a laboratory test or follow-up on a patient’s progress on lifestyle change.

Patient portal

Screening and diagnosis

Develop standardized patient portal messages to remind patients that they are due for abnormal glucose screening and to prompt patients to obtain laboratory testing prior to an appointment.

- Incorporate the doihaveprediabetes.org risk screener questionnaire into the patient portal to engage patients in determining their risk for prediabetes (and undiagnosed type 2 diabetes)
- Incorporate abnormal glucose screening into the health maintenance or preventive care features of the patient portal
- Develop and incorporate standard patient education materials and instructions to obtain laboratory testing to use in patients after visit summaries

Management

Develop patient portal messages to educate patients about their prediabetes diagnosis and for outreach to patients to discuss possible management options (e.g., referral to a CDC-recognized organization offering the National DPP lifestyle change program)

- Develop automatic reminder follow-up messages to patients after a preventive service has been ordered (e.g., reminder to obtain laboratory test for monitoring)
- Develop and incorporate standard patient education materials and/or instructions regarding how to obtain preventive services to incorporate into patients’ after visit summaries

1 This document is for informational purposes only. It is not intended as medical, legal, or consulting advice, or as a substitute for the advice of a physician, attorney, or other professional. It does not address all possible legal and other issues that may arise with the acquisition or development of an electronic health record (EHR) or other health information technology product or service. Each healthcare provider organization will need to consider its particular circumstances and requirements, which cannot be contemplated or addressed in this document. A healthcare organization should seek counsel from an experienced attorney whenever it proposes to enter into or modify the terms of a legally binding contract. The functionalities discussed herein will vary depending on which EHR system (and/or version of that system) you use, and may vary based on the agreement you have with your EHR vendor.

2 Each healthcare organization should seek counsel from an experienced attorney regarding clinical decision support products or services that may fall under the jurisdiction of the Food & Drug Administration (FDA).