Ohio Type 2 Diabetes
Learning Collaborative

Check her risk. Protect her health.

Primary Care Provider Toolkit

2018

The Ohio Type 2 Diabetes Learning Collaborative

The Ohio Type 2 Diabetes Learning Collaborative is comprised of providers across Ohio dedicated to improving health outcomes for women of child-bearing age at high risk for developing type 2 diabetes (T2DM), including women with a history of gestational diabetes mellitus (GDM.) By increasing the number of women who receive follow-up screening for and education on T2DM, health risks will be addressed early and effectively. This clinical toolkit has been developed in conjunction with national clinical experts to provide office tools to ensure providers have necessary resources to work towards the Learning Collaborative's goals. Specifically, this toolkit includes T2DM screening guidelines for women of child-bearing age at high risk for T2DM, general health and wellness information, and resources specific to T2DM management.

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Collaborative's Goal:
To improve postpartum T2DM screening rates among women with a history of GDM.

The Ohio Type 2 Diabetes Learning Collaborative is funded by the Ohio Department of Health and the Medicaid Technical Assistance and Policy Program (MEDTAPP), and administered by the Ohio Colleges of Medicine Government Resource Center. Clinical experts include:

- Dr. Seuli Bose-Brill, OSU Internal Medicine/ Pediatrics Grandview Yard Clinical Director, Maternal-Infant Dyad Practice Director, OSU Pragmatic Clinical Trials Network
- Dr. Bethany Panchal, Assistant Program Director, The Ohio State University Family Medicine Residency Program, Director of Maternity and Women's Health, Assistant Professor - Clinical at OSUWMC
- Dr. Steven Gabbe, Emeritus Chief Executive Officer, Professor of Obstetrics and Gynecology, The Ohio State University Wexner Medical Center (OSUWMC)
- Dr. Mark Landon, Chair and Professor of the Department of Obstetrics and Gynecology at OSUWMC
- Dr. Stephen Thung, Professor - Maternal Fetal Medicine, Clinical Chief of Obstetrics, Medical Director of Patient Flow Management, OSUWMC

With contributions by

- Reena Oza-Frank, PhD, RD

Staying Ahead of Type 2 Diabetes after a History of GDM

The strongest known predictor of type 2 diabetes mellitus (T2DM) is a history of gestational diabetes mellitus (GDM), regardless of family history. Because GDM often subsides shortly after delivery, many patients are unaware of the link between GDM and T2DM. They may also be unaware that their children are at an increased for both T2DM and childhood obesity.

Women with a history of GDM are **9 times more likely** than the general population to develop T2DM, and more than half of them will develop T2DM within 10 years following pregnancy.

Recommended Screening Frequency

Both the American Diabetes Association and the American College of Obstetricians and Gynecologists (ACOG) recommend that women with a GDM-affected pregnancy be screened for T2DM:

- Within four to 12 weeks of delivery AND
- Every year, if screened as prediabetic OR
- Every one to three years, depending on risk factors, if last screen was within normal range.

Despite these recommendations, research has shown the assessment for a history of GDM and rates of T2DM screenings to be consistently low.[1] A recent study of women with a history of GDM showed that only 5.8 percent had glucose monitoring in the 4-12 week recommended period; 21.8% at one year, and 51% at three years.[2] In an effort to improve low T2DM screening rates among women with a history of GDM, this project previously engaged OB-GYN and Maternal Fetal Medicine (MFMs) providers across Ohio. While screening rates improved, feedback also stressed the need to engage primary care providers who treat and care for these women throughout their lives.

Who is responsible?

Every healthcare professional has the responsibility to ensure that the glucose test has been ordered, administered and reviewed with their patient.

Assessing for Risk of Type 2 Diabetes

Whether a patient delivered her baby six weeks ago or years prior, primary care providers have the opportunity to:

1. Assess both new and existing patients at high risk of developing T2DM
    a. Identify risk factors, including a history of GDM
2. Review history of at risk women for their last T2DM screening
    a. If needed, conduct or schedule the appropriate screening immediately, or
    b. Schedule recommended screening every one to three years;
3. Educate patients at high risk of developing T2DM on the:
    a. Link between GDM and T2DM
    b. Risk of T2DM for both mother and child
    c. Increased likelihood of GDM in subsequent pregnancies;
4. Provide at-risk women with the pink patient toolkit so they have the resources they need to understand and minimize the risk;
5. Follow up with lifestyle recommendations or medication if necessary; and
6. Refer patients for additional treatment to diabetes educator, dietitian, and/or diabetes prevention programs.
    a. Additional information can be found at https://www.cdc.gov/diabetes/prevention/index.html.

Ask your patients:

Have you gotten screened to see if you have type 2 diabetes before?

Do you understand the importance of getting screened every 1-3 years for type 2 diabetes? How long has it been since your last screen for type 2 diabetes?

Would you like to get screened today?

Check her risk. Protect her health.

Risks for the following health conditions are increased in women with a history of GDM:

- T2DM:
  - Women with GDM have a 50% chance of developing T2DM within 5-10 years postpartum.
- GDM in subsequent pregnancies:
  - Recurrence rate of GDM in second pregnancy is approximately 50 percent.[3]
- Cardiovascular disease

Risks for the following health conditions are increased in babies born to mothers having GDM:

- T2DM
- Childhood obesity

Inform the baby's doctor about the child's risk for these diseases.

Myth: GDM goes away after pregnancy.

Truth: GDM has an array of long-term health implications for women and their children.

Complete a T2DM screening, at minimum:

Complete a T2DM screening, at minimum:

- 4-12 weeks postpartum, and
- Every 1-3 years thereafter

Why is T2DM screening so important for this at-risk group?

Identifying women with prediabetes or at risk for T2DM allows for targeted lifestyle interventions to reduce the risk for developing T2DM later in life.

If a woman is identified with T2DM, targeted interventions to reduce the risk of end-organ injury can occur, and allows for optimized blood glucose control prior to any future pregnancies. Insufficiently controlled blood glucose leads to increased maternal and perinatal morbidity.

Impact of follow-up T2DM screenings

Let's say GDM complicates 7 percent of 4,000,000 pregnancies in the United States each year. This means that approximately 280,000 women will be diagnosed with GDM.

Postpartum screening of these 280,000 women could identify:

- 11,200 (~4 percent) women with T2DM who need referrals for diabetes management.
- 42,000 (~15 percent) women with impaired fasting glucose or impaired glucose tolerance who would benefit from diabetes-prevention efforts.
- 226,800 (~81 percent) women with normal postpartum blood glucose testing who should be counseled to maintain a normal weight, exercise, avoid smoking, and eat a healthy diet.[4]

If your site doesn't directly provide the screening tests, **identify a lab partner and ensure your patient can get a referral there for T2DM testing**. Work with her to schedule her test and have your office call with a reminder 24 hours before her test.

Be sure to get **100 percent** of your patients with a history of GDM screened for diabetes between 4-12 weeks postpartum and every 1-3 years thereafter.

Make the decision with your patients!

It's often easy to give all your patients the same health recommendations. But not all patients will comply with your prescriptive recommendations. To manage their health more successfully, patients must be able to make decisions for their self-management plan that fit their priorities, goals, resources, culture, and lifestyle.

1

Ask

Ask your patients to explore their most pressing issue:

- What is your understanding of GDM, prediabetes or T2DM?
- What specific concerns do you have about managing your health?
- What do you think is the biggest challenge to managing your health?
- Do you understand that you and your child are at higher risk for developing T2DM later?
- Do you know that it is important to get tested for T2DM after you deliver your baby **and** every 1-3 years?

2

Listen

Listen to your patients' responses. For five minutes, allow your patients to complete responses. Do not interrupt or offer any advice during that time. **Just listen.** Then, if your patients have a difficult time answering, offer some questions to encourage them to add to their responses:

- What about nutrition?
- What do you need to prepare for a blood glucose test?
- How about your exercise plan?

3

Respond

Respond to your patients *after* they tell you their answers. Make sure your responses are relevant to your patients' situations and benefit them the most.

Elements to consider during Shared Decision Making:

- Moms tend to be more focused on the care of their children than their own health care needs. Emphasize healthy meals and exercise habits will benefit the whole family.
- These techniques can help patients atrisk for T2DM consider making lifestyle changes, including a healthy diet and exercise, that can reduce the progression to T2DM.
- This may also be useful for assessing patients who would benefit from metformin. The American Diabetes Association indicates that providers could consider prescribing metformin for patients with prediabetes or with an HbA1c level between 5.7 and 6.4%.

Additional resources for shared decision making

Helpful Websites:

- Center for Shared Decision Making by Dartmouth-Hitchcock: http://patients.dartmouth-hitchcock.org/shared_decision_making.html
- Center for Evidence-Based Practices (CEBP) at Case Western Reserve University: http://www.centerforebp.case.edu/practices/mi
- *Videos and Other Helpful Tools:*
- Ottawa Personal Decision Guide–A free, printable worksheet designed to help people make health related and social decisions: http://decisionaid.ohri.ca/docs/das/OPDG.pdf
- Motivational Interviewing Recorded Presentations by SAMHSA-HRSA Center for Integrated Health Solutions: http://www.integration.samhsa.gov/clinical-practice/motivational-interviewing
- Patient Activation Reference Guide by U.S. Department of Defense: http://www.health.mil/dodpatientsafety
- *Sources for Decision Aids:*
- Decision Aid Library by Dartmouth-Hitchcock: http://patients.dartmouth-hitchcock.org/shared_decision_making/decision_aid_library.html
- Patient Decision Aids by Ottawa Hospital Research Institute: http://decisionaid.ohri.ca/

References

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[3] Kim C, Berger DK, Chamany S. Recurrence of gestational diabetes mellitus: a systematic review. Diabetes Care 2007;30: 1314–9.

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If your at-risk patient is diagnosed with prediabetes or T2DM, lifestyle changes may be necessary. While you will likely be referring your patients diagnosed with T2DM to a dietitian and/or diabetes educator for a comprehensive meal plan, you can also provide some initial guidance. Consider sharing these strategies for success with all at-risk patients. It's not easy to incorporate these changes, but motivate your patients to do it for their family.

Wellness: Strategies for Success

- Stress to moms that eating healthy meals and increasing activity will benefit the whole family.
- A good goal is to return to their pre-pregnancy weight within 6-12 months after birth. Research shows that postpartum weight loss may reduce the onset of diabetes.
- If past the postpartum phase or otherwise at-risk, the National Diabetes Prevention Program has shown that losing 5-7% of your bodyweight can reduce the progression to T2DM by as much as 58%.
    - For a 200-pound person, this is just 10-14 pounds

Nutrition: Healthy eating tips to share with your patients

- Use portion control. Try using half the plate for breakfast, and the whole plate for lunch and dinner
- Limit fast foods, including breaded and deep-fried foods
- Eat smaller, more frequent meals
- Do not skip meals
- Avoid foods/drinks sweetened with sugar or honey
- Limit fruit juice. Eat fresh fruits
- Choose high fiber foods

Available at ***www.ChooseMyPlate.gov***, "MyPlate Checklist" is an easy tool to use in your office, and creates a personalized meal plan while taking various factors into account, including a woman's pregnancy or breastfeeding status. If needed, remind patients about free Internet access at their local library.

Exercise can help your patients reach their blood sugar targets or health goals.

1. Talk to your patients about the importance of being physically active in lowering their chances of having T2DM and its complications in the future.
2. Encourage your patients to include 2 ½ hours of regular, moderate-intensity exercise per week, typically 30 minutes per day, at least 5 days a week.

Encourage your patients to start or keep making healthy lifestyle choices now to make it easier to keep good habits in the future. It's not easy to incorporate these changes, but motivate your patients to do it for their family.

Review your patients' history to determine if it is safe for them to exercise.

If newly postpartum, patients with the following conditions require specific medical recommendations before they pursue any physical activity:

- Cesarean delivery
- Healing of episiotomy
- Rectus Diastasis
- Anemia
- If you have questions, please consult your OBGYN or MFM physician.

Benefits of Exercising Postpartum

- Increase energy
- May help avoid postpartum depression
- Strengthens abdominal muscles
- Can help reduce stress
- Weight loss
- May reduce onset of T2DM

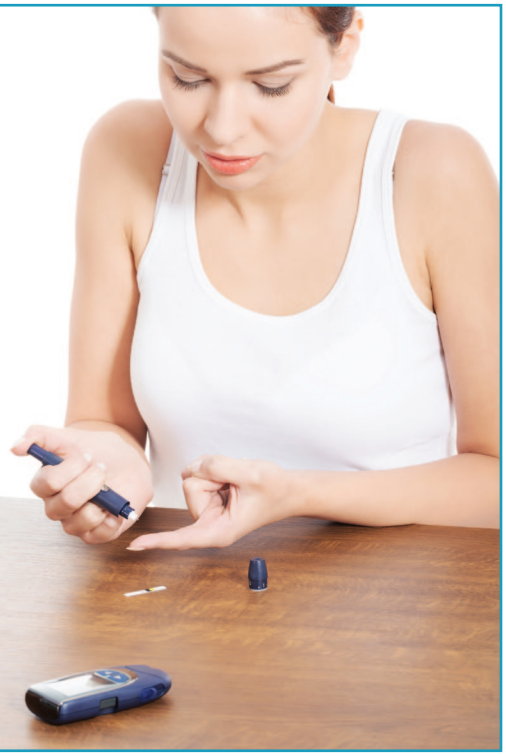
Ask your patients:

What activities do you do now? Do you exercise? How?

Help your patients understand their diagnosis of T2DM.

- Be sure to give your patients clear and simple directions on how to use their glucose meter
- Review blood glucose recommendations, including target, before meals and 1-2 hours after eating
- Education on high and low blood glucose symptoms
  - Include tips on how to quickly deal with low blood glucose
- Encourage a healthy diet and exercise
- Make sure your patients demonstrate understanding

Review with your patients the symptoms they may experience when they have:



High blood sugar

- Thirst
- Headaches
- Frequent urination
- Difficulty paying attention
- Blurred vision
- Weakness or lethargy
- Yeast infection

Low blood sugar

- Hunger
- Headaches
- Dizziness
- Confusion
- Paleness
- Increased heart beat
- Sweating
- Weakness
- Anxiety

T2DM and Pregnancy

Review what your patient should do if she is newly diagnosed with T2DM and becomes pregnant..

Ask your patients:

Have you experienced any symptoms of high or low blood sugar? What did you do?
Do you know what to do now?

Among women in Ohio, more than 20 percent smoke, and Ohio's adults smoke more than other adults in the US.[1]

A 2015 snapshot of women's health, using current smoking status by age and insurance type showed that women age 26-44 (26.9%) and those who were Medicaid-insured (41.4%) reported the highest prevalence of smoking.[2]

Over 4 in 10 low-income adults smoke, and a survey of Ohio middle school students showed that over one in three were exposed to secondhand smoke in the last week.[3,4] The majority of women who quit smoking during pregnancy will relapse postpartum.

It is important to discuss with women who quit smoking during pregnancy that they should not relapse after giving birth.

Secondhand smoke can hurt children before and after birth. Smoking around children increases the risk of:

- SIDS (Sudden Infant Death Syndrome)
- Slower lung growth
- Asthma
- Bronchitis
- Pneumonia
- Respiratory infections
- Ear infections

Ohio Tobacco Quit Line

A **free** tobacco quit line counseling service for uninsured Ohioans, Medicaid recipients, pregnant women, and members of the Ohio Tobacco Collaborative.

To learn more, or to enroll in the program:

1-800-QUIT-NOW
1-800-784-8669
http://ohio.QuitLogix.org

[1] https://www.odh.ohio.gov/en/odhprograms/eh/quitnow/Tobacco Resources/Statistics
[2] 2015 Ohio Medicaid Assessment Survey data
[3] Centers for Disease Control and Prevention, Behavior Risk Factor Surveillance System, Year 2012.
[4] Ohio Youth Tobacco Survey, 2012.

Use the 5 A's!

The 5 A's is an evidence-based smoking cessation program designed to help you hold that conversation with patients encouraging them to quit.

- **Ask** your patient about her smoking status at the first visit and follow up with her at subsequent visits.
- **Advise** your patient who smokes to stop by providing advice to quit. Provide her with information about the risks of continued smoking to her family and herself.
- **Assess** your patient's willingness to attempt to quit smoking at each visit. Quitting advice, assessment, and motivational assistance should be offered at subsequent care visits.
- **Assist** your patient who is interested in quitting by providing specific, self-help smoking cessation materials. Offer direct referral to the Quit Line to provide ongoing counseling and support.
- **Arrange** follow-up visits to track the progress of your patient's attempt to quit smoking. For current and former smokers, smoking status should be monitored and recorded, providing opportunities to congratulate and support success, reinforce steps taken toward quitting, and advise those still considering a cessation attempt.

"Smoking Cessation for Pregnancy and Beyond: A Virtual Clinic" is a training program intended for healthcare professionals to assist female patients in quitting smoking, in particular, patients who are pregnant or in their child-bearing years. Continuing Medical Education Credits are offered with the training. **https://www.smokingcessationandpregnancy.org**

The Smoke Free Families Learning Collaborative provides resources designed to support healthcare professionals in implementing or improving tobacco cessation services within their organization. Provider and consumer resources can be found at: **http://ohiosmokefreefamilies.org/**

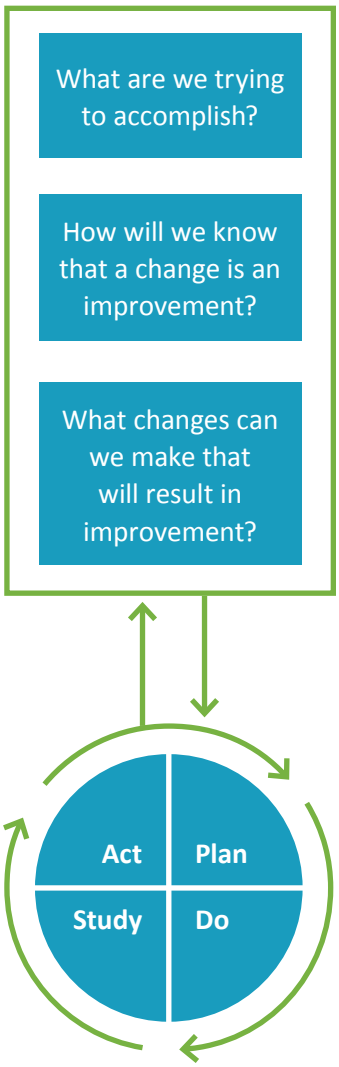
The American Academy of Family Physicians' "Ask and Act" tobacco cessation program encourages family physicians to ASK all patients about tobacco use, and then to ACT to help them quit. More details on this tobacco cessation program can be found at **http://www.aafp.org/patient-care/public-health/tobacco-nicotine/ask-act.html**

Overview

The Model for Improvement is a powerful tool for accelerating improvement. The model is not meant to replace change models that organizations may already be using, but rather to accelerate improvement.

The model has two parts:

- Three fundamental questions.
- The Plan-Do-Study-Act (PDSA) cycle to test changes in real work settings. The PDSA cycle guides the test of a change to determine if the change is an improvement.



Step #1: Form a Project Team

Having the right people on a quality improvement team is essential. Teams can vary in size and composition based on the organization and the complexity of the improvement effort. An effective team includes a Project Champion, someone in a leadership position who can get buy-in from staff members required for change to occur. The Project Champion may represent the following:

- Clinical Leadership
- Technical Expertise
- Day-to-Day Leadership

Tips:

- Having a Project Champion is crucial.
- The interdisciplinary team may consist of the following:
  - Physician Leader
  - Nurse Manager
  - Nurse Practitioner
  - Office Manager
  - Office Staff
  - Diabetes Educator
  - Dietitian
  - Pharmacist

Step #2: Set Aims

"What are we trying to accomplish?"

SMART Aims for the Type 2 Diabetes Learning Collaborative to accomplish by May 2019 are:

1. Increase the rate of assessments done for women with a history of GDM in participating practices by 20%.
2. Increase the rate of postpartum T2DM screenings among women with a history of GDM in participating practices by 10%.

Step #3: Establish Measures

"How will we know that a change is an improvement?"

Measures for the Ohio Type 2 Diabetes Learning Collaborative are:

1. Percent of women assessed for history of GDM in prior pregnancy.
2. Percent of women diagnosed with GDM in prior pregnancy.
3. Percent of women of childbearing age at high-risk for T2DM that received a T2DM screen.
4. Percentage of women with a history of GDM that:
   - -Received a referral for a T2DM screen.
   - -Received a referral for a T2DM screen AND completed the screen.
   - -Did not fulfill their referral for T2DM screen and were rescheduled for screening by PCP office.
5. Percent of women with a history of GDM who had evidence of education or a referral to at least one of the following areas:
   - a) Dietitian
   - b) Diabetes Prevention Program
6. Percentage of women with a history of GDM who had evidence of education on:
   - -The risk of developing T2DM
   - -Recommended re-screening frequency for T2DM every 1-3 years

Step #4: Select Changes

"What changes can we make that will result in improvement?"

Changes are necessary to make improvements. Rather than completely reconfiguring your current process, develop, test, and implement changes on a small scale. What are the low-hanging fruits? Your team can also use previously gathered observations to identify potential changes.

Examples:

- Put stickers on the charts identifying patients with GDM.
- Educate staff of the importance of this health issue.
- Allow nurses to order diabetes screening tests for at risk patients.
- Develop and send a letter to all women with GDM that explains the risks of developing T2DM.
- Set reminder call procedures to call patients who did not attend scheduled visits.

Step #5: Test Changes

Start the selected changes! The changes may or may not work, but you must start in order to figure out if an improvement can be made.

Follow the Plan-Do-Study-Act (PDSA) cycle:
Plan: Develop a plan to test the change (Who? What? When? Where? What data need to be collected?)
Do: Implement the test on a small scale.
Study: Use data to analyze the results of the change and determine if it made a difference.
Act: Based on your analysis, refine the change. Determine what modification should be made and plan for the next test.

Step #6: Implement Changes

After several PDSA cycles, your changes can be implemented on a broader scale. Implementation is a permanent change to the current process. It may affect documentation, written policies, hiring, training, compensation, and organizational infrastructure. Implementation also requires following the PDSA cycle for continuous testing and monitoring.

Step #7: Spread Changes

After a successful implementation, your changes can be spread to other parts of your clinic or other clinics that are facing the same issues.

History Form: Questions to Identify History of GDM.

1. Have you been pregnant before?
   a. If **yes**, when was your most recent delivery? *(e.g. Birthdate of youngest child)*_____

   b. If **no**, stop.

2. Have you ever had gestational diabetes?
   a. If **yes**, when was your last blood sugar testing? _____

   b. If **no**, stop.*

3. Have you ever been told that you had diabetes?
   a.If **yes**, review standard diabetes management protocol

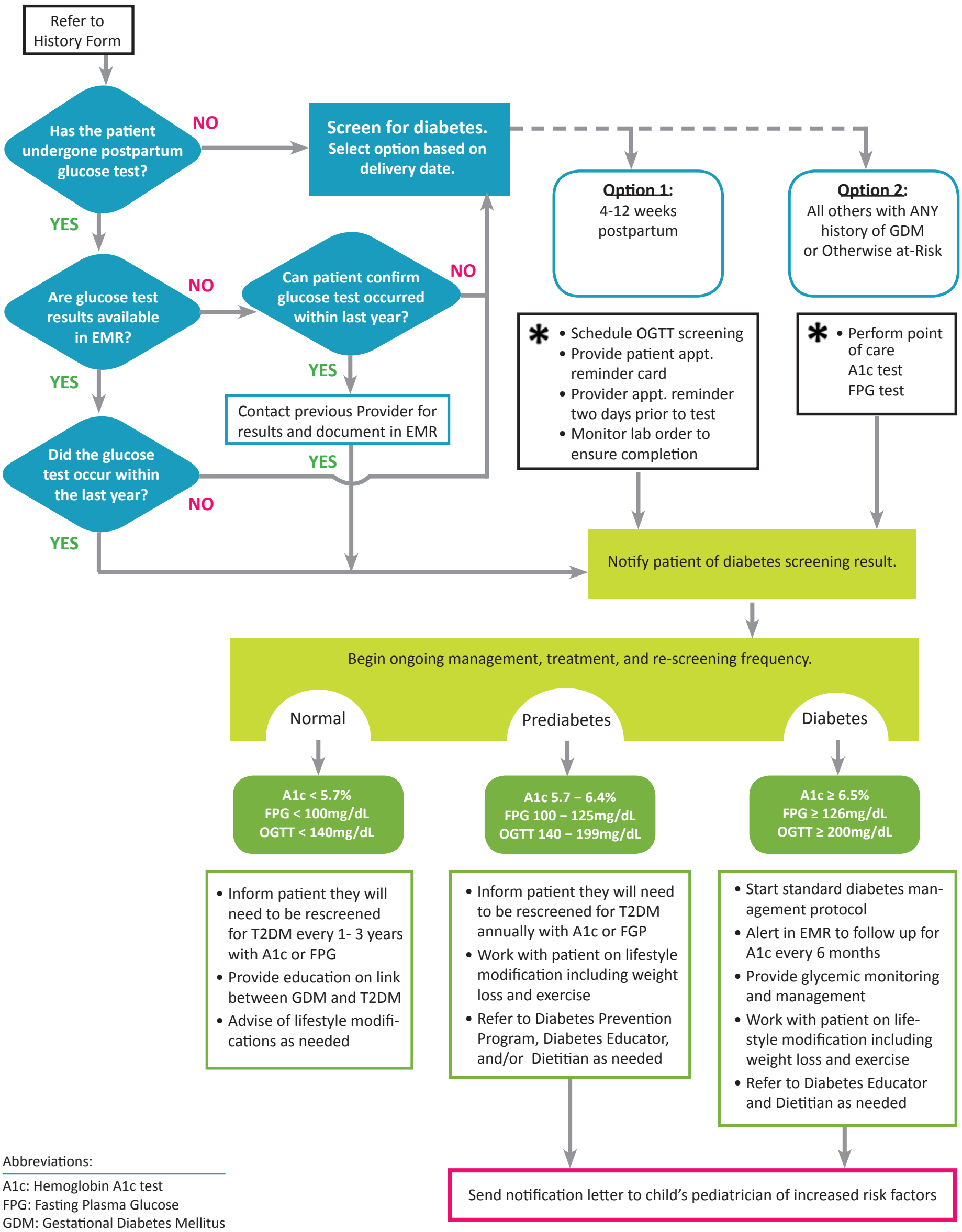
   b.If **no**, proceed to workflow.

   *If otherwise at-risk, please proceed directly to workflow.

Ohio Type 2 Diabetes Learning Collaborative

Check her risk. Protect her health.

Office Workflow



Abbreviations:

A1c: Hemoglobin A1c test
FPG: Fasting Plasma Glucose
GDM: Gestational Diabetes Mellitus
OGTT: Oral Glucose Tolerance Test
T2DM: Type 2 diabetes mellitus

* The **gold standard** is the 75-g OGTT; the standard for PCPs tends to be the A1C, even for women who are 4-12 weeks postpartum.

Ohio Department of Health

MedTAPP Medicaid Technical Assistance and Policy Program

Ohio Department of Medicaid

Ohio Colleges of Medicine Government Resource Center

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Blood Glucose Log

Week of: ________________________ Current Medication(s): ____

Make as many copies of this chart as you need to keep track of your blood glucose. Circle your blood glucose result each time you're above or below your target. Add comment about your diet, exercise, illness, or stress. If you are taking medication(s), write down the time you take them. Most providers will ask you to monitor your blood glucose before breakfast and after each meal.

*Some providers may ask you for optional monitoring before lunch, before dinner, and/or at bedtime.

Date	**Breakfast**		**Lunch**		**Dinner**		**Bedtime***	**Other**
	Before	**After**	**Before***	**After**	**Before***	**After**		
Time								
Blood Glucose Readings								
Comments/Medicine								
Date	**Breakfast**		**Lunch**		**Dinner**		**Bedtime***	**Other**
	Before	**After**	**Before***	**After**	**Before***	**After**		
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