If the calculated risk (see 2nd bullet below) is in the LOW risk group

**Diabetes Risk**

Your blood sugar (glucose) level is elevated, but not quite to the level of diabetes. You have a condition called “pre-diabetes.” You are at risk of developing diabetes, but the good news is, you can lower your risk. This is your chance to prevent developing diabetes.

**Your risk of developing diabetes in the next 3 years, if you don’t change anything, is 5%.**

This is about one chance out of 20.

**This places you in the LOW risk group.**

*But you should still pay close attention to a healthy diet, avoiding simple sugars, maintaining a healthy weight,[ quitting smoking,] and getting regular exercise.*

Data that go into estimating your risk:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body mass index (BMI) – 29 kg/sq m</td>
<td></td>
</tr>
<tr>
<td>Systolic blood pressure – 135 mmHg</td>
<td></td>
</tr>
<tr>
<td>HDL cholesterol – 56 mg/dL</td>
<td></td>
</tr>
<tr>
<td>Triglycerides – 220 mg/dL</td>
<td></td>
</tr>
<tr>
<td>Fasting plasma glucose – 112 mg/dL</td>
<td></td>
</tr>
<tr>
<td>Hemoglobin A1c – no data</td>
<td></td>
</tr>
</tbody>
</table>

Notes:

- This formatted text is placed in the Epic clipboard when the user clicks the PATIENT INSTRUCTIONS report button.
- The patient parameter values and risk estimates from the model should be those that were set when the clinician/user first clicked on the Patient View (or the current values when either report button is first clicked, if the Patient View hasn’t been displayed).
- The data are laid out as a table with just 2 columns, no visible borders, and cell margins set to zero.
- Let’s round the risk values from the model to the nearest whole percentage.
- “one chance out of n” is the reciprocal of the risk, rounded to the nearest whole number, but let’s cap that value at 100 (if there’s a MIN function in JavaScript, ROUND(MIN(1/Risk,100)),0), to keep it from getting too large when risk values are low.
- “quitting smoking,” would be included in the red text if and only if the patient’s Smoking status is Current smoker.
- For the red text, let’s use a relatively dark red, so it will print legibly on a black-and-white printer (which is what’s likely to be available for the after-visit summary printed in the clinic).
- For the slider in the app, we have the units for BMI as kg/m^2, but this could be too geeky for the patient report, so I’d suggest: kg/sq m.
If the calculated risk is in the INTERMEDIATE risk group:

**Diabetes Risk**

Your blood sugar (glucose) level is elevated, but not quite to the level of diabetes. You have a condition called “pre-diabetes.” You are at risk of developing diabetes, but the good news is, you can lower your risk. This is your chance to prevent developing diabetes.

**Your risk of developing diabetes in the next 3 years, if you don’t change anything, is 10%.
This is about one chance out of 10.**

This places you in the INTERMEDIATE risk group.

**How to Lower Your Risk**

You can lower your risk substantially by participating in an intensive lifestyle modification program, the Diabetes Prevention Program (DPP).

More information:
https://www.mercy.net/service/diabetes-prevention-program
https://www.cdc.gov/diabetes/prevention/what-is-dpp.htm
https://gwrymca.org/ymca-diabetes-prevention-program-contact-us

If you enroll in the Diabetes Prevention Program (DPP) and stick with it, your risk will drop to 6%.
This is about one chance out of 17.

This program requires a sustained commitment on your part, with weekly sessions for the first 16 weeks and goals for healthy eating, exercise, and weight loss over the first year. The DPP has been studied in rigorous clinical trials, the same kind used to study new medicines. We know the DPP is very effective, and you can participate virtually. The cost of the program is often covered by insurance.

Data that go into estimating your risk:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body mass index (BMI)</td>
<td>29 kg/sq m</td>
</tr>
<tr>
<td>Systolic blood pressure</td>
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<td>Triglycerides</td>
<td>220 mg/dL</td>
</tr>
<tr>
<td>Fasting plasma glucose</td>
<td>112 mg/dL</td>
</tr>
<tr>
<td>Hemoglobin A1c</td>
<td>no data</td>
</tr>
</tbody>
</table>

Note:
- For patients in the INTERMEDIATE risk group, the text highlighted in yellow replaces the italicized paragraph in red, in the report for the LOW risk group.
If the calculated risk is in the HIGH risk group:

**Diabetes Risk**

Your blood sugar (glucose) level is elevated, but not quite to the level of diabetes. You have a condition called “pre-diabetes.” You are at risk of developing diabetes, but the good news is, you can lower your risk. This is your chance to prevent developing diabetes.

**Your risk of developing diabetes in the next 3 years, if you don’t change anything, is 17%.**
This is about one chance out of 6.

**This places you in the HIGH risk group.**

**How to Lower Your Risk**

A) You can lower your risk substantially by participating in an intensive lifestyle modification program, the Diabetes Prevention Program (DPP).

More information:
https://www.mercy.net/service/diabetes-prevention-program
https://www.cdc.gov/diabetes/prevention/what-is-dpp.htm
https://gwrymca.org/ymca-diabetes-prevention-program-contact-us

**If you enroll in the Diabetes Prevention Program (DPP) and stick with it, your risk will drop to 7%.**
This is about one chance out of 14.

This program requires a sustained commitment on your part, with weekly sessions for the first 16 weeks and goals for healthy eating, exercise, and weight loss over the first year. The DPP has been studied in rigorous clinical trials, the same kind used to study new medicines. We know the DPP is very effective, and you can participate virtually. The cost of the program is often covered by insurance.

B) You can also lower your risk by taking metformin, a drug that’s used to treat diabetes. It can also reduce the risk of developing diabetes in people with pre-diabetes who are at high risk.

**If you take metformin, your risk will drop to 13%.**
This is about one chance out of 8.

Note how much more you can reduce your risk by following the DPP lifestyle modification program, compared to taking metformin.

Data that go into estimating your risk:

- **Age** – 57
- **Sex** – Female
- **Race** – Black
- **Smoking status** – Current smoker
- **Hypertension diagnosis** – Yes
- Body mass index (BMI) – 29 kg/sq m
- Systolic blood pressure – 135 mmHg
- HDL cholesterol – 56 mg/dL
- Triglycerides – 220 mg/dL
- Fasting plasma glucose – 112 mg/dL
- Hemoglobin A1c – no data
Note:

- For patients in the HIGH risk group, the first block of text highlighted in yellow becomes the first of two ways to reduce your risk, so it’s preceded by the indented “A).”
- We also add the second block of text highlighted in yellow, which is the second of the two ways to reduce your risk.