



OPERATION DIABETES

**American Pharmacists Association
Academy of Student Pharmacists**

Seeking to increase overall awareness of diabetes and the role pharmacists can play.

What is the purpose of Operation Diabetes?

- Increase diabetes awareness in our community
- Through free risk assessments, identify:
 - Individuals in the community with previously undetected diabetes
 - Those who are at risk for developing diabetes
 - Those who have diabetes and need reinforcement
- Provide opportunities for student pharmacists to apply their pharmaceutical care skills
- Foster mentoring relationships across the DPH classes and within the pharmacy community

What is Diabetes?

- Diabetes mellitus is a disease characterized by hyperglycemia (high blood sugar) resulting from defects in insulin secretion and/or insulin action.
 - *Diabetes is a disease in which the body does not produce or properly use insulin*
- Insulin is a hormone responsible for signaling tissue cells to take up glucose for metabolism, storage, and energy.
 - *Insulin helps convert sugar, starches and other food into energy our body needs.*
- The actual cause of diabetes is unknown; but genetics, obesity, and lack of exercise appear to play roles

What are the different types of diabetes?

- Type 1: 'insulin dependent' or 'juvenile diabetes', affecting ~5-10% of people with diabetes.
 - Autoimmune disorder, pancreatic β -cells don't produce insulin and results in insulin insufficiency.
 - Patients need an exogenous source of insulin to maintain normal functioning.
 - Type 1 diabetes patients almost always experience symptoms of hyperglycemia and seek medical attention.
 - We are not likely to see Type 1 patients at our screenings since they are diagnosed during childhood or adolescence.
 - We cannot screen individuals less than 18 years old.

What are the different types of diabetes? (cont.)

- Type 2: 'Insulin resistant' or 'adult onset'. Majority of Americans diagnosed with diabetes have type 2 diabetes.
 - Tissues don't respond to insulin and/or have relative deficiency of insulin production.
 - Individuals are often asymptomatic, as the disease develops over time.
 - Strongly linked to obesity or high sugar diet.
 - Most who develop Type 2 have had a state of high blood sugar, know as pre-diabetes.

What are the different types of diabetes? (cont.)

- Gestational Diabetes: occurs during pregnancy
 - A degree of glucose intolerance with onset of pregnancy
 - Most return to normoglycemic 6 weeks after pregnancy while others will develop Type 2 diabetes.
 - Those who had gestational diabetes have a 40% to 60% chance of developing diabetes in the following 5-10 years.
 - We also cannot screen pregnant women.

How do you know if you have diabetes?

- Fasting blood glucose test
 - 100-125 mg/dl signals pre-diabetes
 - 2 separate tests >125 mg/dl indicates diabetes
 - *Fasting* means at least 8 hours since they last ate or drank anything besides water.
- Signs and symptoms
 - Polyphagia (increased hunger)
 - Polydypsia (increased thirst)
 - Polyuria (increased urination)
 - Unusual weight loss
 - Blurry vision
 - Increased fatigue
 - Irritability

The Need for Diabetes Education and Screening

- Chronic health condition:
 - Affects 23.6 million individual, or 7.8% of the U.S. population
 - 5.7 million of those individuals are undiagnosed and not receiving treatment
 - 7th leading cause of death in the U.S.
- Diabetes affects every organ system
 - Brain, eyes, heart, kidneys, feet, and nervous system

What do I bring to a screening?

- Clean white lab coat and wear professional dress
- School name badge
- Training materials for reference
- COPs Hours verification form

When should I get there?

- Please arrive 10-15 minutes early before your scheduled time so you can locate the screening site and become oriented.
- If you're in the first group of the day, please come earlier to help set up.
- If you're in the last group of the day, plan on staying a little later to help clean up.

What will I be doing at the screening?

- Greeting patients
- Distributing and collecting consent forms
- Interviewing patients
 - Discussing signs and symptoms of diabetes
 - Testing blood glucose levels
 - Documenting the patients you screen
- Distributing educational material

Before you start, set up your station:

- | | |
|---------------------------|--------------------|
| ■ Forms: | ■ Supplies: |
| ■ Consent Form | ■ Gloves |
| ■ Diabetes Screening Form | ■ Kleenex/Gauze |
| ■ Risk Assessment Sheet | ■ Alcohol swabs |
| ■ Screening Result Sheet | ■ Lancets |
| | ■ Sharps container |
| | ■ Strips |
| | ■ Calibrated meter |
| | ■ Band-aids |

How do I introduce myself?

- "Hi, my name is _____ and I'm a student pharmacist from the UW-School of Pharmacy. We're conducting a diabetes screening today. Do you have about 15 minutes to assess your risk for diabetes?"

Do I need consent to get a little drop of blood?

- YES! We need to have consent before we take a blood sample, even if it is just a little drop of blood.
- Again Note: We cannot take a blood sample if the patient is pregnant or under the age of 18 (even if their parent gives consent).
- Make sure the consent form is signed and dated by the patient.

How do I assess risk for diabetes?

- Follow the diabetes screening form to conduct the patient interview. This is in a SOAP note format.
- Start with the basics: Name, DOB, history of diabetes (previous diagnosis?), current medications.
 - Probe for any information about meds.
- Assess risk factors and mark (+) if they have them and (-) if they don't. Add comments if possible.
- Discuss signs and symptoms of diabetes, adding comments if they say yes.
- Find out what they've eaten in the last 8 hours and document the food/beverage and amount. Note how much time has lapsed since they ate.

How do I assess risk for diabetes? (cont.)

- Obtain a blood sample
- Assess their risk score and their blood glucose reading. Remember, this is **NOT** a diagnosis.
- Fill out the Screening Results form so the patient can present his/her primary care provider with the results we obtained.
- Make sure all paperwork is complete before the patient leaves!

How do I obtain a blood sample?

- Pull out your meters, strips and lancets.
- Document the meter and test strips you will use.
- Put on gloves.
- Place strip in meter. Once the strip is in place, there should be a drop of blood flashing on the screen. This means that the meter should be ready to use.
- Wipe patient's finger with an alcohol swab and *allow to dry*.
- Rest patient's hand on knee or table below heart level (gravity works).
- Press lancet firmly on side of fingertip until area is white, then lance.
- Wipe away first drop of blood with gauze. (optional)
- Gently apply pressure to base of finger (Do not milk).

How do I obtain a blood sample? (cont.)

- Fill the strip with a small drop of blood. The meter will automatically analyze the blood glucose level.
- Give the patient gauze/tissue to hold on their finger.
- Apply a band-aid if necessary.
- Obtain reading from the meter and record.
 - FPG <70 mg/dl (Hypoglycemic)
 - FPG 70-110 mg/dl (Normoglycemic)
 - FPG >110 mg/dl (Hyperglycemic)
 - Peak postprandial (1-2 hours after meal) : <140mg/dl
- Goals for patients with diabetes
 - Fasting Plasma Glucose (FPG): 80-130 mg/dl
 - Peak postprandial glucose (PPG): <180 mg/dl
- If blood glucose level is >250 mg/dl, call a pharmacist over to discuss the reading.

What do I tell the patient?

- Do Discuss:
 - The results with the patient and whether it is considered high or low.
 - The relationship between what you've eaten and medications that you're taking (these impact your blood glucose reading).
 - Lifestyle modifications such as diet and exercise.
- Do NOT discuss:
 - A diagnosis of diabetes.
 - **Remember**, this is just a risk assessment, not a diagnosis! If their numbers are high, we will refer them to their primary care provider for further assessment.

What do I do with all the papers?

- Forms you keep:
 - Consent form
 - Diabetes screening form
- Forms you give to the patient:
 - Risk Assessment form
 - Screening results form
 - Informational materials

Knowledge Assessment and Passport Stamp

- Please turn in your knowledge assessment.
- We will stamp your passport.
- However, you will still need to have hands-on training using the glucometers (sign up for break-out sessions during the first week of school). This is required training and will be verified via attendance sheets.

Any questions? Contact Adam (ajmaguire@wisc.edu) or Cole (comccoy@wisc.edu)

Glucometer training

- Wed Sept. 2nd 2:30-4; Rm 2336 (Full)
- Thu Sept. 3rd 2:30-4 Rm 2336
- Fri Sept. 4th 2:30-4 Rm 2336
- Tue Sept. 8th 1 to 2:30 Rm 2336
- Wed. Sept. 9th 2:30-4 Rm 2336
- Fri Sept. 11th 2:30-4 Rm 2336