UW Medicine UNIVERSITY OF WASHINGTON MEDICAL CENTER

Using Your Insulin Pump or Continuous Glucose Monitor

During your hospital stay

This handout tells what to expect if you use your insulin pump or continuous glucose monitor during your hospital stay. It describes your role as a partner with your healthcare team to make sure you receive the best care possible. It also tells why you may have to receive your insulin through a vein or by injection.

Questions You May Have

If you use an insulin pump or a continuous glucose monitor (CGM) to manage your diabetes, you may have concerns about how your diabetes will be managed during a hospital stay. You may have questions such as:

- Will I be able to use my insulin pump or CGM in the hospital?
- Will someone help me if I have a problem with my insulin pump or CGM?
- Are there times I would not be able to use my insulin pump or CGM?

About Insulin Pumps

You may already know how your insulin pump works. It provides a steady (basal) dose of insulin. Your diabetes provider has decided what your basal dose should be.



Ask your nurse if you have any questions about using your insulin pump or CGM while you are in the hospital.

You may also give yourself a *bolus* dose of insulin when you eat a meal or snack. A bolus dose of insulin is given to cover food intake.

About Continuous Glucose Monitors (CGM)

A CGM works through a tiny sensor inserted under your skin, most times on your belly or arm. The sensor measures your *interstitial* glucose level. This is the glucose found in the fluid between the cells that make up your body tissue.

A wireless transmitter sends the information to a monitor. The monitor may be part of an insulin pump or another device.

Please note that the Food and Drug Administration (FDA) does not approve CGMs for use in the hospital. This is because hospital patients may be low in oxygen, have swelling or constricted blood vessels, or be taking new medicines. These conditions can affect how well the CGM reads blood glucose.

You and your healthcare team may decide that you should wear the CGM in the hospital to monitor trends in your blood sugar. **But, hospital staff will also use a hospital-approved blood glucose meter to test your blood sugar.** We will do this before each insulin dose.

Your Hospital Stay

When you come to the hospital, you may be very ill. This could change how much insulin you need to keep your blood glucose in the normal range.

Your activity level, eating times, and food choices are also different in the hospital. This may affect how much insulin you need to give yourself. Work closely with your care team to decide if using your insulin pump or CGM during your hospital stay is the best choice for you.

For example, if you have an infection, your normal doses of insulin may not be enough to control your blood glucose. Your provider may decide to manage your diabetes with an *intravenous* (IV) infusion of insulin or with injections instead of using your insulin pump or CGM.

Hospital staff will use a hospital-approved glucose meter to check your blood glucose level. We will do this before each meal, at bedtime, and if you show any signs of *hypoglycemia* (low blood sugar).

Other Options May Be Needed

Your healthcare team may decide to manage your insulin with an IV infusion or injections. This may be done if:

- Your insulin pump does not control your blood sugar levels well enough.
- You are too sleepy or confused to manage your insulin pump.
- You need a test, such as a *magnetic resonance imaging* (MRI) scan, where you cannot use your insulin pump or CGM.

Your care team will work with you to decide when you can safely start using your insulin pump or CGM again.

What You Need to Do

You may know more about your insulin pump or CGM than many of the hospital staff. If you can use your pump or CGM during your hospital stay, here's what you need to do:

- Maintain your pump or CGM:
 - Bring all the supplies you need to use your pump or CGM. This includes infusion sets, if you use them. We do not have these supplies.
 - Bring enough insulin for the first day. When you are admitted, talk with your care team about a plan for getting insulin refills.
- Tell your nurse if you see any changes (such as redness) at the infusion site.
- If you have a pump:
 - Change the infusion set every 3 days, or more often if needed.
 - Refill the pump reservoir with insulin when needed.
 - Tell your nurse when your insulin is running low. If you are running low, you will need to review your plan for refilling your insulin.
 - You are responsible for using your pump to give yourself any bolus and correction doses. This will be based on what you eat and what your blood glucose levels are.
 - Record both your basal and bolus insulin doses on a daily log sheet.
 Your nurse will give you a log sheet form to use.

If You Have Questions

The hospital has diabetes providers or specialists who can talk with you about using your insulin pump or CMG. If you have questions about the pump or diabetes in general, please ask your nurse to call one of our diabetes staff.

Questions?
Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.