

## Diabetic Education: Guidelines for 6E Nurses

(Only while Mary Beth is out)

### When do RNs conduct DM Education?

- Teaching is required when a patient will be discharged with:
  - New onset Diabetes
  - New order for Insulin
  - “Diabetes Education Consult” or “Patient Education – Give Diabetes Handout & Education” is ordered by provider.
- Start education as soon as possible, even if patient won’t be discharged right away! Ask providers if patient will need to be on insulin at home or required DM education prior to discharge.

### Supplies you will need for teaching:

- “Insulin Pen Teaching Kit” – blue kit w/ insulin pen, vial and syringes
- “4mm pen needle” education leaflet by BD –
  - Both are located in cabinets across from tele monitors on top, right-hand side.
- 6E’s BG Travel Kit, including: Glucometer, BG strips, finger stick needles, alcohol wipes and gauze.
- Copies of Educational papers to give the patient
- Give the patient the booklet “**Balancing your Act.**” #6229

### Helpful Materials to Aid in Education:

- Add Patient Education for Diabetes to discharge paperwork.
  - Under “Patient Education” tab within Cerner:
    - “Step-by-Step: Checking Your Blood Sugar”
    - “Step-by-Step: Giving Yourself an Insulin Shot”
    - “Step-by-Step: Treating Hypoglycemia/Hyperglycemia”
    - “Types of Insulin”
    - “Using Injected Insulin”
- Turn on channel 19 and have the patient watch “**What is diabetes**” that runs at 0700 and 1300, “**Food choices**” 07:30 and 13:30, or “**Taking Insulin**” 09:15 or 15:15.

For any questions or concerns, contact Office of Outpatient Diabetes Education: **phone: 404-778-4991**

## Steps/Guide for Educating

- 1. Check-in with patient:** Ask patient how they feel about this life change, encourage them that they can do it, and express the importance of this new adjustment.
- 2. When to check Blood Sugar:**
  - a. Give patient printed "**Blood Glucose Log**" – instruct based on patient's *specific orders*.
  - b. Check blood sugar on an empty stomach, at least 10-15 minutes before each meal (breakfast, lunch & dinner).
- 3. How to check blood sugar using glucometer:**
  - a. Wash hands w/ soap & water or sanitizer
  - b. Show patient how to "milk" finger
  - c. Use your own ID to log into 6E glucometer & scan patient's ID band
  - d. Have patient practice using alcohol wipe, pricking own finger, & applying sample to glucometer strip.
  - e. Inform patient that their prescribed glucometer may be slightly different. Instruct them to look up their device on the internet and watch videos on how to use the device.
- 4. Give instructions related to patient's specific prescribed insulin (Humalog, Lispro, NPH, Regular, etc.)**
  - a. GO TO: "**Types of Insulin**" sheet for reference
- 5. Educate on Sliding Scale based off of patient's ordered prescription.**
- 6. How to use an Insulin Pen (if prescribed):** Using guide & teaching pens located in blue kit.  
**\*\*Teaching pens do not actually inject into humans\*\*** however, the patient can inject into a towel
  - a. **Get pen ready** – using a new needle every time, tear off paper tab from new disposable needle, wipe tip of insulin pen with alcohol wipe, and screw needle onto pen.
  - b. **Prime the pen** – tune pen dial to "2", hold pen with needle facing up, push button in, & look for drop of insulin at tip. If NO drop, repeat this step.
  - c. **Dial the dose** – turn pen dial to necessary dose based off sliding scale order.
  - d. **Choose the site** – picture of appropriate injection sites are on the "4mm pen needle" flyer; pinch skin if needed
  - e. **Inject** – push needle into skin, press dose button in, & hold for **10 seconds**.
  - f. **After injecting** – remove needle from skin, place large cap on need, & turn counterclockwise to remove needle from pen.
  - g. **Discard the used needle** - Dispose of needle into a thick plastic container with a lid (laundry detergent bottles work well), or obtain a needle/sharps disposal bin from pharmacy.
- 7. How to use Insulin vial and syringes (if prescribed):**
  - a. GO TO: "**How to Inject Insulin**" sheet in Education folder.
- 8. Signs, Symptoms, and What to Do:**
  - a. "**Hypoglycemia**" & "**Hyperglycemia**" – GO TO: flyers in Blue Diabetes Education folder
    - i. "Hyperglycemia is a chronic problem, *hypoglycemia* can be an emergency."
- 9. Hemoglobin A1C (HbA1C):** a measurement in your blood that shows your average blood glucose level over the last 3 months.
  - a. For people without Diabetes, normal range for HbA1C = 4-5.6%
  - b. For people with Pre-Diabetes, normal range for HbA1C = 5.7-6.4%
    - i. Means you have an increased risk of getting diabetes
  - c. For people with Diabetes, normal range for HbA1C = >6.5%
  - d. **Your HBA1C level is:**



## Types of Insulin

Insulin is a type of hormone. It helps the body use blood sugar (glucose) for fuel. With diabetes, your body may not make enough insulin. You may need insulin injections to help manage this condition. In addition, your cells may have trouble using insulin if you have type 2 diabetes. There are many types of insulin that can be prescribed for your treatment. Your healthcare provider will work with you to find the types that are best for you. Most insulin is made in a lab. It's called human insulin because it's just like the insulin that's made in the body. Some types of insulin work fast. Other types work slowly and last longer.

According to the American Diabetes Association, the different types of insulin work in the following ways:

### 1. Rapid-acting insulin:

- Begins working about 10 to 20 minutes after taken.
- Peaks about 30 to 90 minutes after taken.
- Continues working for 3 to 5 hours.

Name of insulin: \_\_\_\_\_

### 2. Short-acting or regular insulin:

- Begins working about 30 to 60 minutes after taken.
- Peaks within 2 to 4 hours after taken.
- Continues working for 5 to 8 hours.

Name of insulin: \_\_\_\_\_

### 3. Intermediate-acting insulin:

- Begins working about 1 to 3 hours after taken.
- Peaks within 8 hours after taken.
- Continues working for 12 to 16 hours.

Name of insulin: \_\_\_\_\_

### 4. Long-acting insulin:

- Begins working about 1 hour after taken.
- No peak.
- Continuous even action for about 20 to 26 hours

Name of insulin: \_\_\_\_\_

### 5. Premixed combinations of intermediate-acting and short-acting insulin:

- Begins working about 30 to 60 minutes after taken.
- Strongest action is variable.

- Continues working for 10 to 16 hours.

Name of insulin: \_\_\_\_\_

6. Premixed combinations of intermediate-acting and rapid-acting insulin:

- Begins working about 5 to 15 minutes after taken.
- Strongest action is variable.
- Continues working for 10 to 16 hours.

Name of insulin: \_\_\_\_\_

7. Inhaled insulin:

- Begins working about 12 to 15 minutes after taken.
- Strongest action is about 30 minutes after being inhaled.
- Continues working for 180 minutes.

Name of insulin: \_\_\_\_\_

# How to Inject Insulin

**Step 1:** Wash hands thoroughly before injecting insulin.

**Step 2:** Read the label on the insulin bottle carefully to make sure you are using the right bottle of insulin.

**Step 3:** Look at the liquid in the bottle carefully to see if it is:

- Clear if it is a rapid-acting, short-acting, or long-acting insulin (such as insulin glargine);
- Uniformly cloudy, without clumps, if it is any other type of insulin (such as NPH).



**Step 4:** If you are using insulin that is supposed to be cloudy, gently roll the bottle between your hands to make sure that it is well mixed. Do not shake the bottle.



**Step 5:** Use an alcohol swab to clean the top of the insulin bottle.



**Step 6:** Take the protective cap off the needle. Once the protective cap is removed, do not let the needle touch any other surface. (This is to make sure the needle stays clean.)

**Step 7:** Fill the syringe with the same amount of air as your insulin dose. Do this by pulling the plunger back until it reaches the appropriate mark on the syringe.



**Step 8:** Push the needle straight down through the rubber top of the insulin bottle and press down on the plunger to inject the air into the bottle.



## How to Inject Insulin (continued)

**Step 9:** With the needle inside the insulin bottle, hold the insulin bottle higher than the needle, making sure that the insulin covers the needle.



**Step 10:** Hold the syringe at eye level so you can see the markings on the barrel clearly. Then pull back on the plunger until the insulin in the syringe reaches the correct dose.



**Step 11:** Check to see if there are any air bubbles in the syringe. If there are, tap against the barrel of the syringe to move the air bubbles toward the needle. Then gently press on the plunger to inject the air back into the insulin bottle. Check the dose in the syringe to see if you need to pull back on the plunger again to draw more insulin into the syringe.



**Step 12:** Swab an area of skin on your stomach (below your navel), upper arm, upper buttock, or thigh, as directed by your doctor, nurse, or diabetes educator.



**Step 13:** Pinch a small fold of skin in the cleaned area. Hold the syringe toward the end with the plunger, and insert the needle at a 90-degree angle into the center of this area.



**Step 14:** Inject the insulin by pressing on the plunger. Leave the needle in place for 5 seconds after the plunger is completely depressed to make sure that all the insulin has been injected.

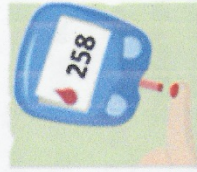
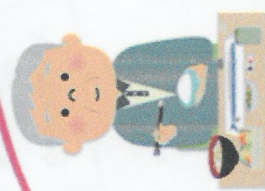


**Step 15:** Only use each syringe and needle *once*. Dispose of used syringes and needles according to the regulations where you live (call your town government office to ask).

# HYPERGLYCEMIA (HIGH BLOOD SUGAR)



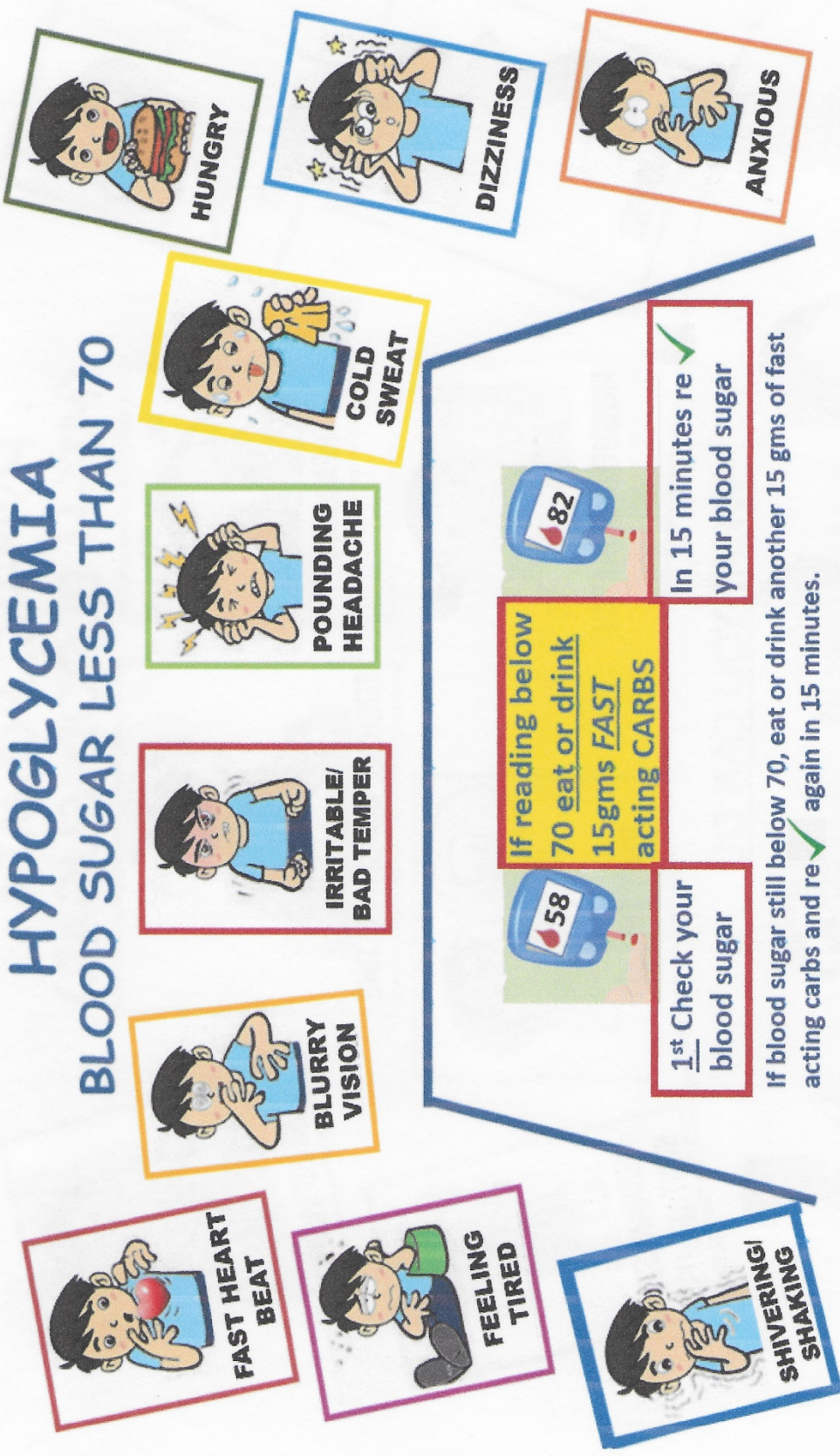
## WHAT YOU CAN DO





# HYPOGLYCEMIA

## BLOOD SUGAR LESS THAN 70



- Examples of 15gms Fast acting carbs. Choose only one!**
- 3-4 Glucose tablets
  - 1/2 cup or 4 oz any juice
  - 1 tablespoon of sugar, syrup or honey
  - 1 cup milk
  - 1/2 can or 6 oz any soda
  - 6-8 Lifesaver candies

Within the next 30 minutes to 1 hour after bringing your blood sugar up make sure to eat a carb/protein snack, examples:

- 1/2 peanut butter sandwich
- 1/2 Banana with tablespoon peanut butter
- Protein bar with 15-20 grams carbs
- apple with string cheese
- 1/4 meat sandwich (Turkey/Ham/Chicken)