Continuous glucose monitoring (CGM) can help you better manage your diabetes by providing a more detailed picture of your glucose levels, trends and patterns. The information your CGM collects is shown visually in an ambulatory glucose profile (AGP)—See example below. The AGP combines glucose readings throughout each day you wear your CGM into a single 24-hour glucose profile. Whether you download the information from your CGM or view at your next clinic visit, use this guide to understand your glucose patterns and improve glucose management.

**Step 1: Collect enough glucose readings by wearing your CGM at least 10 to 14 days.**
The example AGP below shows 13 days* of glucose readings. Note your glucose daily average (example below shows 173 mg/dL).

**Step 2: Look at your time in ranges (see example below, right).**
The goal is to gradually increase the time in target range while decreasing time below target (with low glucose). Generally you need to be in target range 70 percent (%) or more of the time to have an A1C less than 7 percent. The goal is to be below target (lower than 70 mg/dL) less than 3 percent of the time. How do your time in ranges compare?

**Step 3: Note when you eat, take diabetes meds and are active.**
Food, activity, meds (medication) and other factors can affect your glucose level. Write these factors on your AGP. See example below for noting daily diabetes meds (name, dose and timing); usual times for waking and bedtime, for morning (B), midday (L) and evening (D) meals and snacks (S)—especially in the evening—and for physical activity.
Step 4: Review your AGP, looking for where your glucose patterns are lowest.

If any glucose readings drop very low (below 54 mg/dL), make changes right away. If glucose readings are often between 69 and 54 mg/dL, make changes soon. Look at separate daily glucose views from your CGM information (see examples, right) to confirm patterns of low glucose. To treat low glucose, see the “Tips for Changing Your Care Plan” (far right).

Step 5: Review your AGP, looking for where your glucose patterns are highest.

Consider reasons for very high glucose (above 250 mg/dL). How often do you miss taking your meds? Are your highs before or after meals? Look at separate daily views (see examples, right) to confirm patterns of high glucose.

Step 6: Look for times of more variability on your AGP.

More variability on your AGP means your glucose level differs a lot day to day at that particular time. Look at the width of the dark shaded area (see example on other side for areas of more and less variability). The goal is less variability. Variability may be due to missed meds or meals, stress or activity. What’s causing variability in your AGP?

Step 7: If previous CGM information and AGP are available, compare current and past glucose patterns.

Are you spending more time in target range without low glucose? Does your current AGP have less variability (fewer wide areas)? What strategies did you use that were helpful in making changes?

Step 8: Decide on an action plan with your care team.

Identify a few steps you will take to help improve your glucose patterns. Keep in mind lifestyle changes, including food, and timing or amount of physical activity. Also consider timing and dose of your diabetes meds or the need to add diabetes meds.

Make sure you understand when to call your diabetes care team if concerns arise and when to schedule your next appointment.

Tips for Changing Your Care Plan

- Choose 1 to 2 lifestyle goals. Consider diabetes education.
- For patterns of low glucose, your clinician may adjust your meds or med doses. Also make sure you eat or drink enough carbohydrate for your activity level. Remember drinking alcohol can lower glucose, too.
- For patterns of high glucose levels, check if you missed medication, when you took insulin, illness and if you ate too much food with carbohydrate.
- See AGPreport.org to learn more about reading a glucose profile.

Daily Glucose Views
27 February 2018 – 11 March 2018
(7 days shown below from the 13 days)

Look for differences between weekdays and weekends, as well as times when you may have missed your diabetes meds and times when you were physically active.

Adapted from Carlson AL, Mullen DB, Bergenstal RM. Clinical Use of Continuous Glucose Monitoring in Adults with Type 2 Diabetes. *Diabetes Technology & Therapeutics* 2017;19(Suppl 2):S4–S11.