



This **PANTHER Program**® tool for **Dexcom CGM** was created with the support of danatech.

PANTHERTOOL® for DEXCOM Continuous Glucose Monitor

INSTRUCTIONS FOR USE

- 1 In the Clarity account set the "Patient Glucose Ranges" to: Target Range: 70-180 mg/dL, very low: 54 mg/dL, very high: 250 mg/dL
- 2 Create reports → 2 weeks → Select: a. AGP Report; b. Daily Report
- **3** Follow this worksheet for step-by-step guidance on clinical assessment, user education and insulin dose adjustments.



STEP 1 BIG PICTURE (PATTERNS)

→ STEP 2 **SMALL PICTURE** (REASONS)

→ STEP 3 PLAN (SOLUTIONS)

STEP 1 BIG PICTURE (PATTERNS)

Use captūrAGP® report to assess CGM use, glycemic metrics, and identify glucose patterns.

A

Is the person using the CGM consistently?

% Time CGM Active:

If <90%, discuss why:

- Problems accessing supplies/sensors not lasting 10 days?
 Contact Dexcom for replacement sensors
- Skin problems or difficulty keeping sensor on?
 - →Rotate sensor insertion sites (arms, hips, buttocks, abdomen)
 - →Use barrier products, tackifiers, overtapes and/or adhesive remover to protect skin



SCAN TO VIEW: pantherprogram.org/ skin-solutions

B Is the user meeting Glycemic Targets?

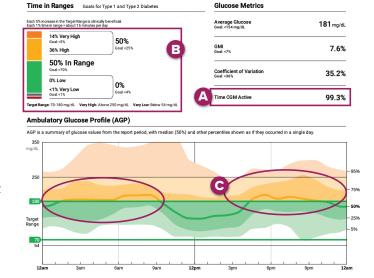
Time in Range (TIR) ______ Goal is >70%
70-180 mg/dL (3.9-10.0 mmol/L) "In Range"

Time Below Range (TBR) _____ Goal is <4%
<70 mg/dL (<3.9 mmol/L) "Low" + "Very Low"

Time Above Range (TAR) _____ Goal is <25%
>180 mg/dL (>10.0 mmol/L) "High" + "Very High"

PANTHER**POINTERS®** FOR CLINICIANS

- The goal of this therapy review is to increase Time in Range (70-180 mg/dL; 3.9-10.0 mmol/L) while minimizing Time Below Range (<70 mg/dL; <3.9 mmol/L)
- Is the Time Below Range more than 4%?
 If YES, focus on fixing patterns of hypoglycemia
 If NO, focus on fixing patterns of hyperglycemia



What are their patterns of hyperglycemia and/or hypoglycemia?

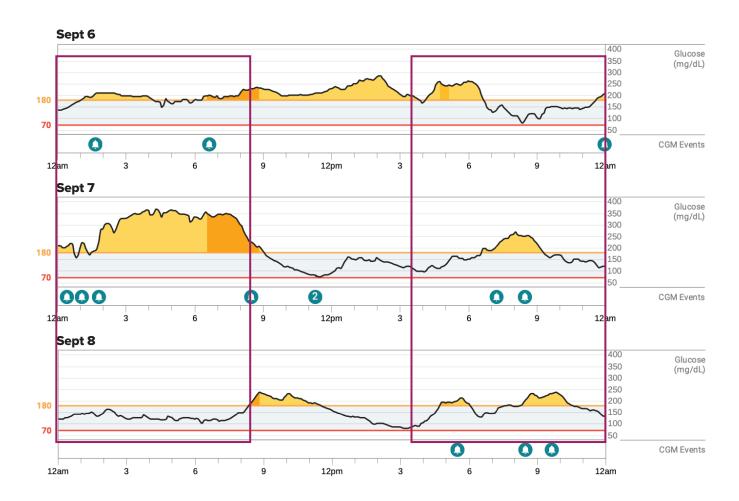
Ambulatory Glucose Profile compiles all data from reporting period into one day; shows median glucose with the solid line, and variability around the median with the shaded ribbons. Green shading indicates glucose values in range; orange = above range; red = below range. Wider ribbon = more glycemic variability.

Identify the glycemic patterns by focusing on the dark shaded ribbon around the median line.

Hyperglycemia patterns: (eg: high glycemia at bedtime)
Hypoglycemia patterns:

STEP 2 **SMALL PICTURE** (REASONS)

Use the **Daily Report** and discussion with the user to identify causes of the glycemic patterns identified in STEP 1 (hypoglycemia or hyperglycemia).



Identify the predominant 1-2 causes of the hypo- or hyperglycemia pattern.

Is the hypoglycemia pattern occurring:	Is the hyperglycemia pattern occurring:	
Fasting/Overnight?	Fasting/Overnight?	
Around mealtime? (1-3 hours after a meal or snack)	Around mealtime? (1-3 hours after a meal or snack)	
Where low glucose levels follow high glucose levels?	Where high glucose levels follow low glucose levels?	
Around or after exercise?	After a correction bolus was given? (2-3 hours after correction insulin and glucose remains high)	

ADJUST insulin doses and EDUCATE

Hypoglycemia		Hyperglycemia
SOLUTION	PATTERN	SOLUTION
Decrease basal insulin dose by 10-20%	Fasting / Overnight	Increase basal insulin dose by 10-20%
Reduce meal dose/weaken I:C Ratios by 10-20% (e.g. if ratio is 1:10g, change to 1:12g)	Around mealtime (1-3 hours after a meal/snack)	Ask if the meal dose was missed. If yes, educate on giving all meal doses prior to eating. Increase meal dose/strengthen I:C Ratio by 10-20% (e.g. if ratio is 1:10g, change to 1:8g)
If hypoglycemia is occuring 2-3 hours after correction insulin is given: Reduce correction dose/weaken correction factor by 10-20% (e.g. if correction factor is 1:50 mg/dL, change to 1:60 mg/dL)	Low glucose follows high glucose High glucose follows low glucose	Ask how user is treating low glucose and educate: • Treat with 10-15g of carbs if on injections/manual pump therapy; treat with 5-10g if using Automated Insulin Delivery (AID)
Discuss current exercise strategies, educate on: • Small snacks as needed before and during exercise without an insulin dose if on injections or manual mode pump • Use temp basal feature on a manual pump OR exercise features on AID pump to reduce basal insulin delivery 1-2 hours before, during and/or after exercise • Reduce meal time insulin dose if meal is within 2 hours of exercise start	Around or after exercise	
	After correction insulin was given (2-3 hours after correction insulin given)	Increase high glucose correction dose/strengthen correction factor (e.g. if correction factor is 1:50 mg/dL, change to 1:40 mg/dL)

OPTIMIZE CGM Alerts

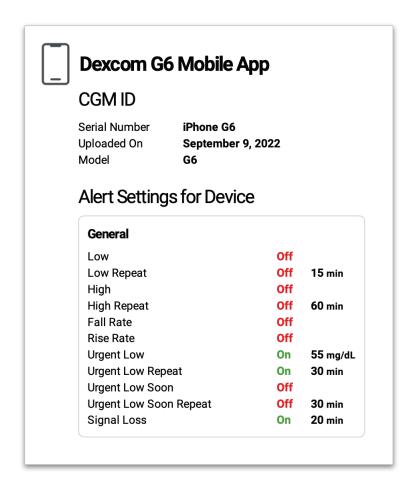
Personalize CGM alert settings with user to be *useful* and *actionable*.

To reduce alert burden:

- Turn OFF all predictive glucose alerts and rise/fall rate alerts.
- Consider turning off all alarms except for the low threshold alarm and set at the glucose level requiring low treatment.
- If high alarm is ON, set to an extreme high (e.g., 250-300 mg/dL) to reduce frequency. Turn off the high repeat, or set to 2 hours.

CGM alerts should result in action from the user most of the time (e.g. low glucose treatment, or high glucose correction). If the user is getting alerts but there is no action to take, change the alert setting and develop an action plan for how to respond to the alerts.

The Dexcom CGM alert settings can be found on the 'Overview' report on Dexcom Clarity.



Great job using **Dexcom!**

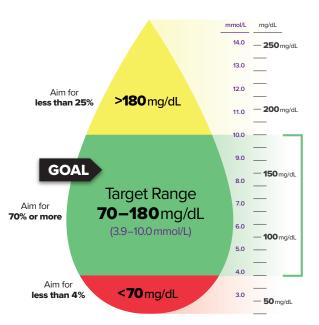
Using a Continuous Glucose Monitor (CGM) can help you achieve your diabetes goals.

The American Diabetes Association suggests aiming for **70%** of your glucose levels to be between **70-180 mg/dL** (3.9-10.0 mmol/L), called **Time in Range** or **TIR**). If you are not currently able to reach 70% TIR, don't be discouraged! Start from where you are and set smaller goals to increase your TIR. Any increase in your TIR is beneficial to your lifelong health!



REMEMBER...

Don't over-analyze each individual glucose value you receive from the Dexcom CGM. Instead, **focus on the glucose trends**. If you notice a similar pattern of highs or lows happening each day, talk to your doctor or educator about how to help.



TIPS for DEXCOM CGM

 Rotate where you place your sensor to keep your skin healthy. If you have problems with skin rashes or difficulty keeping your sensor on, check out our Skin Solutions: PANTHERprogram.org/skin-solutions



- High glucose levels >300 mg/dL for 2 hours or more? Check ketones first! If ketones are elevated (>1.0 mmol/L on a blood meter OR mod/large on a urine stick), give correction insulin from a syringe or pen (not through a pump) and contact your doctor or educator for help.
- Give your insulin dose before eating, ideally 10-15 minutes before all meals and snacks.
- Are you getting too many alerts? Sometimes less is more!
 Personalize your alerts so you only get alerts that are useful to you and require a response most of the time (e.g., low treatment, high glucose correction).









Have questions about your CGM?

Visit dexcom.com

Dexcom customer support **1-888-738-3646**

Dexcom technical support 1-844-607-8398