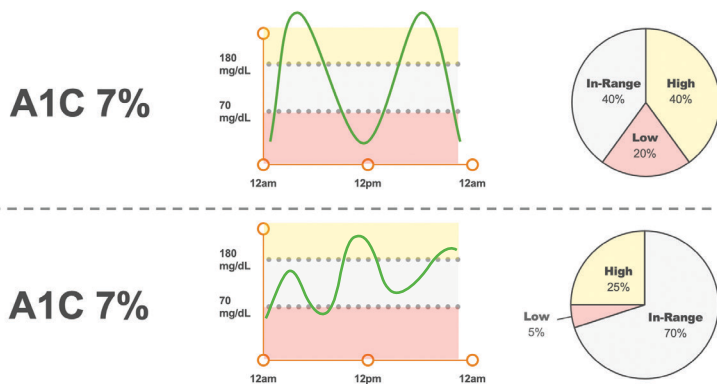## THE VALUE OF METRICS BEYOND A1C

A1C is a reflection of average glucose over the last 2–3 months but does not identify glycemic variability.[1] CGM data provides the actual average glucose and can identify patterns of hypo– and hyperglycemia, assess glycemic excursions and glucose variability to allow for therapy modification.[1]

Same A1C but CGM Patterns Drive Different Treatment Plans[2]

A1C 7%

A1C 7%

Each 5% increase in TIR is considered clinically significant.[1]

For every 10% increase in TIR = ~0.8% A1C reduction.[3]

Estimated A1C for a Time in Range (TIR) level[3]

TIR 70-180 mg/dL	A1C
20%	10.6%
30%	9.8%
40%	9.0%
50%	8.3%
60%	7.5%
70%	6.7%
80%	5.9%
90%	5.1%

KEY METRICS

Number of days with CGM data
14+ days recommended

Percentage of time CGM is active
>70% of data recommended

Mean glucose
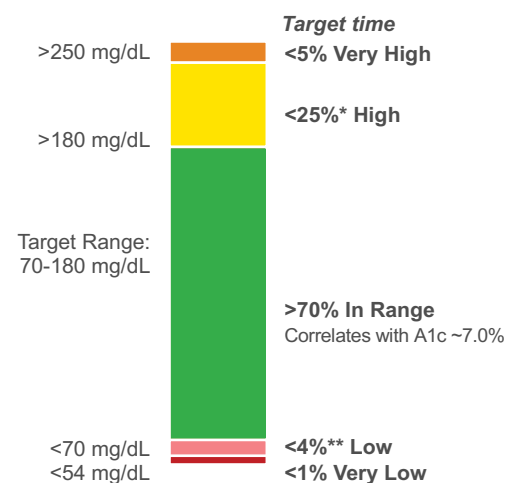The average glucose

Glucose Management Indicator (GMI)
Calculated using average sensor glucose data and expressed as a percent. Can be an indicator of glucose management and will likely differ from A1C.

Coefficient of Variation (CV)
Measure of glycemic variability ≤36% is recommended[1]

GOALS FOR TIR

Recommended Time in Range for most people with T1D and T2D[1]***

Target time

>250 mg/dL — **<5% Very High**

>180 mg/dL — **<25%* High**

Target Range: 70-180 mg/dL

>70% In Range
Correlates with A1c ~7.0%

<70 mg/dL — **<4%** Low**
<54 mg/dL — **<1% Very Low**

USING STRENGTH-BASED LANGUAGE[4] WHILE TALKING ABOUT TIR

- **Emotions tied to living with diabetes**

- **Numbers are data, not a judgement*[4]**
  - Not "good" vs "bad" numbers

- **Develop SMART goals to move towards more TIR and less time below range**

- **Create an action plan together using shared decision-making**
  - What is one way you might move towards more TIR?
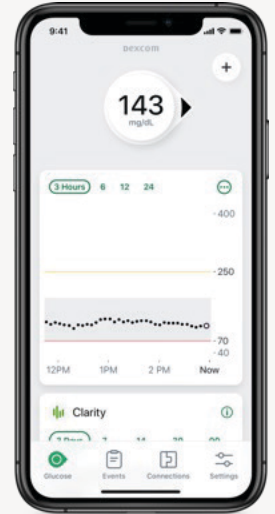 - Would you prefer to eat fewer carbs at breakfast or increase your insulin?
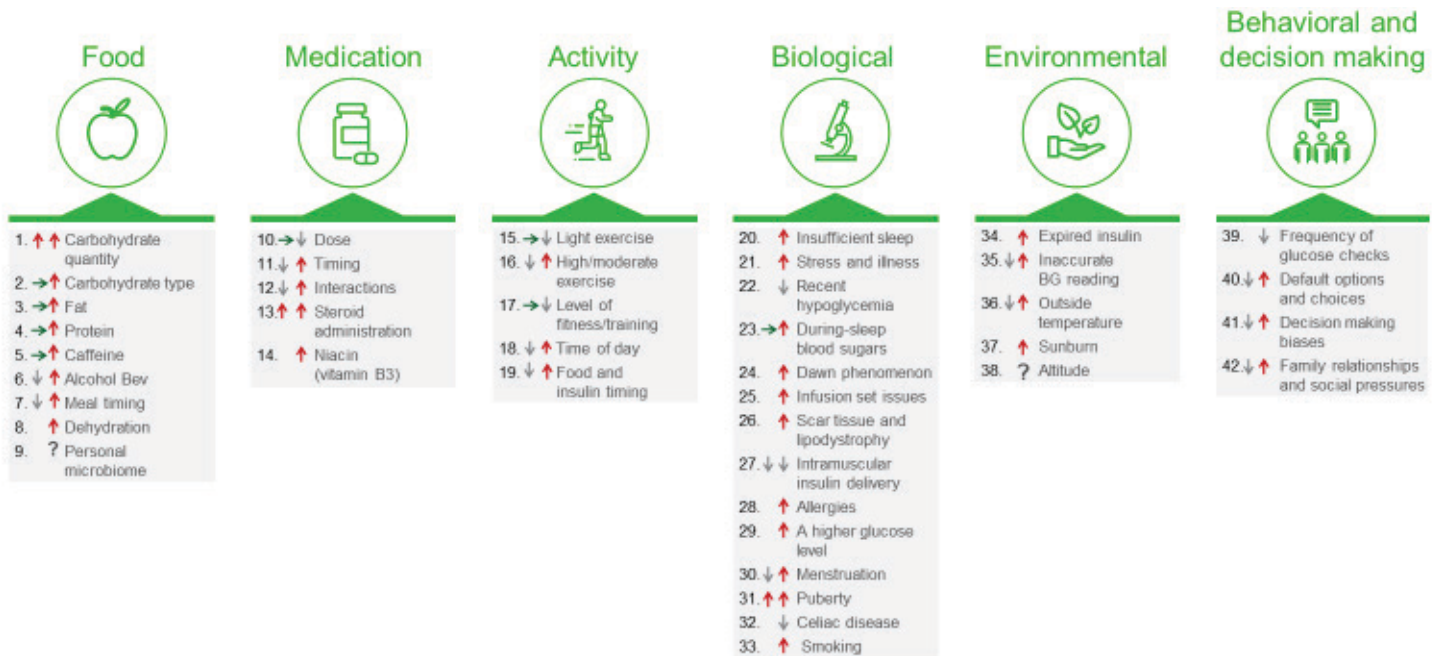
- **Celebrate the success!**
  - Identify the positives

STRATEGIES TO HELP INCREASE TIR

- **Discover** –What food or activity choices helped glucose to stay in range (70-180 mg/dL)?

- **Be curious** –Experiment with portion sizes to evaluate post-prandial peak after eating favorite foods.

- **Strive for FNIR** (flat, narrow, in-range) on the trend graph

- **Celebrate** -Acknowledge the hard work required to manage diabetes and stay in-range.

AT LEAST 42 FACTORS CAN AFFECT THE GLUCOSE[5]

Food
1. ↑↑ Carbohydrate quantity
2. →↑ Carbohydrate type
3. →↑ Fat
4. →↑ Protein
5. →↑ Caffeine
6. ↓↑ Alcohol Bev
7. ↓↑ Meal timing
8. ↑ Dehydration
9. ? Personal microbiome

Medication
10. →↓ Dose
11. ↓↑ Timing
12. ↓↑ Interactions
13. ↑↑ Steroid administration
14. ↑ Niacin (vitamin B3)

Activity
15. →↓ Light exercise
16. ↓↑ High/moderate exercise
17. →↓ Level of fitness/training
18. ↓↑ Time of day
19. ↓↑ Food and insulin timing

Biological
20. ↑ Insufficient sleep
21. ↑ Stress and illness
22. ↓ Recent hypoglycemia
23. →↓ During-sleep blood sugars
24. ↑ Dawn phenomenon
25. ↑ Infusion set issues
26. ↑ Scar tissue and lipodystrophy
27. ↓↑ Intramuscular insulin delivery
28. ↑ Allergies
29. ↑ A higher glucose level
30. ↓↑ Menstruation
31. ↑↑ Puberty
32. ↓ Celiac disease
33. ↑ Smoking

Environmental
34. ↑ Expired insulin
35. ↓↑ Inaccurate BG reading
36. ↓↑ Outside temperature
37. ↑ Sunburn
38. ? Altitude

Behavioral and decision making
39. ↓ Frequency of glucose checks
40. ↓↑ Default options and choices
41. ↓↑ Decision making biases
42. ↓↑ Family relationships and social pressures

4. Dickinson, J.K. et al., Diabetes Care 2017 Dec; 40(12): 1790-1799. 5. Adapted from Brown 2020. Brown A. DiaTribe Learn: Making sense of diabetes. Published February 13, 2018. Accessed February 4, 2020. diatribe.org/42factors

BRIEF SAFETY STATEMENT: Failure to use the Dexcom G7 Continuous Glucose Monitoring System (G7) and its components according to the instructions for use provided with your device and available at https://www.dexcom.com/safety-information and to properly consider all indications, contraindications, warnings, precautions, and cautions in those instructions for use may result in you missing a severe hypoglycemia (low blood glucose0 or hyperglycemia (high blood glucose) occurrence and/or making a treatment decision that may result in injury. If your glucose alerts and readings from the G7 do not match symptoms, use a blood glucose meter to make diabetes treatment decisions. Seek medical advice and attention when appropriate, including for any medical emergency.

The web-based Dexcom Clarity software is intended for use by both home users and healthcare professionals to assist people with diabetes and their healthcare professionals in the review, analysis, and evaluation of historical CGM data to support effective diabetes management. It is intended for use as an accessory to Dexcom CGM devices with data interface capabilities. Caution: The software does not provide any medical advice and should not be used for that purpose. Home users must consult a healthcare professional before making any medical interpretation and therapy adjustments from the information in the software. Caution: Healthcare professionals should use information in the software in conjunction with other clinical information available to them. Caution: Federal (US) law restricts this device to sale by or on the order of a licensed healthcare professional.