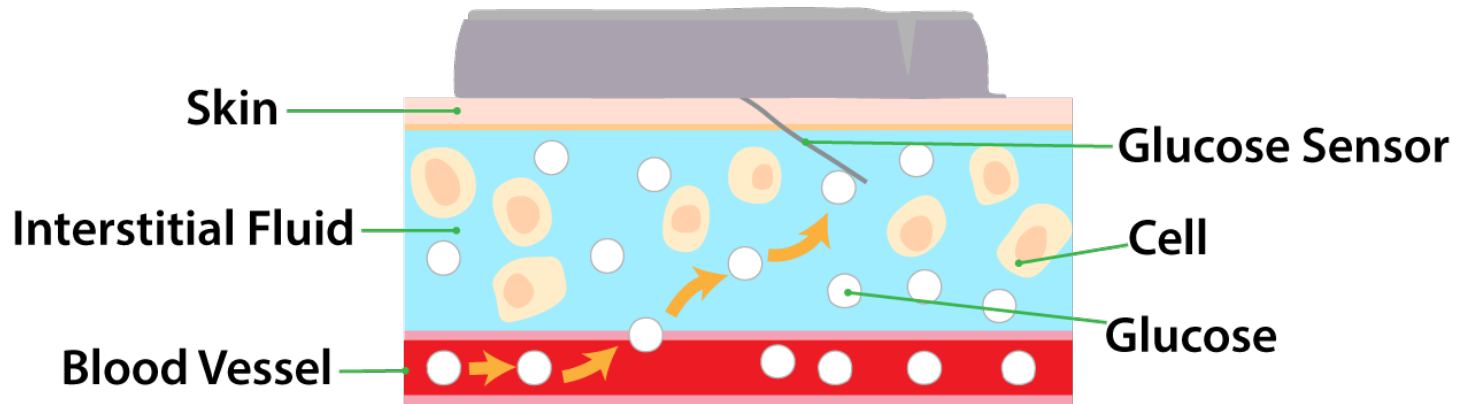


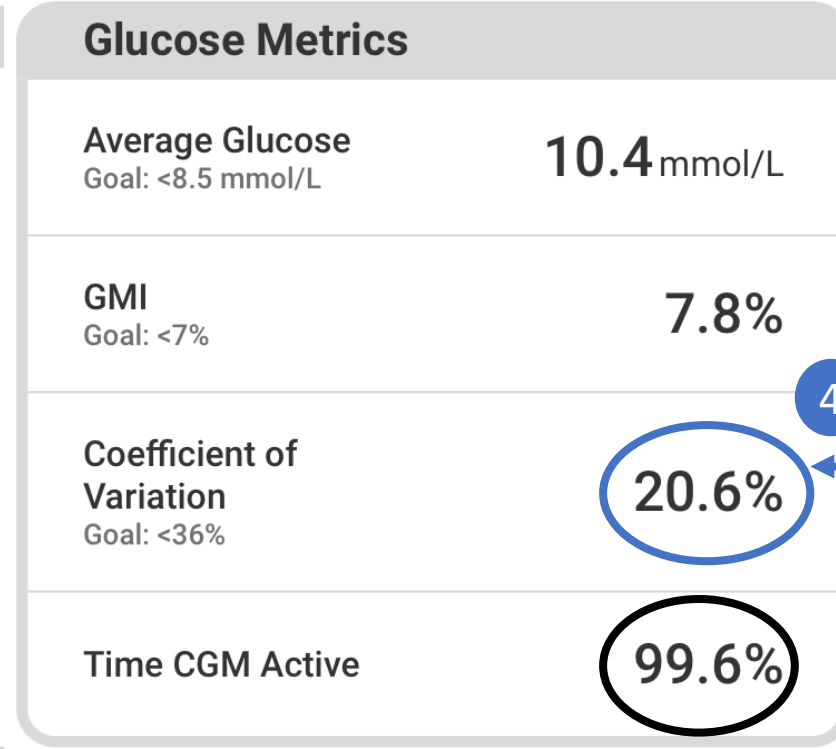
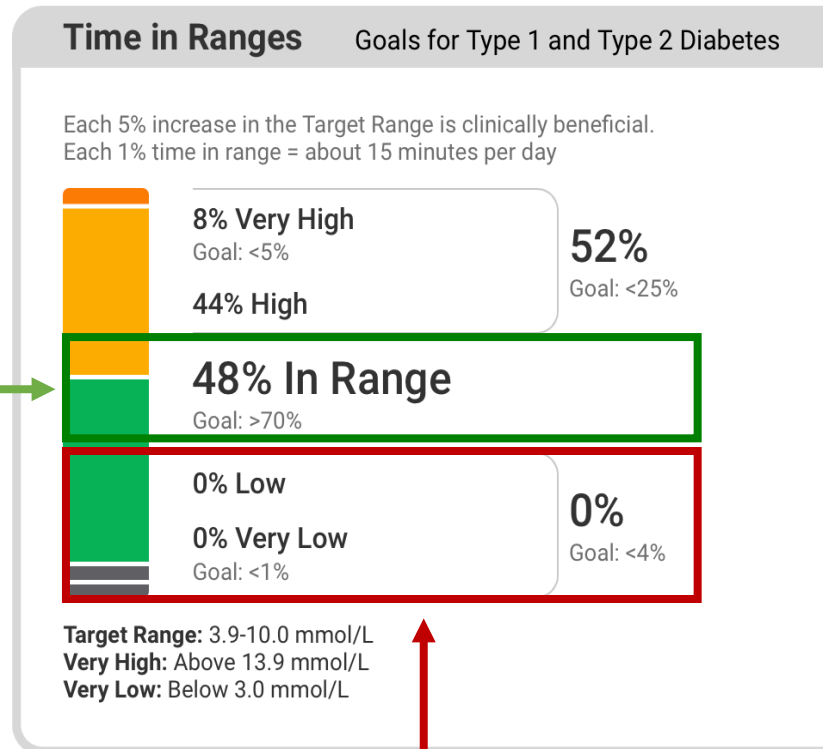
# What is a Glucose Sensor?

- A small wearable device
- “Hair-like” filament sits under the skin in interstitial fluid
- Measures interstitial glucose concentration continuously
- As the glucose concentration in the blood stream changes, so does the glucose concentration in the interstitial fluid
- Sensor is typically inserted on the back of the arm, upper buttocks, or abdomen
- Respective devices have recommendations for insertion sites (see next page) based on how they were studied



# Ambulatory Glucose Profile (AGP) Report Interpretation<sup>1</sup>

14 Days Sat Feb 11, 2023 - Fri Feb 24, 2023



### 3 Look at TIR

TIR is below the target of >70% and there is no hypoglycemia. Review the 24-h glucose profile (below) to identify the time(s) when hyperglycemia is occurring.

### 2 Look for lows

In this patient, there is no evidence of hypoglycemia

### 1 Check for adequate data

% time CGM is active should be  $\geq 70\%$  as this indicates that there is sufficient data for decision making.

### 4 Check glycemic variability

The CV is at goal indicating that this patient's glucose level is relatively stable

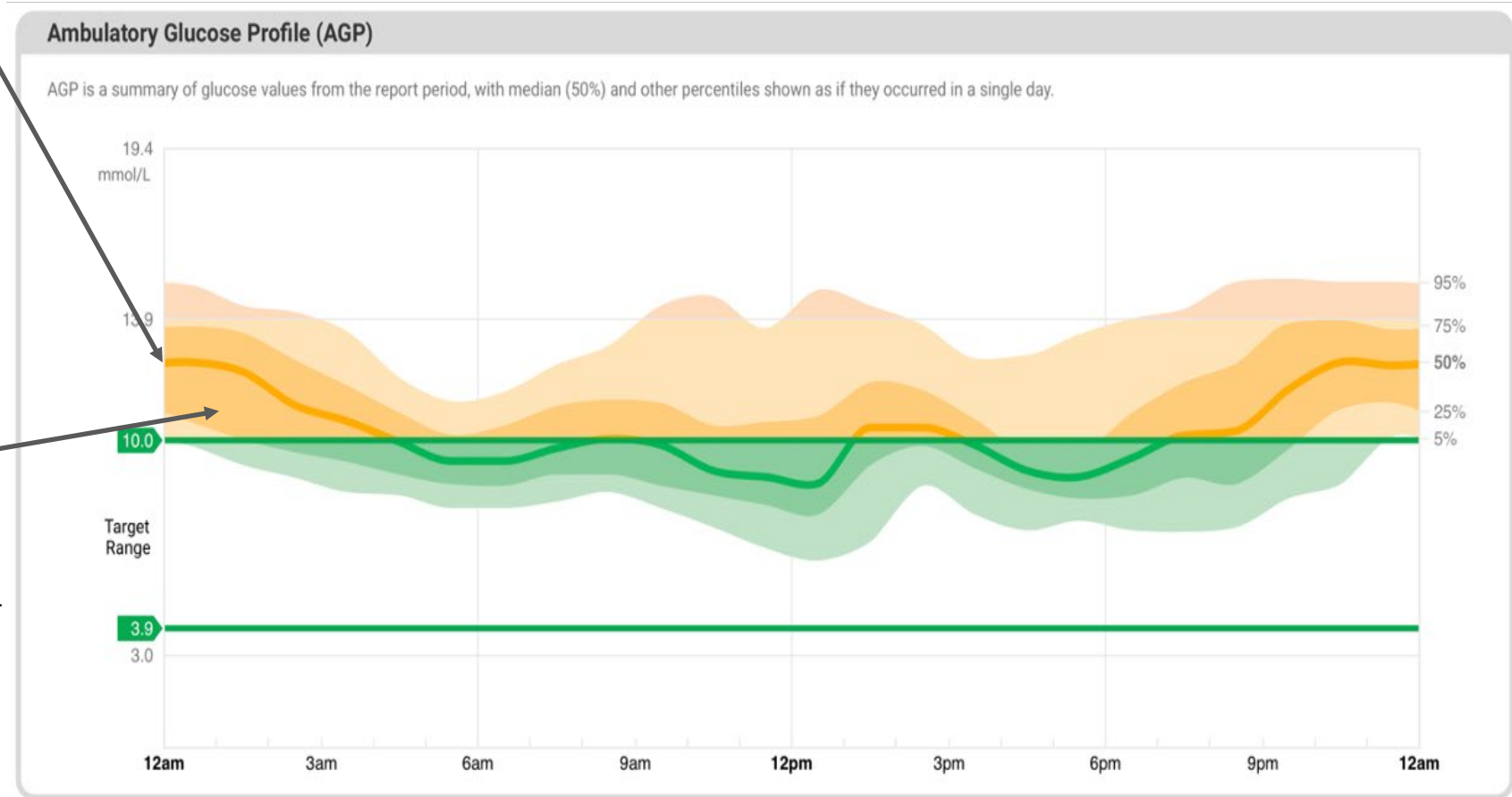
## 5 Is the median line in range? What's the shape of the line?

The solid line is the median or 50% line (half of all glucose values are above and half are below this value). Ideally, the line should be mostly flat and inside the green target range. In this case, we see that the patient is hyperglycemic for a large portion of the day, particularly between 7 pm and 5 am.

## 6 How wide is the shaded area ("the river")?

The darker shaded area (often referred to as "the river") represents the interquartile range – the 25<sup>th</sup> and 75<sup>th</sup> percentile curves. The lighter shaded area represent the 5<sup>th</sup> to 95<sup>th</sup> percentile curves, which indicates where most of the readings are. Ideally, the "river" should be narrow, indicating low variability.

A wider 'billowing' or 'ballooning' river means unwanted glucose fluctuations on most days, which suggests a need to adjust management of therapeutic parameters such as insulin doses and/or timings, or to review meal planning.



# Summary of No-Calibration, Standalone CGM Systems Available in Canada

Model	Indicated for	Integration with Insulin Pumps	Access to glucose data	Sensor Placement Site(s)	Sensor Wear Duration	Alerts/Alarms	Remote Monitoring	Known Interferences
<b>Intermittently-scanned continuous glucose monitors (isCGM)</b>								
FreeStyle Libre <sup>1</sup>	≥18 years <sup>†</sup>	No	Users need to scan sensor with a paired reader and/or compatible smartphone to retrieve the latest glucose data and transfer up to 8 hrs of data between scans	Back of upper arm	14 days	No	Remote connections are notified each time a user scans the sensor with their smartphone and can view scanned data remotely	High-dose vitamin C, high-dose ASA
FreeStyle Libre 2 <sup>2*</sup>	≥4 years					<ul style="list-style-type: none"> <li>Low &amp; High</li> <li>Loss of signal</li> </ul>	Remote connections are notified each time a user scans the sensor, receives and dismisses an alarm. They can also view scanned data remotely.	High-dose vitamin C
<b>Real-time continuous glucose monitors (rtCGM)</b>								
G6 <sup>3</sup>	≥2 years	Yes	Glucose data is continuously and automatically sent via Bluetooth to a paired receiver or compatible smartphone without the need to scan	<ul style="list-style-type: none"> <li>Abdomen (&gt;2 years)</li> <li>Back of upper arm (&gt;18 years)</li> <li>Upper buttocks (2-17 years)</li> </ul>	10 days	Yes <ul style="list-style-type: none"> <li>Predictive Alert (Urgent Low Soon)</li> <li>Low, Urgent Low &amp; High with customizable repeats</li> <li>Rates Alerts</li> <li>Signal Loss/No reading</li> </ul> Alert schedules available: (i.e. weekday/weekends), customizable sounds and alert repeat frequency	Followers can receive their own customizable alerts, and monitor remotely without scanning	Hydroxyurea
G7 <sup>4</sup>	≥2 years Including pregnant women	TBD		<ul style="list-style-type: none"> <li>Abdomen (all ages except pregnant women)</li> <li>Back of upper arm (all ages plus pregnant women)</li> <li>Upper buttocks (2-6 years)</li> </ul>	10 days + 12 hours	Yes, all of the above plus additional alert features including: delayed first alert and silence all		
FreeStyle Libre 3 <sup>5</sup>	Licensed in Canada on July 19, 2023 but details regarding Canadian indication, sensor placement sites and wear, etc. not yet available.							

Table current as of August 3, 2023.

\*New app to be available in the future that will allow FreeStyle Libre 2 to function as a rtCGM. Specific details about this app and timing of availability have not yet been specified.

CGM, continuous glucose monitor; ASA, acetylsalicylic acid; TBD, to be determined

1. Freestyle Libre User's Manual (ART34745-107 Rev. A 12/16; ART42121 Rev. A 02/20) <https://www.freestyle.abbott/ca-en/home/freestyle-libre.html> 2. Using Your G6 - Instructions for Use. <https://s3-us-west-2.amazonaws.com/dexcompdf/OUS+Specific+PDFs/Canada+G6/BL016368+Artwork%2C+UYG6+Guide%2C+CA.pdf> 3. Freestyle Libre 2. <https://www.freestyle.abbott/ca-en/home/freestyle-libre-2.html> 4. Dexcom G7 CGM System User Guide, 2023. 5. Health Canada. <https://health-products.canada.ca/mdall-limh/information?lang=eng&companyId=134918>