

# Analyzing Control-IQ Technology Glooko Reports

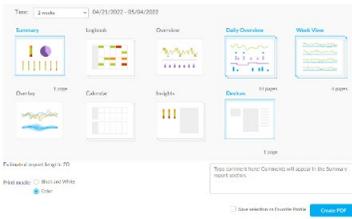
A Step-by-Step Approach to understand the t:slim X2 Insulin Pump with Control-IQ Technology



The Summary Report															
<p>Glucose (CGM)</p> <table border="1"> <tr><td>GMI</td><td>6.7%</td></tr> <tr><td>Average</td><td>7.8 mmol/L</td></tr> <tr><td>SD</td><td>2.1 mmol/L</td></tr> <tr><td>CV</td><td>27.5%</td></tr> <tr><td>Median</td><td>7.4 mmol/L</td></tr> <tr><td>Highest</td><td>15.5 mmol/L</td></tr> <tr><td>Lowest</td><td>2.9 mmol/L</td></tr> </table> <p>% Time CGM Active <b>96.3% (28.9 days)</b></p>	GMI	6.7%	Average	7.8 mmol/L	SD	2.1 mmol/L	CV	27.5%	Median	7.4 mmol/L	Highest	15.5 mmol/L	Lowest	2.9 mmol/L	<p><b>Time CGM Active:</b></p> <ul style="list-style-type: none"> <li>Aim for &gt; 90%. If less, assess why?</li> </ul> <p><b>Time in Range: (As measured by CGM)</b></p> <ul style="list-style-type: none"> <li>% below range, % in range, and % above range</li> <li><b>If TIR &lt; 60%:</b> Assess bolus behaviour — timing, missed; adjust basal rates if needed; bolus doses [adjust Insulin:carb ratio (ICR), correction factor, if needed.]</li> <li><b>If TBR ≥ 5%:</b> Assess bolus doses, basal rates; ensure a sleep schedule is turned on; is Exercise Activity being used?</li> <li><b>Glucose Management Indicator (GMI):</b> GMI indicates the average A1c level. This is available only if there is at least 15 days of data. The GMI may be similar to, higher than, or lower than the laboratory A1c<sup>1</sup>.</li> <li><b>Coefficient of Variation (CV):</b> According to Battelino &amp; Associates in 2019,<sup>2</sup> the coefficient of variation (CV) goal is ≤ 36%.* Some studies suggest that lower %CV targets (&lt; 33%) provide additional protection against hypoglycemia for those receiving insulin.<sup>2</sup></li> </ul>
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<p><b>System Details</b></p> <p>Tandem t:slim X2 (13d 9h)</p> <p><b>LGS/PLGS</b></p> <table border="1"> <tr><td>Time Suspended/Day</td><td>2h 42m</td></tr> <tr><td>Avg Suspensions/Day</td><td>6.7</td></tr> <tr><td>Avg Suspension/Time of Day</td><td>Morning - 16% Afternoon - 18% Evening - 31% Night - 34%</td></tr> </table> <p><b>Diet</b></p> <table border="1"> <tr><td>105.4 g Carbs/Day</td><td>3.5 Entries/Day</td></tr> </table>	Time Suspended/Day	2h 42m	Avg Suspensions/Day	6.7	Avg Suspension/Time of Day	Morning - 16% Afternoon - 18% Evening - 31% Night - 34%	105.4 g Carbs/Day	3.5 Entries/Day	<p><b>Control-IQ:</b></p> <ul style="list-style-type: none"> <li>Assess % of time spent in Control-IQ Technology</li> <li>Aim for &gt; 90%. If less, assess why?</li> </ul> <p><b>Activity - Sleep:</b></p> <ul style="list-style-type: none"> <li>Is Sleep Schedule set?</li> </ul> <p><b>Activity - Exercise:</b></p> <ul style="list-style-type: none"> <li>Is Exercise Activity being used?</li> </ul> <p><b>LGS/PLGS:</b></p> <ul style="list-style-type: none"> <li>Assess time pump is suspending insulin.</li> <li>Click “Show more” for 2-hour time segments, showing number of suspensions every 2 hours.</li> </ul> <p><b>Diet:</b></p> <ul style="list-style-type: none"> <li>Average Carb intake per day and average number of entries.</li> <li>Make sure PWD is entering carbs to benefit from the system.</li> </ul>						
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## How to create a PDF?



### How to create a PDF?

- Click on Create PDF Report.
- Choose: Summary (CGM only), Daily Overview (if details are important), Week View and Devices.
- It's possible to create "Favorite PDF Reports".
- Once the PDF is created, it can be viewed, saved, and printed.

## The Week View Report



### This report makes it easy to look for patterns - 4 days per page

Review the CGM tracing for hypoglycemia or hyperglycemia patterns

- If yes, look at what the system does: basal modulation, bolus by user, automatic correction bolus etc.
- Assess lifestyle/behavioural considerations impacting pump management.

## The Daily Overview Report



### The Daily Overview will show one day at a time.

#### If pattern of hypo/hyperglycemia identified:

- Review basal modulation in insulin graph.
- Assess impact of current ICR and correction factors.
- Review frequency and impact of automatic correction boluses  $\square$ .
- Look for bolus overrides  $\blacklozenge$ , or additional boluses dialed in by the user which may explain unexpected hypoglycemia.
- Assess for appropriate use of Sleep Activity (purple bar) and Exercise Activity (green bar).
- Assess if CGM trend aligns with carbohydrates entered (aqua boxes) and bolus timing.
  - If it does not match: Review bolus timing.

If more bolus details are required: Graph Tab → Overview Tab → Choose the specific date and hover mouse on graph for detailed information (*only available in live view*).

## The Devices Report

Daily	12:00 AM (3 hr)	0.4 Units/hr
Active	3:00 AM (3 hr)	0.55 Units/hr
	6:00 AM (2 hr)	0.775 Units/hr
	8:00 AM (2 hr)	0.775 Units/hr
	10:00 AM (2 hr)	0.7 Units/hr
	12:00 PM (5 hr)	0.55 Units/hr
	5:00 PM (4 hr)	0.65 Units/hr
	9:00 PM (3 hr)	0.5 Units/hr
Total		14.2 Units

### Devices Report:

- Pump Profile has Basal, Correction Factor, Carb Ratio and Target BG (set to 6.1mmol/L).
- Device settings includes Active Insulin Time (insulin duration set to 5hours), Cannula Fill amount, Low Reservoir (cartridge), Auto Off, Max Bolus, Closed Loop (Control-IQ) enabled or not and Personal Profile active at download.

# Analyzing Control-IQ Technology Glooko Reports



## The Week View Report

**Step 1: Assess CGM tracing and trends:** Assess CGM tracing as you would with traditional diabetes management. Is there a pattern? Look for:

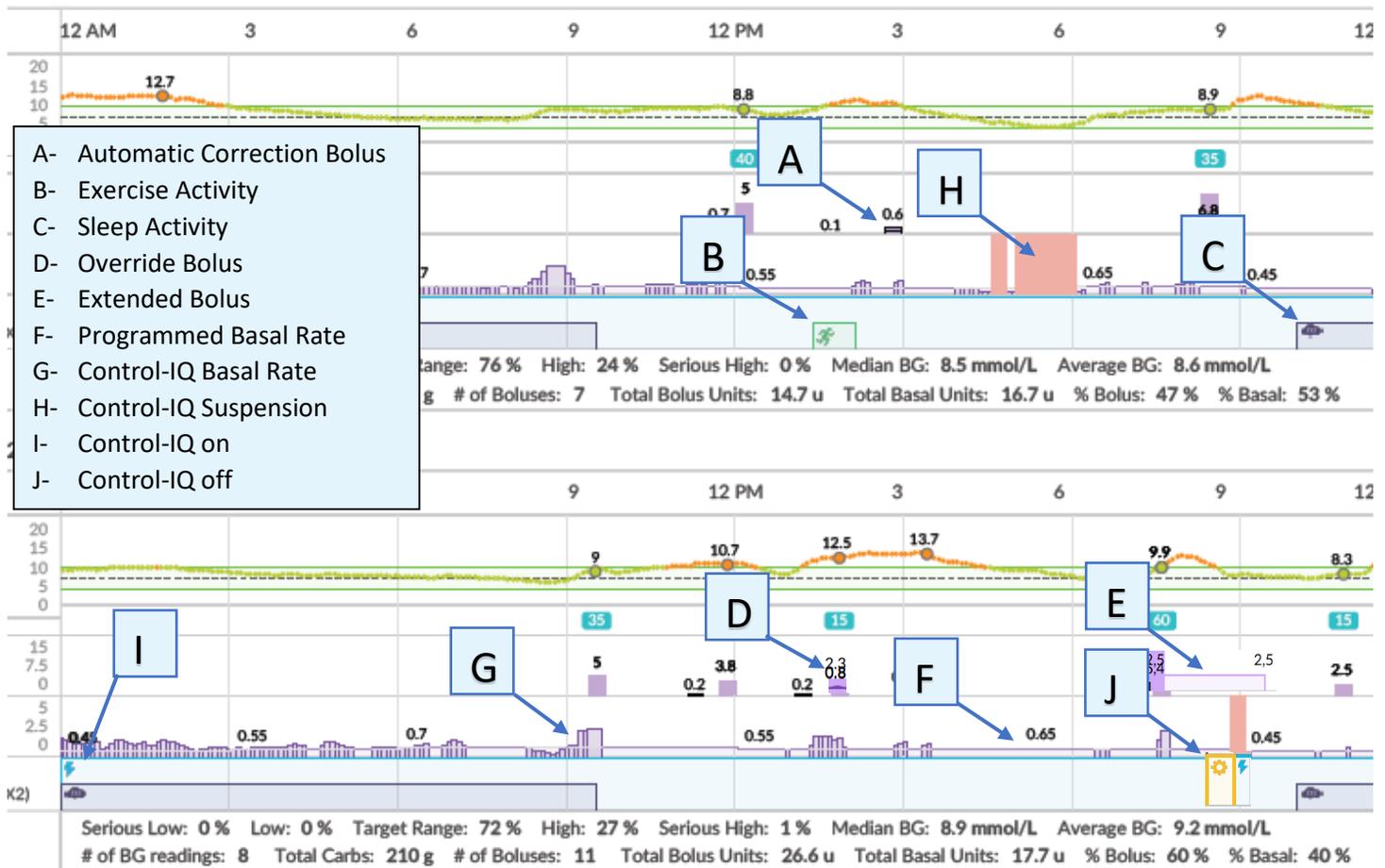
- 1- Hypoglycemia
- 2- Overnights
- 3- Pre-prandial
- 4- Post-prandial

**Step 2: Review Personal Profile Settings:** Is there more than one profile? Which profile is active at the time of the download? Does the PWD switch between profiles?

- 1- **Basal Rates:** Assess differences between programmed and delivered basal. During fasting, is there a pattern associated with hypo/hyperglycemia?
- 2- **Correction Factor:** This setting is important for basal modulation as well as automatic correction boluses. Multiple automatic correction boluses can mean basal rate is too low, not prebolusing or too weak ICR (especially after meal boluses).
- 3- **ICR:** Assess for automatic correction boluses or basal suspensions after meals.

**Step 3: Educate or Adjust Settings:** Determine if the PWD needs additional diabetes self-management education or if pump settings need adjustment. Assess these topics:

- 1- Use of Sleep and Exercise Activities
- 2- Hypoglycemia treatment
- 3- Bolus timing
- 4- Infusion set/site management
- 5- Others?





## Training Tips



### Control-IQ Technology Therapy Tips

- ✓ Look at these reports the same way you would assess pump parameters without automated insulin delivery.
  - ✓ Remember to always look for patterns before making insulin dose adjustments. Self-management skills and education with insulin pump therapy remain important for success.
  - ✓ Frequent suspensions do not necessarily indicate hypoglycemia or indicate a need for a change in therapy. What is relevant here is the pattern and/or duration of the suspensions as they relate to glucose outcomes.
  - ✓ Assess basal modulation for patterns and adjust personal profile basal rates as needed. Be careful not to focus too much on basal modulation, especially if TIR goals are being met.
  - ✓ Consider using different Personal Profiles with certain situations (i.e. exercise, work schedules, menses, sick days).
  - ✓ It is important to turn the Exercise Activity on 60-90 minutes prior to the initiation of physical activity. Additional strategies to prevent hypoglycemia during exercise may be required.
  - ✓ Be sure to encourage user to stop insulin delivery when disconnected from the pump (i.e., for a shower or swimming) to help keep insulin on Board accurate.
  - ✓ Consider treating hypoglycemia with less carbohydrate in order to help prevent rebound hyperglycemia. As the PWD has already experienced a reduction and potential suspension of basal insulin delivery, the full carbohydrate treatment may not be necessary. The suggestion is to use 5-10 grams of carbohydrate and evaluate.
  - ✓ View report called “Insights” to see average days between fill tubing/cannula fills, the glucose trend before and after the site change.
- Note:** TruSteel™ infusion set does not have a cannula fill



Control-IQ technology does not prevent all high and low blood glucose events, and is not a substitute for meal boluses and active self-management of your diabetes. Control-IQ technology will not be able to predict sensor glucose values and adjust insulin dosing if your CGM is not working properly or is unable to communicate with your pump. Always pay attention to your symptoms and blood glucose levels and treat accordingly. Please visit [tandemdiabetes.com](https://tandemdiabetes.com) for more information.



t:slim X2 Insulin Pump

Need additional help?  
Scan code for support.



This guide is intended for  
distribution only within Canada.

