

Quick reference guide

MiniMed™ 780G System

Advanced hybrid closed loop technology

SmartGuard™ feature = Auto basal + Auto correction

Customizable Auto basal targets: 5.5 mmol/L (default) | 6.1 mmol/L | 6.7 mmol/L

Customizable bolus settings: Insulin Carb Ratio (ICR) | Active Insulin Time (AIT) | Auto corrections - ON or OFF

Getting started

Initial settings for **MDI users**

Basal:

Reduce Total Daily Dose (TDD) by 15-25%
 Basal Insulin Dose: Reduced TDD × 0.5
 (If half the dose is > 0.4 units per kg, use weight dose below*)
 Basal insulin /24 = hourly basal rate
 1 or 2 basal rates (night time-day time)

Bolus:

ICR: _____ 450/TDD
 ISF: _____ 100/TDD
 BG target: _____ 5.5 - 6.7 mmol/L
 AIT: _____ 2.0 - 3.0 hours

Initial settings for **pump users**

Basal:

Use current pump settings

Bolus:

ICR: _____ 450/TDD
 ISF: _____ 100/TDD
 BG target: _____ 5.5 - 6.7 mmol/L
 AIT: _____ 2.0 - 3.0 hours

Initial CGM and SmartGuard™ settings for **MDI and pump users**

CGM:

Suspend before low: _____ ON
 Low limit threshold: _____ 3.8 mmol/L
 Alert before low: _____ OFF
 Alert on low: _____ ON by default
 Alert on high: _____ OFF

SmartGuard™ feature:

Auto basal target: _____ 5.5 mmol/L
 - For ≤15 years old, start with 6.1 mmol/L and reduce to 5.5 mmol/L if no concern of hypoglycemia¹
 Auto corrections: _____ ON

Follow up

Metric	Time above ² 13.9 mmol/L	Time above ² 10.0 mmol/L	Time in Range ² 3.9 - 10.0 mmol/L	Time below ² 3.9 mmol/L	Time below ² 3.0 mmol/L	A1C ³	Coefficient of variation (CV) ⁴	SmartGuard™ Use	Sensor Use ⁵
Goals	< 5%	< 25%	70%	< 4%	< 1%	< 7.0% Adults (< 53 mmol/mol)	< 36%	≥ 85%	≥ 85%

Review the Assessment & Progress report for information on Time in Range/below & above Range, SmartGuard™ and Sensor use.

Personalized patient goals may be different than what's in the table. Action may not be required if personalized goals are met.

* Weight doses: weight in kg x 0.3 for adults, x 0.2 for peds, x 0.4 for adolescence

MDI=Multiple Daily Injections, **CGM**=Continuous Glucose Monitoring, **BG**=Blood Glucose, **ICR**=Insulin Carb Ratio, **ISF**=Insulin Sensitivity Factor, **AIT**=Active Insulin Time

Follow up

Review Auto basal target and AIT

- Is Auto basal target set to 5.5 mmol/L? AIT set to 2-3 hours?
- If no, are higher settings warranted?

Time above Range is high

Use Meal Bolus Wizard report and other CareLink™ reports to evaluate if:

- **Bolusing too late:** if pre-bolus glucose rise occurs, counsel patient on bolusing earlier before meal
- **ICR is not optimized:** if 2 hour post-prandial glucose is > 10.0 mmol/L and bolus timing is appropriate, ICR most commonly needs to be strengthened to provide a larger meal dose (i.e. change ICR from 10 to 8 g/U)
- **Boluses are omitted**

Time below range is high

Use CareLink™ reports to assess:

- Timing of bolus
- Overestimating of carbs (avg carbs/meal are listed)
- Smaller meal bolus may be needed (i.e. change ICR from 8 to 10 g/U)
- If persistent **lows** occur without a bolus: consider higher Auto basal target
- If persistent **lows** occur after **Auto** correction boluses: use longer AIT (i.e. 2.0 to 2.5 hours) - lengthening the AIT leads to a limited magnitude in the correction bolus decision
- Utilization of temp target with exercise
- If **low during sleep**, smaller meal/snack bolus may be needed prior to bed (or program higher target or even temp target)

If SmartGuard™ use is < 85%

- Educate on sensor wear (primary issue)
- Check for any SmartGuard™ exits (Assessment & Progress Report)

If sensor use is < 85%

- Educate on sensor use and care
- Explore reasons for underuse

Best practices

- Keep interventions at a minimum. After updating a setting, allow the system time to adapt
- Carb entry + Auto correction boluses ON + lowest Auto basal target = achieving diabetes goals
- Optimize ICR and AIT
- **In general:** the system needs time to adapt, and it may take a few days, but maybe also several weeks
- Auto correction % is an indicator of how the patient is using the system. If Auto correction % is high (>30%) and personalized goals are not met:
 - Evaluate if boluses are omitted
 - Evaluate meal bolus report to assess bolus timing and ICR adequacy
 - If post-prandial elevated, consider intensifying carb ratio (more insulin) or refine carb counting if not consistent

Clinical tips

- Encourage carb counting and pre-meal bolusing
- Start new sensor during a fasting period or wait 2-3 hours after bolusing
- Caution using multiple correction doses in Manual mode
- Majority of patients will run a bit above the target glucose setting
- Keep Manual mode settings up to date (Adjust BG target, ISF, basal rates, suspend before low)
- Depending on CGM slope and past insulin delivery, the SmartGuard™ feature may reduce a food bolus to help mitigate low SG
- Sync to CareLink™ feature allows automatic uploads, giving HCPs access to data with less work

Important safety information – MiniMed™ 780G system

The MiniMed™ 780G insulin pump is indicated for use by patients age 7-80 years with Type 1 diabetes, whose total daily dose of insulin is 8 units per day or more. The MiniMed™ 780G system is intended for the continuous delivery of basal insulin at selectable rates and the administration of insulin boluses at selectable amounts. The system is also intended to continuously monitor glucose values in the fluid under the skin. The MiniMed™ 780G system includes SmartGuard™ technology, which can be programmed to provide an automatic adjustment of insulin delivery based on continuous glucose monitoring (CGM) and can suspend the delivery of insulin when the sensor glucose (SG) value falls below, or is predicted to fall below, predefined threshold values.

The Medtronic MiniMed™ 780G system consists of the following devices: MiniMed™ 780G Insulin Pump, the Guardian™ Link (3) Transmitter, the Guardian™ Sensor (3), One-press Serter, and the Accu-Chek® Guide Link meter. The Guardian™ Sensor (3) is required for CGM. The Guardian Sensor (3) glucose sensor is the only sensor compatible with the MiniMed™ 780G insulin pump and Guardian Link (3) transmitter.

1. Arrieta A, et al. Diabetes Obes Metab. 2022 Jul;24(7):1370-1379
2. Battelino T et al. Clinical Targets for Continuous Glucose Monitoring Data Interpretation: Recommendations from the International Consensus on Time in Range. Diabetes Care 2019; 42: 1593-1603
3. American Diabetes Association. Glycemic Targets: Standards of Medical Care in Diabetes—2021. Diabetes Care 2021; 44(1): S180-S199
4. Danne T et al. International Consensus on Use of Continuous Glucose Monitoring. Diabetes Care. 2017; 40:1631-1640
5. Battelino T et al. Routine use of continuous glucose monitoring in 10 501 people with diabetes mellitus. Diabet Med 2015. 2(12); 1568-74

See the device manual for detailed information regarding the instructions for use, indications, contraindications, warnings, precautions, and potential adverse events. For further information, contact your local Medtronic representative.