Identifying Patients

The MiniMed™ 670G system is indicated and FDA approved for patients with type 1 diabetes, ages seven years and older. Use of clinical judgment is always recommended in cases where patients cannot read instructions on the pump screen, refuse to routinely check glucose, or are unwilling to count and enter carbs before eating.

Most patients transition to Auto Mode easily and are relieved to have the algorithm adjust basal insulin according to the real-time increases and decreases in glucose levels. However, it may take longer for patients who fall at extreme ends of the diabetes self-care spectrum to become comfortable and trust the system. For example:

Patients who strive for perfection with tight glycemic control sometimes find it difficult to accept the transient highs that occur in Auto Mode as glucose gradually lowers back to target. Reviewing CareLink™ reports with these patients is particularly important so they can see if Auto Mode is resulting in more time in range with fewer lows.

Patients who do not perform basic self-care behaviors such as bolusing before eating, checking BG, or calibrating the sensor, may not be able to stay in Auto Mode enough to experience the full therapeutic benefit. For some of these patients, Auto Mode can relieve the burden of making diabetes decisions and provide motivation to complete the tasks needed for Auto Mode.

Setting Appropriate Expectations

The overarching goal is for patients to spend most of their time in Auto Mode. The system is designed with safety in mind to mitigate lows and maximize time in range (70–180 mg/dL). Therefore, when the system exits to Manual Mode, the priority is for patients to re-enter Auto Mode as quickly as possible.

One of the most important factors that leads to success when using Auto Mode is having realistic expectations. Most patients see a marked improvement in glycemia (especially overnight), less glucose variability, increased time spent in range (70-180 mg/dL), and fewer lows.* Improvement is seen faster in patients who are willing to accept the new concepts and implement behaviors needed for diabetes self-management.

Auto Mode Key Concepts

- The system is not fully automated
- Correction doses target 150 mg/dL, then Auto Basal gradually lowers SG to 120 mg/dL
- Frequent follow up is needed at first
- Glucose levels will not be perfect (may run higher than accustomed at first). Auto Basal will adjust to better match insulin requirements as the patient learns to use the system
- Patient Responsibilities:
  - Bolusing before eating (unless low) and counting carbs as accurately as possible
  - Calibrating 3-4 times / day (always before bed)
  - Responding to alerts and prompts (usually entering a BG) to stay in or re-enter Auto Mode
- Clinician Responsibilities:
  - Strengthening ICR as needed
  - Reviewing CareLink™ data uploads to evaluate glycemia, identify issues, make setting and / or behavior changes (i.e., post-meal highs, lows, bolusing pre-meal, ICR is appropriate)
  - Recognizing some situations (i.e., steroids, surgery) may need to be managed in Manual Mode