

T1D Technology

Technology Tools to Better Manage T1D:

CGM (continuous glucose monitor)

BG readings every 5 minutes allow you to see BG changes, direction, and trends more easily. Think of it as "BG video vs snapshot"

Most CGM readings can be seen on smartphones, and many have smartwatch widgets that allow viewing on a smartwatch

CGM measures interstitial fluid glucose (5-30 min delay vs BG)

- Dexcom (G6 every 10 days, G7 every 14 days)
- Eversense (implant every 6 months)
- Freestyle Libre (every 14 days)
- Medtronic (every 7 days)

Glucometer

- Lowest cost way to measure BG
- No need to wear anything
- Easiest find and use

Insulin Delivery

Injection Types:

- Pens and smartpens
- Insulin vial & syringe
- Inhaler (Afrezza)

Pumps:

- Omnipod (disposable, no tubes, replace every 3 days)
- Medtronic
- Tandem
- MiniMed
- Dana
- Roche

Miscellaneous:

- Stem cell implants, TBD
- Pancreas transplant (may not take, lasts 5-10 years, require immune-suppressive drugs, best insulin when working though)
- Symlin (like amylin made by beta cells, reduces insulin needs)
- Metformin or GLP1, SGLT2 (helps if insulin resistance suspected)

Considerations

Copay or OOP costs

Functional with current smartphone, smartwatch

CGM and pump cross functionality (Dexcom and Omnipod, or Medtronic with Medtronic)

Learning curve, refill costs

Keep a backup insulin pen or vials in case a pump fails!

Keep a glucometer as backup in case a CGM fails!

If insulin resistance is suspected, consider Symlin and/or Metformin (GLP1 or SGLT2)