Technology Updates in Pregnancy



May 7th, 2026

Stacey Ehrenberg, MD

Maternal-Fetal Medicine

Director of Diabetes in Pregnancy for the OGI

Cleveland Clinic

Rates of Diabetes in Pregnancy



Gestational Diabetes
9%



Type1 Diabetes
0.2-0.5%



Type 2 Diabetes
1-2%

Why do we treat?

We treat to prevent the mother from:

- Abnormal metabolism
- Gestational hypertension/preeclampsia
- Operative vaginal delivery/cesarean delivery

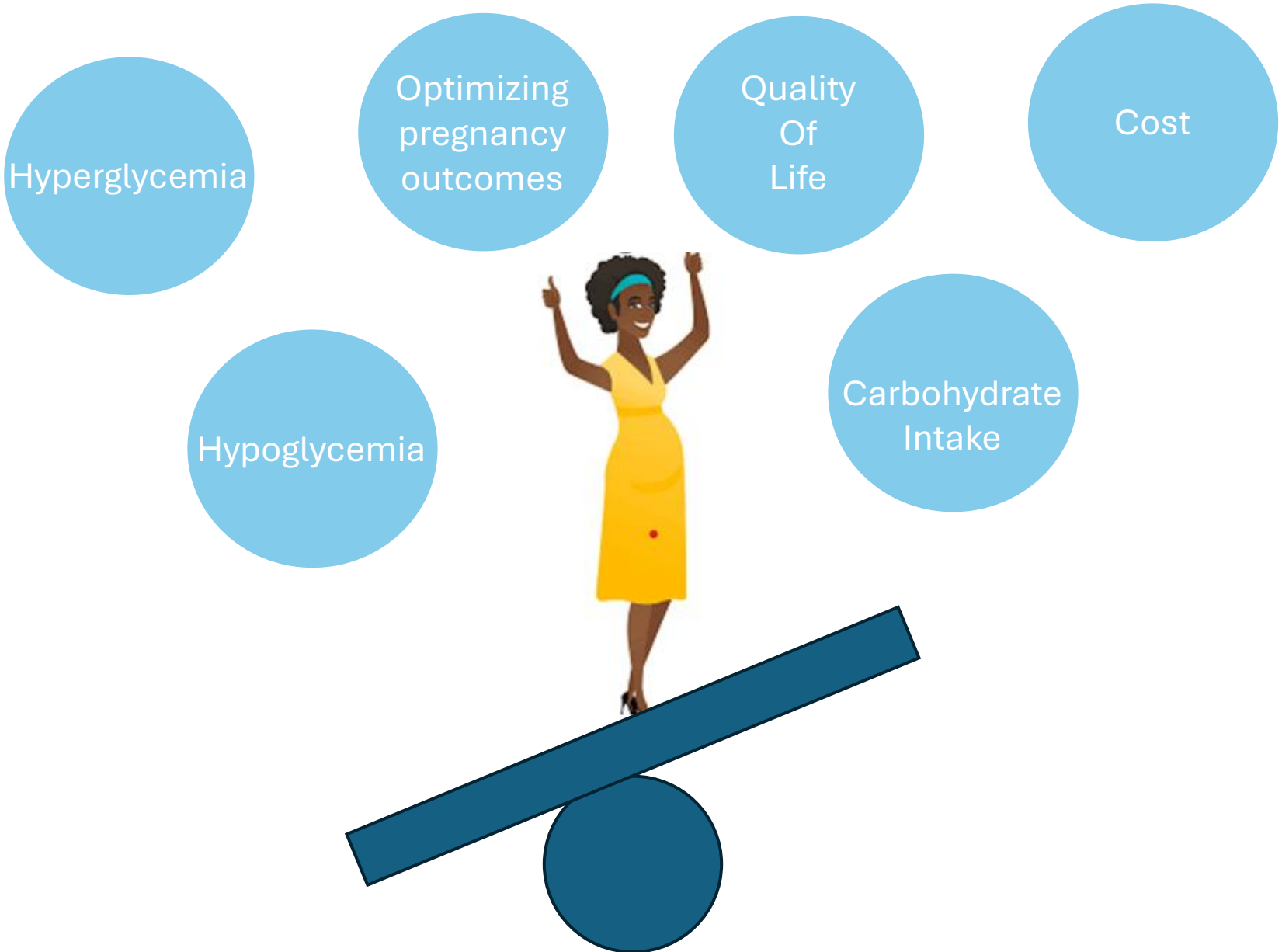
We treat to prevent the fetus/neonate from:

- Hyperinsulinemia
- Fetal anomalies
- Macrosomia
- Birth injury/shoulder dystocia
- Neonatal hypoglycemia
- Hyperbilirubinemia/jaundice
- Neonatal respiratory distress
- Adult diabetes, obesity and heart disease
- Stillbirth/spontaneous abortion
- Diabetes, obesity, hypertension and heart disease later in life

Why do we treat?

The incidence of complications is inversely proportional to glucose control

Diabetes in Pregnancy is a Balancing Act



Glycemic Goals in Pregnancy

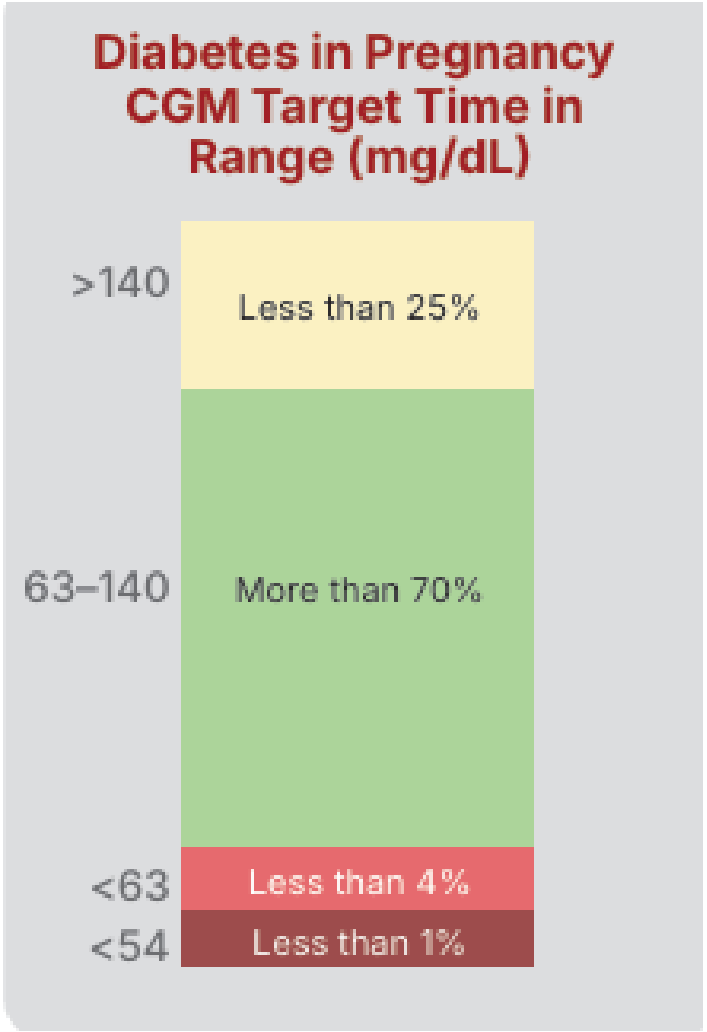
- Due to increased RBC turnover, A1C is slightly lower during pregnancy in people with and without diabetes. Ideally, the A1C goal in pregnancy is <6% if this can be achieved without significant hypoglycemia, but the goal may be relaxed to <7% if necessary to prevent hypoglycemia.
- CGM can help to achieve glycemic goals (eg. time in range, time above range) and A1C goal in T1D and pregnancy, and may be beneficial for other types of diabetes in pregnancy.

Table 15.2—Blood glucose goals in pregnancies associated with diabetes

	Blood glucose goal		
Glucose measurement	Type 1 diabetes or type 2 diabetes^	GDM treated with insulin	GDM not treated with insulin
Fasting glucose	70–95 mg/dL (3.9–5.3 mmol/L)	70–95 mg/dL (3.9–5.3 mmol/L)	<95 mg/dL (<5.3 mmol/L)
1-h postprandial glucose	110–140 mg/dL* (6.1–7.8 mmol/L)	110–140 mg/dL* (6.1–7.8 mmol/L)	<140 mg/dL* (<7.8 mmol/L)
2-h postprandial glucose	100–120 mg/dL (5.6–6.7 mmol/L)	100–120 mg/dL (5.6–6.7 mmol/L)	<120 mg/dL (<6.7 mmol/L)

Gestational diabetes mellitus (GDM) blood glucose goals shown are recommended by the Fifth International Workshop-Conference on Gestational Diabetes Mellitus (42). ^Lower glucose limits do not apply to individuals with type 2 diabetes treated with nutrition alone. Aim for less stringent goals if these cannot be achieved without significant hypoglycemia, based on clinical experience and individualization of care. *Optimal goal includes either a 1-h postprandial glucose level or 2-h postprandial glucose level within column of type of diabetes.

Glycemic Targets in Pregnancy T1D



Hgb A1C <6.5% pre-conception

Hgb A1C <6% in pregnancy

Mean glucose of 115-120 mg/dL may be associated with less LGA

Diabetes Care. 2024;47(Suppl 1):S282-S294
Diabetes Care. 2024;47(Suppl 1):S282-S294.
Wyckoff JA, et al. Diabetes Spectr. 2021;34(2):119-132.

Glycemic Goals in Pregnancy for Patients with Type 1 Diabetes

	Measures	Aim
HbA_{1c} when planning pregnancy	HbA_{1c}, which reflects glycaemic concentrations over the past 3–4 months	<7·0% (<53 mmol/mol); <6·5% (<48 mmol/mol) if feasible
HbA_{1c} first trimester	NA	<6·5% (<48 mmol/mol)
HbA_{1c} second and third trimester	NA	<6·0% (<42 mmol/mol)[54]
Percentage of sensor data obtained	The proportion of obtained versus total possible data collected by the CGM device; provides a measure of confidence in all data-derived metrics	≥70% of data during the collection period[38]
TIR when planning pregnancy	Percentage of time spent between 3·5 mmol/L and 7·8 mmol/L (63–140 mg/dL) for pregnancy if possible or between 3·9 mmol/L and 10·0 mmol/L (70–180 mg/dL) otherwise	>70% of time per day (ie, 16 h 48 min)
TIRp	Percentage of time spent in consensus target glucose range in pregnancy—ie, between 3·5 mmol/L and 7·8 mmol/L (63–140 mg/dL)	>70% of time per day (ie, 16 h 48 min)† from as early as possible following pregnancy confirmation
TBRp <3·5 mmol/L (63 mg/dL)	Percentage of time spent with glucose <3·5 mmol/L (<63 mg/dL)	<4% of time per day (1 h)
TBR <3·0 mmol/L (54 mg/dL)	Percentage of time spent with glucose <3·0 mmol/L (<54 mg/dL)	<1% of time per day (15 min)
TARp >7·8 mmol/L (140 mg/dL)	Percentage of time spent with glucose >7·8 mmol/L (>140 mg/dL)	<25% of time per day (6 h)‡
Mean sensor glucose	Mean 24-h glucose concentration calculated across all recorded sensor glucose readings	Suggested mean sensor glucose of 6·0–6·7 mmol/L (108–120 mg/dL), based on expert opinion (evidence level E)
GMI	A measure of short-term glucose concentrations that can be used to predict long-term glucose exposure; GMI is expressed in the same units as HbA_{1c} (eg, as a percentage or mmol/mol) for comparative purposes, but they are usually not identical	No international consensus target, but <42mmol/mol is suggested, which is similar to (but not equivalent to) a HbA_{1c} of 6·0%
CV	Dynamic GV expressed as percentage CV and calculated as follows: 100 x (SD divided by mean glucose)	≤36% of glucose variability in type 1 diabetes;[38] ≤30% in type 2 diabetes (NCT04972955)[55]
TIRp intrapartum	Percentage of time spent in consensus target glucose range—between 3·5 mmol/L and 7·8 mmol/L (63–140 mg/dL)—during labour and delivery	>70% of time intrapartum
TIR postpartum	Percentage of time spent in consensus target glucose range—between 3·9 mmol/L and 10·0 mmol/L (70–180 mg/dL)—following delivery	>70% of time per day

CGM=continuous glucose monitoring. CV=coefficient of variation. GMI=glucose management indicator. GV=glucose variability. NA=not applicable. SD=standard deviation. TARp=pregnancy time above range. TBR=time below range. TBRp=pregnancy time below range. TIR=time in range. TIRp=time in range in pregnancy. *HbA_{1c} is known to be an inconsistent marker of glycaemia during pregnancy, emphasising the value of CGM metrics. †Percentage of TIRp is specific for pregnant women with type 1 diabetes. Percentage of TIRp for pregnant women with type 2 diabetes and gestational diabetes should probably be more than 70%, but the exact amount is unknown due to a scarcity of data. ‡Percentage of TARp is specific for pregnant women with type 1 diabetes. Percentage of TARp for pregnant women with type 2 diabetes and gestational diabetes should be much less than 25%, but the exact amount is unknown due to a scarcity of data.

Table 1: **HbA_{1c} and CGM targets for pregnant women with type 1 diabetes***

Continuous Glucose Monitors (CGM)

- Allow patients to track glucose levels in real time and react as needed
- Data shared with the clinical team electronically
- Multiple metrics available for optimal decision making by the clinical care team
- Most CGMs offer pregnancy specific glucose goals
- Standard of care for patients with type 1 diabetes in pregnancy
- Should be offered to patients with type 2 diabetes and GDM
- Pregnancy-specific glycemic targets should be used

Personal CGM Options (Rx)



Freestyle Libre 2 and 2+



Freestyle Libre 3 and 3+



Eversense



Guardian

CIRCUIT Insulin Adjustments

Coming soon



Simplera

Dexcom G6



Dexcom G7





CGM Comparison

	G6	G7	Libre 2+	Libre 3+	Guardian 4	Eversense 365
Pump Integration	T:Slim X2, Omnipod5, iLet, Mobi	T:Slim X2 iLet, Mobi	T:Slim X2, Omnipod 5	iLet	780G	No
Maximum wear time	10 days	10.5 days	15 days		7 days	365 days
Warm-up time	2 hours	30 min	1 hour		Up to 2 hours	24 hours
Calibrations required	0	0	0		To enter auto mode	After 14 days, Weekly
Water depth	8 feet, 24h	8 feet, 24h	3 feet, 30 min		8 feet, 30 min	3.28 feet, 30 min
Viewing Data	Dexcom Clarity		LibreView		Carelink	Eversense Data Management System

Product user guides: Dexcom G6, Dexcom G7, Libre 2, Libre 3, Medtronic Guardian Connect, Guardian 3, Eversense

CGM Comparison

	G6	G7	Libre 2+ Libre 3+	Guardian 4	Eversense
FDA approved sites	Abdomen (ages2+) Upper buttocks (ages 2-17)	Upper arm (ages 7+) Upper buttocks (ages 2-6)	Upper arm	Upper arm, abdomen Upper buttocks (ages 2-13)	Upper arm
Approved in pregnancy	No	Yes	Yes	No	No
Transmitter	3 months	Disposable	Disposable	Charge weekly	Charge daily
FDA approved ages (years)	≥2	≥2	≥2	≥7	≥18
Drug interactions	Hydroxyurea	Hydroxyurea	Vitamin C	Acetaminophen Hydroxyurea	Tetracycline antibiotics, mannitol

Product user guides: Dexcom G6, Dexcom G7, Libre 2, Libre 3, Medtronic Guardian Connect, Guardian 4, Eversense

Continuous glucose monitoring in pregnant women with type 1 diabetes (CONCEPTT): a multicentre international randomised controlled trial

*Denice S Feig, Lois E Donovan, Rosa Corcoy, Kellie E Murphy, Stephanie A Amiel, Katharine F Hunt, Elizabeth Asztalos, Jon F R Barrett, J Johanna Sanchez, Alberto de Leiva, Moshe Hod, Lois Jovanovic, Erin Keely, Ruth McManus, Eileen K Hutton, Claire L Meek, Zoe A Stewart, Tim Wysocki, Robert O'Brien, Katrina Ruedy, Craig Kollman, George Tomlinson, Helen R Murphy, on behalf of the CONCEPTT Collaborative Group**

△

CGM use in the pregnancy trial:

- Improvement in Hgb A1c
- Increased time in range
- Decreased time above range
- Less glycemic variability
- No increase in hypoglycemia, gestational weight gain or total daily insulin dose
- No difference in hypertensive disorders of pregnancy, cesarean deliveries or preterm deliveries.
- Decrease in LGA neonates
- Decrease in NICU admission lasting >24 hours
- Fewer neonates with hypoglycemia requiring IV treatment
- Reduced total length of stay for the neonate

Outcome: CGM should be offered to all pregnant patients with type 1 diabetes using intensive insulin therapy.

Type 2 Diabetes and CGM: What do we know?

- Preconception Hgb A1c <6.5% to reduce congenital anomalies
- Pregnancy Hgb A1c <6% during pregnancy
- Preconception use of CGM in patients with prediabetes or type 2 diabetes was associated with positive changes in weight and fitness as well as increased TIR1
- No substantive RCTs
- Observational study of CGM vs no CGM: reduced odds of a composite neonatal adverse outcome (preterm birth and NICU admission)2
- Retrospective observational study of CGM vs no CGM: In patients with more than 50% use of CGM, each 1% increase in TIR was associated with a 4-5% reduction in the rates of neonatal complications.3
- Higher TIR during pregnancy is suggested based on expert opinions

1. Bailey KJ, Little JP, Jung ME. Self-monitoring using continuous glucose monitors with real-time feedback improves exercise adherence in individuals with impaired blood glucose: a pilot study. *Diabetes Technol Ther* 2016; **18:** 185–93.
2. Padgett CE, Ye Y, Champion ML, et al. Continuos glucose monitoring for management of type 2 diabetes and perinatal outcomes. *Obstet Gynecol* 2024; **144:** 677–83.
3. McLean A, Barr E, Tabuai G, Murphy HR, Maple-Brown L. Continuous glucose monitoring metrics in high-risk pregnant women with type 2 diabetes. *Diabetes Technol Ther* 2023; **25:** 836–44.

GLAM Study

Can continuous glucose monitoring (CGM) identify specific glycemic patterns early in pregnancy that are associated with a diagnosis of gestational diabetes (GDM) by oral glucose tolerance test (OGTT) at 24-34 weeks' gestation?

Methods

- Observational, nonintervention study in expectant mothers without diabetes enrolled prior to 17 weeks.
- 768 participants were included in the analysis, of which 58 had GDM
- Wore blinded Dexcom G6 CGM throughout gestation
- Main outcome was diagnosis of GDM by OGTT and comparison of participants with GDM vs. without GDM at 24-34 weeks' gestation



Glucose Levels Across Maternity (GLAM) Study

Results

- Participants with GDM had higher mean glucose, more time >120 mg/dL, more time >140 mg/dL, and less time 63-140 mg/dL when compared to participants without GDM.
- Higher glycemic levels in participants with GDM were observed as early as gestational weeks 13-14 (Figure 1).
- CGM derived patterns in early pregnancy can identify individuals with GDM and may provide an opportunity for earlier intervention to mitigate risk

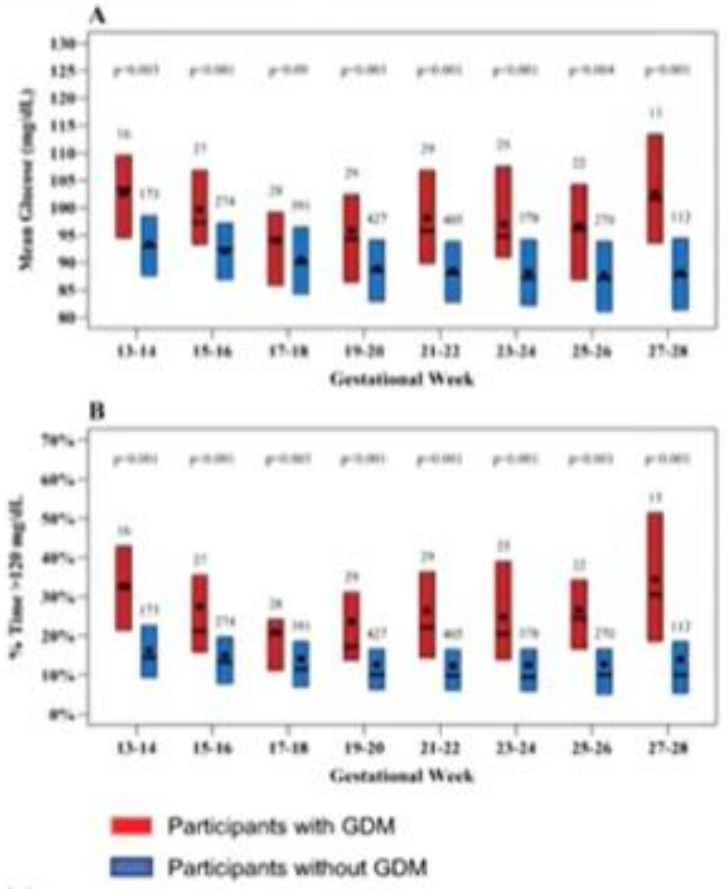
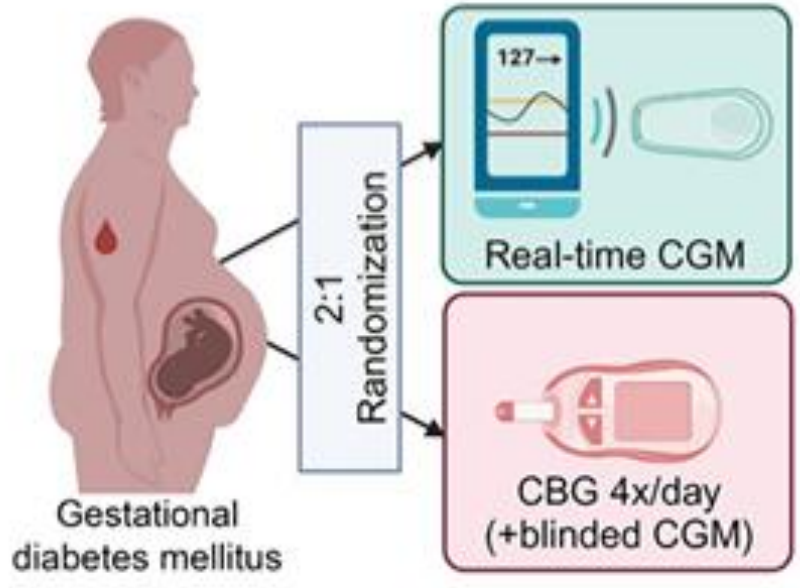


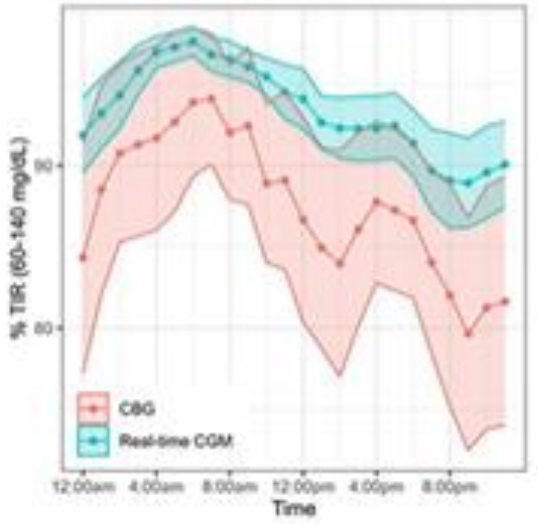
Figure 1 (Right). Boxplots of A) mean glucose and B) % time >120 mg/dL by GDM status and gestational week. Numbers above boxes represent number of participants. Dots in the middle of boxes represent means, lines in the middle of boxes represent medians. Top and bottom of boxes represent the 75th and 25th percentiles, respectively. P-values above each pair of boxes are testing the glycemic difference between participants with GDM vs. without GDM in each 2-week period.

Durnwald C, Beck RW, Li Z, et al. CGM Profiles in Pregnancies With and Without GDM. Diabetes Care. 2024 Aug 1;47(8):1333-1341.

Real-Time Continuous Glucose Monitoring in Pregnancies With Gestational Diabetes Mellitus: A Randomized Controlled Trial

Can pregnant individuals with gestational diabetes mellitus achieve higher study-specific glucose time in range (TIR: 60–140 mg/dL) with real-time continuous glucose monitoring (CGM) compared with capillary blood glucose (CBG) monitoring?

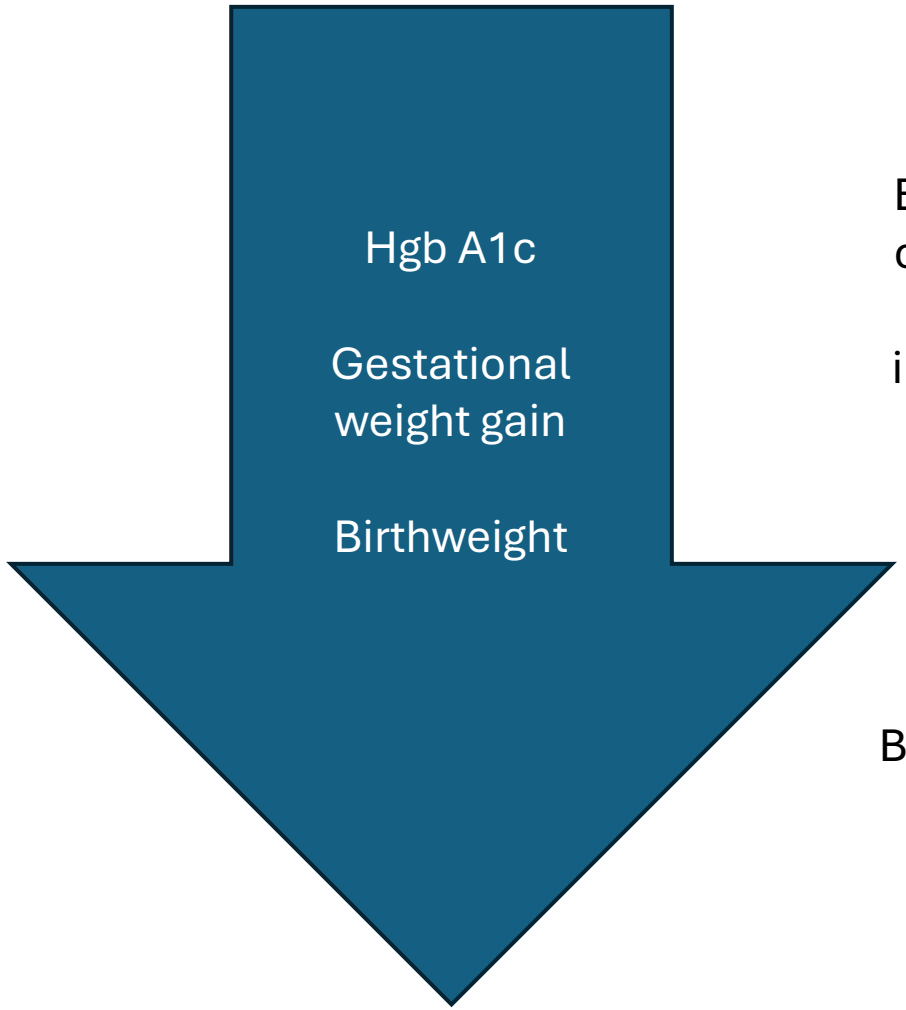




Real-time CGM achieved *greater* percent glucose TIR (93%) compared with CBG (88%) but it is unknown whether CGM use will improve birth outcomes.

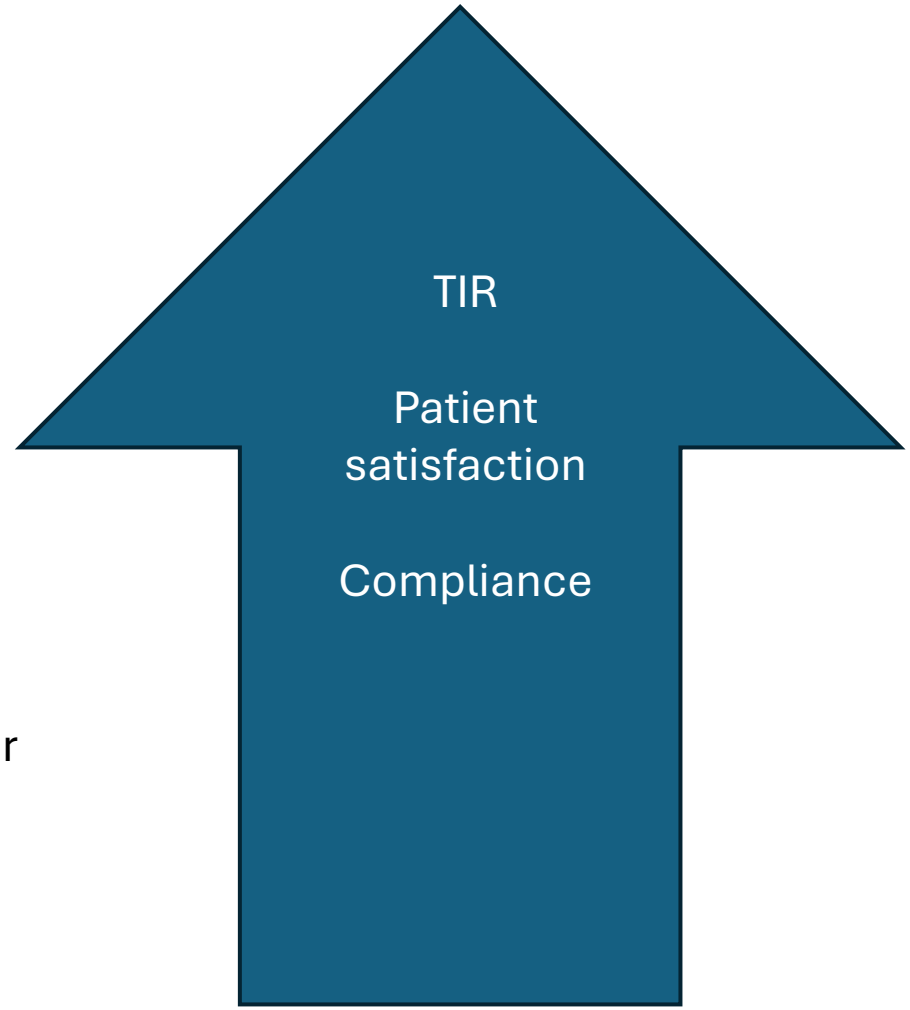
Valent AM, et al. Diabetes Care 2025;48(9):1581–1588 | https://doi.org/10.2337/dc25-0115

Gestational Diabetes and CGM: What do we know?



Based on expert opinion: CGM can be offered to patients with GDM although evidence for improved perinatal outcome is lacking

Based on expert opinion: aim for TIRp >90% and TARp <10%



1. Wang H, Li N, Chivese T, et al, and the IDF Diabetes Atlas Committee Hyperglycaemia in Pregnancy Special Interest Group. IDF diabetes atlas: estimation of global and regional gestational diabetes mellitus prevalence for 2021 by International Association of Diabetes in Pregnancy Study Group's criteria. *Diabetes Res Clin Pract* 2022; **183:** 109050.
2. Raman P, Shepherd E, Dowswell T, Middleton P, Crowther CA. Different methods and settings for glucose monitoring for gestational diabetes during pregnancy. *Cochrane Database Syst Rev* 2017; **10:** CD011069.
3. Garcia-Moreno RM, Benitez-Valderrama P, Barquiel B, et al. Efficacy of continuous glucose monitoring on maternal and neonatal outcomes in gestational diabetes mellitus: a systematic review and meta-analysis of randomized clinical trials. *Diabet Med* 2022; **39:** e14703.
4. Linder T, Dressler-Steinbach I, Wegener S, et al, and the GRACE study collaborative group. Glycaemic control and pregnancy outcomes with real-time continuous glucose monitoring in gestational diabetes (GRACE): an open-label, multicentre, multinational, randomized controlled trial. *Lancet Diabetes Endocrinol* 2025; published online Nov 24. https://oi.org/10.1016/S2213-8587(25)00288-8.
5. Liang X, Fu Y, Lu S, et al. Continuous glucose monitoring-derived glycemic metrics and adverse pregnancy outcomes among women with gestational diabetes: a prospective cohort study.
6. *Lancet Reg Health West Pac* 2023; **39:** 100823.
7. Amylidi-Mohr S, et al. Continuous glucose monitoring in the management of gestational diabetes in Switzerland (DipGluMo): an open-label, single-centre, randomized, controlled trial. *Lancet Diabetes Endocrinol* 2025; **13:** 591–99.
8. Valent AM, et al. Real-time continuous glucose monitoring in pregnancies with gestational diabetes mellitus: a randomized controlled trial. *Diabetes Care* 2025; **48:** 1581–88.

CGM in GDM Practical Considerations

TABLE 2. CGM METRICS: INTERNATIONAL CONSENSUS/ ADA GUIDELINES[31,59] AND EXPERT OPINION

Glucose ranges	*T1D goals[a] Established*	*GDM goals Expert Opinion*
Time above range (>140 mg/dL): %TAR	<25%	<5%
Target in range (63–140 mg/dL): %TIR	>70%	>90%
Time below range (<63 mg/dL): %TBR[a]	<4%	<4%
Time below range (<54 mg/dL): %TBR[b]	<1%	<1%

Recommend CGM to all who are willing and able to safely use this technology

Castorino K, Durnwald C, Ehrenberg S. et al; Continuous Glucose Monitoring for Gestational Diabetes Management Working Group. Practical Considerations for Using Continuous Glucose Monitoring in Patients with Gestational Diabetes Mellitus. J Womens Health (Larchmt). 2024 Oct 8.

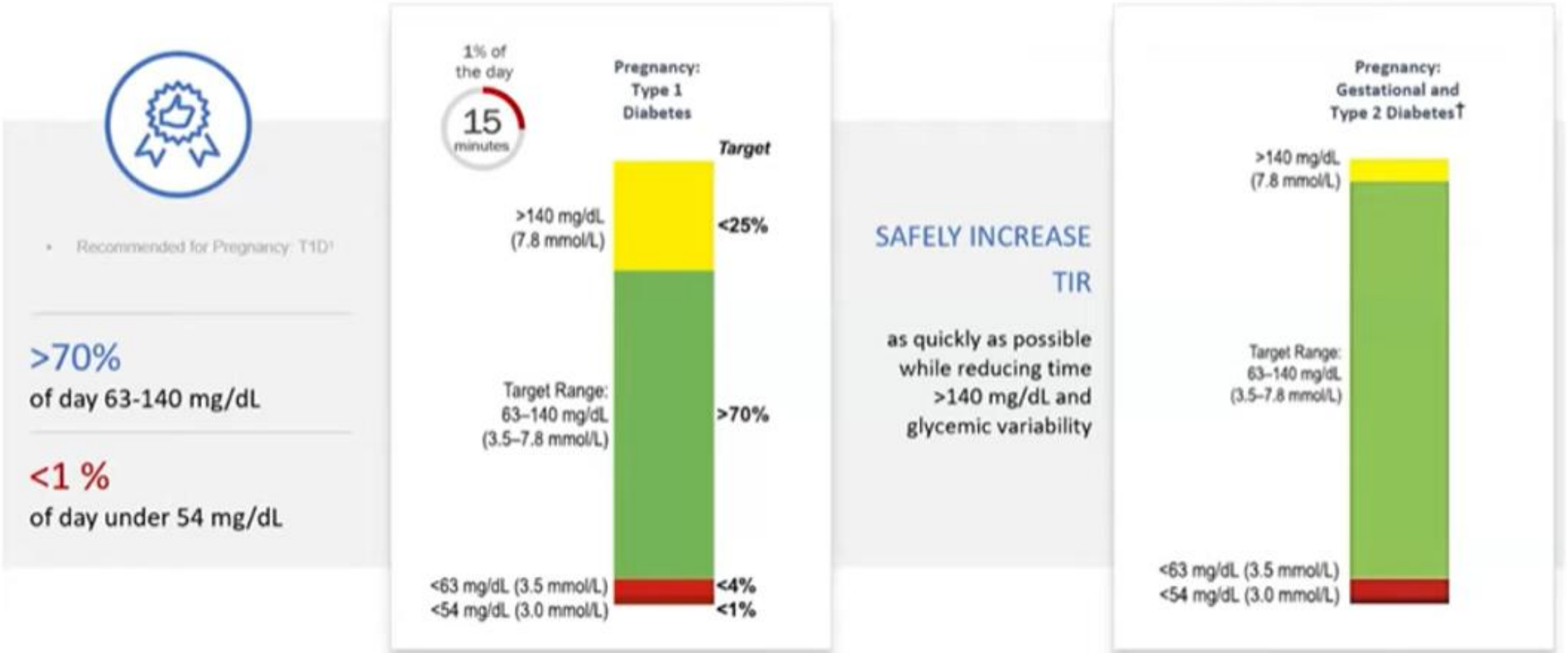
Application of continuous glucose monitoring and automated insulin delivery technologies for pregnant women with type 1, type 2, or gestational diabetes: an international consensus statement

Katrien Benhalima, Celeste Durnwald, Arianne Sweeting, Dawn Adams, Ananta Addala, Tadej Battelino, Richard M Bergenstal, Anders Carlson, Lois E Donovan, Denise Reis Franco, Julie Heverly, Diana Isaacs, Kamlesh Khunti, Anne-Beatrice Kihara, Naomi Levitt, Carol J Levy, Mareda Lewer, Elisabeth Mathiesen, Helen R Murphy, Rimei Nishimura, Sarit Polsky, Uma Ram, David Simmons, Jennifer M Yamamoto, Ádám G Tabák, Denice Feig, Eleanor M Scott



Lancet Diabetes Endocrinol. 2026 Feb;14(2):157-177.

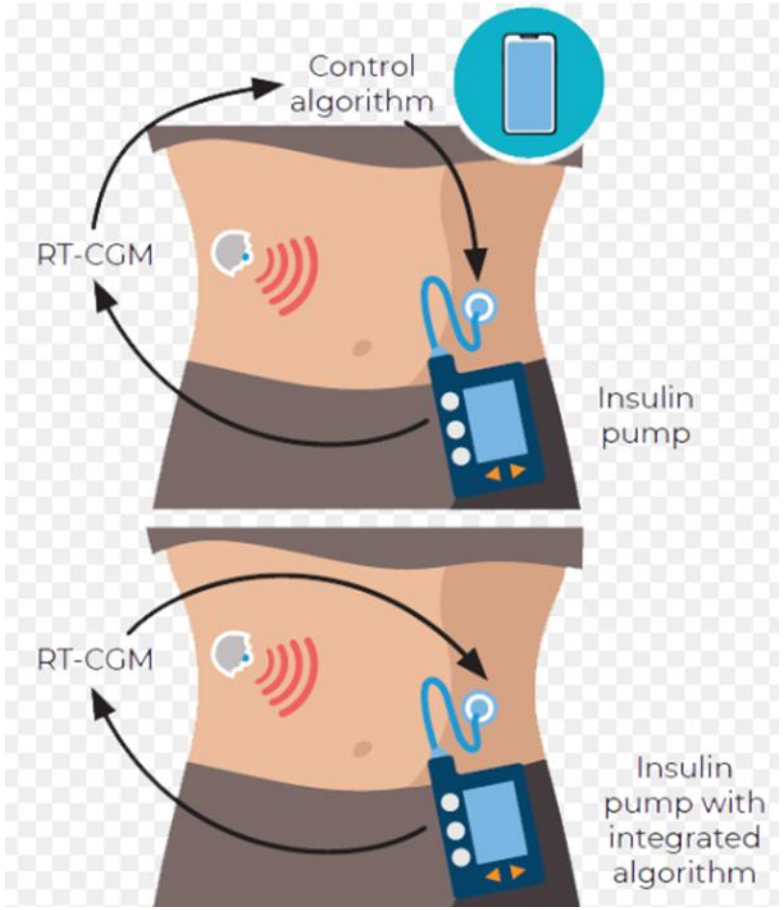
International Consensus on TIR Targets in Pregnancy



Battelino T et al. *Diabetes Care*. 2019:42(8):1593-1603.

Automated Insulin Device (AID)

Use an algorithm, insulin pump and CGM sensor to provide glucose-responsive insulin delivery with use-initiated pre-meal insulin boluses



AID Systems



Omnipod 5
(Insulet)



T:slim X2 (Tandem)
Control IQ+



780G
(MiniMed)



iLet
(Beta Bionics)



Mobi (Tandem)
Control IQ+



Twiist (Sequel)
Tidepool





Tandem Mobi



T:slim x2

Apr. 27, 2026-- Tandem Diabetes Care, Inc., a leading insulin delivery and diabetes technology company, today announced that the United States Food and Drug Administration (FDA) has cleared Control-IQ+ automated insulin delivery (AID) technology for use in pregnancy complicated by type 1 diabetes mellitus. Control-IQ+ powers both insulin delivery systems from Tandem – the t:slim X2 and Tandem Mobi, the first and only commercially available AID systems cleared for use during pregnancy in the United States.

AiDAPT Trial: CamAPS FX

- Algorithm: Cam APS FX
  - Target glucose: As low as **80 and as high as 200 mg/dL**
    - AiDAPT protocol:
      - Randomized, controlled trial with 124 pregnant individuals with T1D prior to 14 weeks gestation
      - Mean Hgb A1c at enrollment 7.7%
      - CamAPS vs standard care (MDI or open-loop CSII with CGM)
      - Early pregnancy (<16-20 weeks): Target=100 mg/dL
      - Late 2nd & 3rd trimesters: Target = 81-90 mg/dL
- Boost and ease off features
- First US AID approved for use during pregnancy in May 2024
- Not actually available in US

Lee TTM, et al. N Engl J Med. 2023;389(17):1566-1578.
Lee TTM, et al. BMC Pregnancy Childbirth. 2022;22(1):282.
https://camdiab.com/

AiDAPT Trial: CamAPS FX

16 weeks until delivery

	CamAPS	Standard Care
TIRp	68.2%	55.6%
Mean Glucose	125 mg/dL	135 mg/dL
>140 mg/dL	29%	41.4%
<63 mg/dL	2.26%	2.02%
TIRp >70%	47%	11%

CRISTAL Trial: Minimed 780G

- Design:
  - Open-label, multicenter (Belgium, Netherlands), RTC, parallel group
- Intervention
  - MiniMed 780G with Guardian 3 or Guardian 4 CGM vs standard care with MDI or open-loop CSII or partial AID and any CGM
  - Recommended initial settings:
    - Glucose target = **100 mg/dL,** Active insulin time = **2 hours**
- Population, n = 95
  - T1D ≥1yr, not on AID pump (could be on sensor-augmented)
  - Mean A1c = **6.5%**; mean TIRp = **59%**; A1c <7% = **~77%**)
  - Median GA at randomization ~10wks
  - MDII (4.1%), CSII (96%) -- sensor-augmented pump (81%)
- Outcome
  - Primary: %TIR at 14–17 weeks', 20–23 weeks', 26–29 weeks', and 33–36 weeks' gestation

Benhalima K, et al. Lancet Diabetes Endocrinol. 2024;12(6):390-403.
Beunen K, et al. BMC Pregnancy Childbirth. 2023;23(1):180.

Medtronic 780G: CRISTAL

16 weeks until delivery

	780G	Standard Care
TIRp	66.5%	63.2%
Mean Glucose	128 mg/dL	126 mg/dL
>140 mg/dL	30.9%	32.8%
<63 mg/dL	2.5%	4.1%
TIRp >70%	21.7%	14.3%

	780G	Standard Care
Pre-eclampsia	9.5%	4.3%
LGA neonate	55.8%	67.4%
Preterm delivery	27.9%	19.6%
NICU admission	33.3%	24.4%

CIRCUIT Trial: Control IQ



- Closed-Loop Insulin Delivery in T1D in Pregnancy
- Design & Setting: Multicenter open-label RCT, 14 sites in Canada and Australia
- Tandem t:slim X2 with Control IQ vs standard care (MDI or open-loop CSII with CGM)
- Enrollment: June 2021 – March 2025
- Participants: 91 women (< 14 weeks' gestation) randomized to original therapy or Control IQ
  - Standard group: 47.7% MDI, 52.3% open-loop pump
- Mean Hgb A1c 7.4% at enrollment
- Primary Outcome: %TIRp (63–140 mg/dL) from 16–34 weeks' gestation
- Methods recommended:
  - Sleep mode all day
  - After 20 weeks gestation program basal rates 20% higher than average delivery from previous 1-2 weeks
  - Correction factor to at least 1620/TDD from previous 1-2 weeks
  - 6 participants used U200 (off label use in pump)

Donovan LE, et al. JAMA. 2025 Oct 24:e2519578. doi: 10.1001/jama.2025.19578.

Tandem: CIRCUIT

16-34 weeks gestation/*16 weeks-end of pregnancy

	Tandem	Standard Care
TIRp	65.4%	50.3%
Mean Glucose	131.3 mg/dL	148.4 mg/dL
>140 mg/dL	33.3%	47.6%
<63 mg/dL	1.3%	2.1%
TIRp >70%	40.9%	4.6%
	Tandem	**Standard Care**
Hypertensive disorders of pregnancy	29.5%	36.4%
LGA neonate	54.5%	61.4%
Preterm delivery	27.3%	29.5%
NICU admission	31.8%	27.3%

Conclusion:

Closed-loop insulin improved maternal glycemia by 3 extra hours/day in target range without increased hypoglycemia, supporting its use during pregnancy for T1D

AID System Comparison

	Omnipod 5	Control IQ+	780G	iLet	Twiist
Max fill	200 units	300 units (T:Slim X2) 200 units (Mobi)	300 units	180 units	300 units
CGM compatibility	Dexcom G6, G7, Libre 2+	Dexcom G6, G7, Libre 2+, Libre 3+	Guardian, Simplera Sync, Instinct	Dexcom G6, G7, Libre 3+	Libre 3+
Lowest algorithm target/range	110mg/dL 100mg/dL (coming soon)	112.5-120mg/dL	100mg/dL	110mg/dL	87mg/dL 67mg/dL (pre-meal preset)
Basal automation	Calculated from total daily insulin, updated each pod change, 60 min prediction	Increases or decreases from **programmed basal rates**, 30 min prediction	Calculated based on total daily insulin from past 2-6 days	Initiated based on user weight and adapts with glucose profile	Increases or decreased from **programmed basal rates**, 6 hour prediction
Automated correction bolus	No	1/hour if glucose predicted >180mg/dL, 60% of calculated dose	If glucose > 120 mg/dL and at max "auto basal" delivery, up to every 5 min	Yes	No
Extended Bolus	No	Yes, up to 8 hours	No	No	No, carb absorption time up to 8 hours
Temp Basals	No	Yes	No	No	No

ICR: insulin to carbohydrate ratio, IAT: insulin action time, ISF: insulin sensitivity factor, NA: not available
Data obtained from user manuals

AID System Comparison

	Omnipod 5	Control IQ+	780G	iLet	Twiist
Max fill	200 units	300 units (T:Slim X2) 200 units (Mobi)	300 units	180 units	300 units
CGM compatibility	Dexcom G6, G7, Libre 2+	Dexcom G6, G7, Libre 2+, Libre 3+	Guardian, Simplera Sync, Instinct	Dexcom G6, G7, Libre 3+	Libre 3+
Lowest algorithm target/range	110mg/dL 100mg/dL (coming soon)	112.5-120mg/dL	100mg/dL	110mg/dL	87mg/dL 67mg/dL (pre-meal preset)
Basal automation	Calculated from total daily insulin, updated each pod change, 60 min prediction	Increases or decreases from **programmed basal rates**, 30 min prediction	Calculated based on total daily insulin from past 2-6 days	Initiated based on user weight and adapts with glucose profile	Increases or decreased from **programmed basal rates**, 6 hour prediction
Automated correction bolus	No	1/hour if glucose predicted >180mg/dL, 60% of calculated dose	If glucose > 120 mg/dL and at max "auto basal" delivery, up to every 5 min	Yes	No
Extended Bolus	No	Yes, up to 8 hours	No	No	No, carb absorption time up to 8 hours
Temp Basals	No	Yes	No	No	No

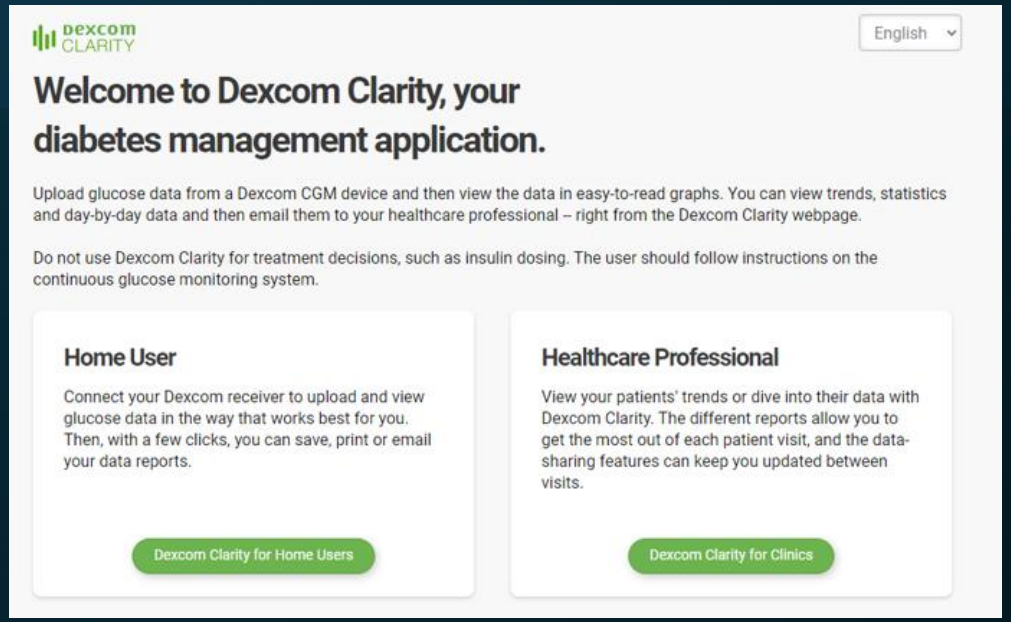
ICR: insulin to carbohydrate ratio, IAT: insulin action time, ISF: insulin sensitivity factor, NA: not available
Data obtained from user manuals

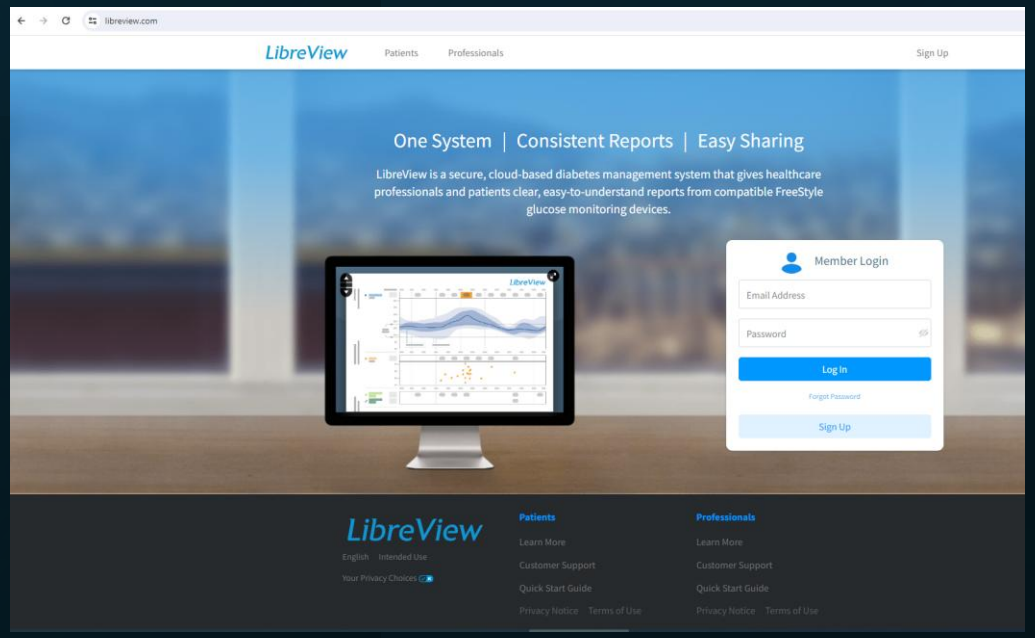
Summary

- Most AID systems are not designed for pregnancy, however they often provide better outcomes compared to standard care (MDI or manual pump).

- Setting optimization in pregnancy includes using lowest possible glucose target and intensifying carbohydrate ratios; depending on the system, also increasing basals, shorten insulin action time and intensify correction factors.

Connecting with Care Providers





Connected Technology

Review Flowsheets

Select a Flowsheet

Enter a flowsheet name | Add | Diabetes in Pregnancy M… ×

Dates in: Columns Rows | Newest data on the: Left Right | Group data by: Dates Times | Copy | Graph Region | Load More | Legend

Diabetes in Pregnancy Monitoring Care Companion	4/19/2026	4/18/2026	4/17/2026	4/16/2026	4/15/2026	4/14/2026	4/13/2026	4/12/2026	4/11/2026	4/10/2026
Fasting	103	98	102	101	119	98	101	128	124	117
After BF	159	177	115		143	133		147	151	126
Comment		I went for a 15 minute walk after breakfast and it was still high …		I was at a doctors appointment appointment so I didn't get my breakfast			Was at OB didn't take sugar at breakfast			
After Lun		105	192	121	102	117	169	123	113	95
Comment	Forgot to take lunch glucose		I had carbs							
After Din	119	127	125	140	135	144	92		142	153
Comment								Forgot to take		
Bedtime			125							
Dose	22 units	22 units	22 units	22 units						
Update Day										

Progress Notes

Diabetes in Pregnancy Monitoring MFM Recommendations

ll is a 25 year old, G2P1001, GA 33w0d with Gestational Diabetes.

Management: Medication controlled

NPH 22 units at bedtime

Type	Low	High	% of the last 7 days that were over goal
Fasting	98	119	100%
!After BF	115	177	60%
!2H After BF			%
!Before Lunch			%
!After Lunch	102	192	33.3%
!2H After Lunch			%
!Before Dinner			%
After Dinner	92	144	28.6%
!2H After Dinner			%
!Bedtime	125	125	100%

*Values are calculated from the past 7 days starting yesterday.
! Indicates data missing from at least one of the days.

Diabetes in Pregnancy Monitoring Care Companion	4/19/2026	4/18/2026	4/17/2026	4/16/2026	4/15/2026	4/14/2026	4/13/2026
Fasting	103	98	102	101	119	98	101
After BF	159	177	115		143	133	
Comment		I went for a 15 minute walk after breakfast and it was still high after		I was at a doctors appointment appointment so I didn't get my breakfast			Was at OB didn't take sugar at breakfast
After Lun		105	192	121	102	117	169
Comment	Forgot to take lunch glucose		I had carbs				
After Din	119	127	125	140	135	144	92
Bedtime			125				
Dose	22 units	22 units	22 units	22 units			

Maternal Fetal Medicine Recommendations: Chart sent to Ehrenberg for review.

Progress Notes — Lamb, Judith, RN (Registered Nurse)

Diabetes in Pregnancy Monitoring MFM Recommendations

I is a 38 year old, G6P1222, GA 32w5d with Type 2 Diabetes.

Management: Medication controlled

Tresiba 100 units in the AM
Lispro 60 units before breakfast
Lispro 80 units before lunch
Lispro 80 units before dinner
Tresiba 100 units at bed
Metformin 500mg BID (4/17)



Maternal Fetal Medicine Recommendations: Sent to Dr Ehrenberg for review

Judith Lamb, RN
April 20, 2026 9:25 AM

ADA Standards of Care 2026

Insulin is the preferred treatment for diabetes in pregnancy (T1D, T2D, GDM)

CGM can help to achieve glycemic goals (e.g., TIR, TAR) and A1C goal in T1D and pregnancy and may be beneficial for other types of diabetes in pregnancy

AID systems with pregnancy-specific glucose targets are recommended for pregnant individuals with T1D

AID systems without pregnancy specific glucose targets or a pregnancy specific algorithm **may be considered** for select pregnant individuals with T1D when used with **assistive techniques** and working with experienced health care teams

Recommend CGM to pregnant individuals with T1D. In conjunction with aims to achieve traditional pre- and postprandial glycemic goals, CGM can reduce the risk for LGA infants and neonatal hypoglycemia in pregnancy complicated by T1D.

Where are we heading???

- Determining the CGM data that will predict pregnancy outcomes
- Optimal timing and metrics to diagnose GDM with CGM
- More data regarding AIDs for type 1 diabetes in pregnancy and potentially type 2 diabetes during pregnancy

Thank you!!