

DIGITAL DIABETES CARE

*Virtual pathways to improved employee health, productivity & safety
with data-driven disease management*

Employee Health Plan Policy Discussion Paper for Advisors, Consultants, Insurers & Sponsors

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1. THE BURDEN OF DIABETES IN THE WORKPLACE

Variable Glucose = Poorly controlled Diabetes

Too high = Hyperglycemia Too low = Hypoglycemia

Major driver of challenges with employee productivity, disability and workplace safety¹⁻⁷

- Injury & workplace accidents
 - Absenteeism
 - Presenteeism
- Short-Term & Long-Term Disability
- Avoidable health plan spending

Effective glucose management is essential

But current intermittent, cumbersome & siloed glucose monitoring approaches fall well short

- Painful, pinprick (repeatedly)
- Poor self-monitoring adherence
- Nocturnal and asymptomatic events go undetected
 - Can't interpret the data
- Doesn't provide proactive insights to predict & mobilize behavior, or prevent low glucose

TIP

We can impact these diabetes outcomes by integrating real-time glucose data within virtual care strategies to enable data-driven patient self-management

2. SIX REASONS WHY DIABETES IS THE IDEAL TARGET FOR DIGITAL / VIRTUAL CARE

1. Well-established biomarker ("gold standard") of disease control: GLUCOSE
2. Body-worn sensors for glucose monitoring can now continuously collect, digitize, interpret & integrate glucose data in real-time into remote virtual care & self-management environments
3. Effective diabetes management requires continuous consistent monitoring *and* engagement [24/7]
 - a. A person living with diabetes spends 168 hours per week managing their disease⁸
 - b. A 1-hr visit to their physician every 3 months means professional assistance with diabetes only 0.05% of the time⁸
4. Traditional clinical resource capacity can't meet these access demands...*in-person*
5. Diabetes confers 3-fold increased risk of severe COVID-19 outcomes (hospitalization, ICU admission, intubation or death)⁹, making in-person visits no longer ideal
6. Real-time data-driven individualized diabetes care improves outcomes & reduces cost

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3. CONTINUOUS GLUCOSE MONITORING TECHNOLOGY OPTIONS: DIFFERENT REAL-WORLD APPLICATIONS

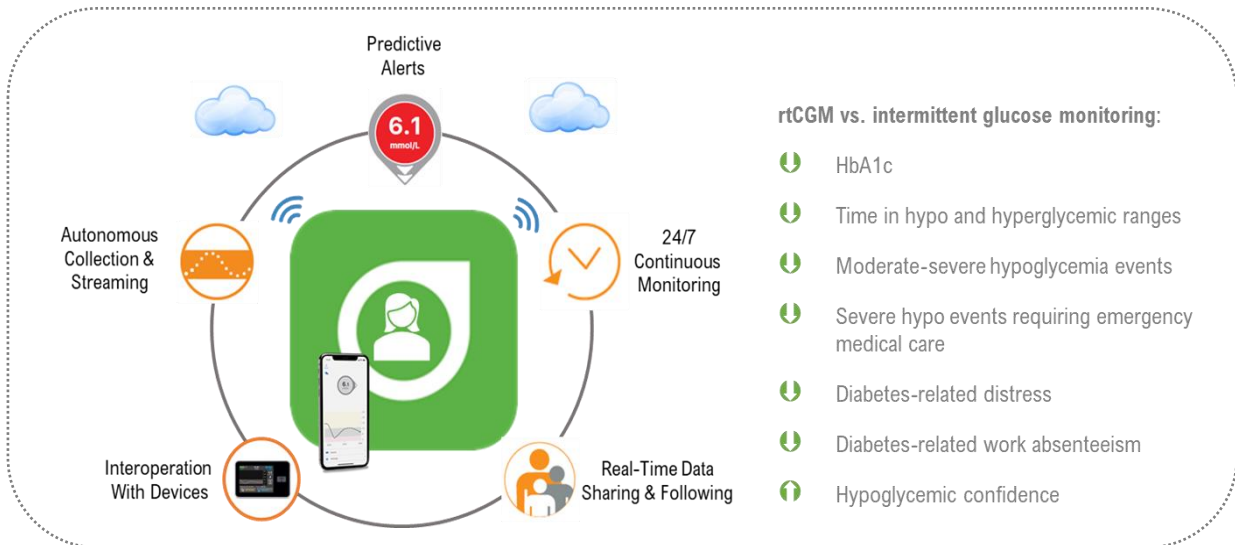
Glucose Sensor Technology Specs ¹⁰⁻¹⁵	rtCGM	isCGM / FGM
Continuity of Data Flow	Real-Time Autonomous	Intermittent User Scan
Replacement of manual SMBG fingersticks	☑ ^A	☑ ^B
Display & Share ▶ Current reading, trend arrow, historical patterns and reports	☑	☑
Remote Monitoring ▶ Continuous real-time autonomous data streaming [users & followers]	☑	☐
Intelligent-software driven <u>predictive</u> alerts & proactive prompts	☑	☐
Integration and interoperability with diabetes software & devices [e.g., insulin pump]	☑	☐

A. If glucose alerts and readings from the Dexcom G6 do not match symptoms or expectations, use a blood glucose meter to make diabetes treatment decisions.
B. A finger prick test using a blood glucose meter is required during times of rapidly changing glucose levels when interstitial fluid glucose levels may not accurately reflect blood glucose levels or if hypoglycemia or impending hypoglycemia is reported by the FreeStyle LibreLink app or when symptoms do not match the app readings. For a complete glycemic picture, scan once every 8 hours.

TIP

"Big glucose data" from real-time Continuous Glucose Monitoring is the ideal foundation for data-driven, personalized virtual diabetes care

4. REAL-TIME CONTINUOUS GLUCOSE MONITORING [rtCGM] TECHNOLOGY



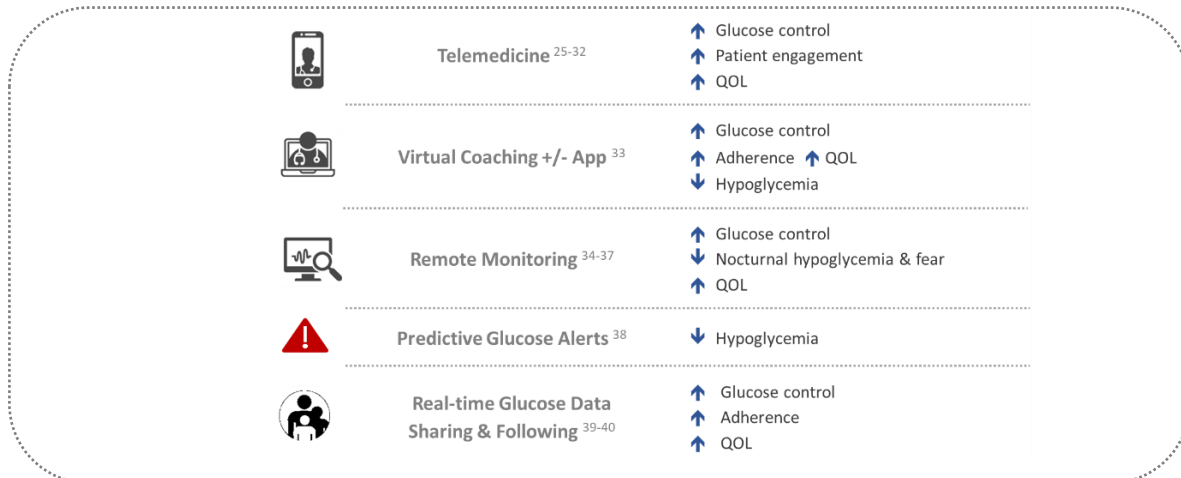
TIP

rtCGM is integrated glucose monitoring technology, with its own diabetes data "ecosystem", and proven stand-alone health benefits for insulin-requiring diabetes ^{12, 16-24}

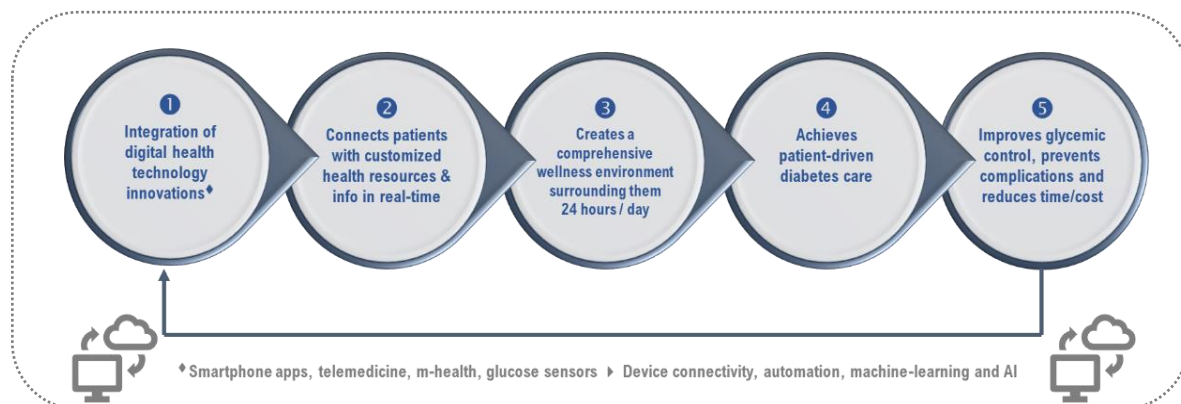
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5. OTHER STAND ALONE DIGITAL / VIRTUAL CARE DIABETES INTERVENTIONS



6. DESIGNING DIABETES CARE OF THE FUTURE IN THE TECHNOLOGY ERA⁴¹: THE POWER IS INTEGRATION



7. THE FUTURE IS NOW ▶ ESTABLISHING VIRTUAL DIABETES CLINICS⁴²: DIABETES CARE TEAM PERSPECTIVE

SETTING UP THE DIGITAL DIABETES ECOSYSTEM 1-2-3

1. Integrate health technologies - connected medical devices, clinical decision support software, **remote coaching** programs and **data analytics** - to create a virtual diabetes clinic [VDC]
2. Establish reporting of **glucose data via cloud-based technology**, combined with **telehealth** (e.g., phone, text, video) to support patient engagement
3. Leverage seamless **sharing of real-time diabetes data** to monitor health status, facilitate diagnosis, coach & adjust treatment promptly

WILL REMOVE BARRIERS & IMPROVE OUTCOMES

Impact of virtual interactions via **smartphone** with connected technology enabling **remote monitoring & counseling**...

- ✓ Monitor & expand health system capacity
- ✓ Increase access
- ✓ Minimize unnecessary face-to-face clinic visits
- ✓ Address therapeutic inertia
- ✓ Improve glycemic control & treatment satisfaction
- ✓ Lower costs

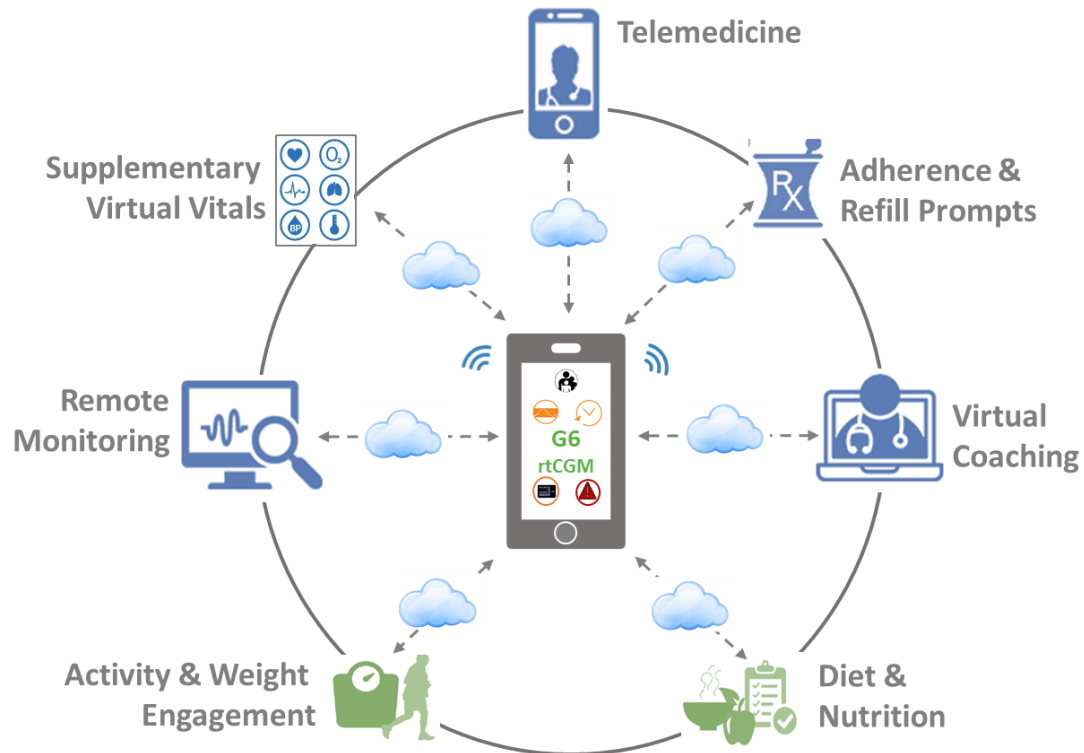
TIP

"Telemedicine technologies have now proven to be best option and, in many cases, only option for providing critical (diabetes) care as COVID-19 runs its course" ...and beyond

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8. BRINGING IT ALL TOGETHER ► VIRTUAL DIABETES CARE FOR EMPLOYEES



TIP

Unprecedented Opportunity for Plan Sponsors to Drive Diabetes Engagement & Outcomes by Integrating Real-Time Glucose Monitoring with Health Plan Offerings

9. CANADIANS ARE READY...NOW ⁴³⁻⁴⁶

	<p>February 2020</p> <ul style="list-style-type: none"> Workers see digital health solutions as having a clear role in personalized health care Employers believe digital health solutions will help advance their objectives for health & well-being programs Workers & employers highly rate the value of wearable technology for self-managing health conditions like diabetes [i.e., rtCGM], equally to telemedicine and more than virtual mental health counseling
	<p>May 2020</p> <ul style="list-style-type: none"> Almost half of Canadians accessed a physician virtually during COVID-19, with a 91% satisfaction rate 46% who used virtual care since COVID-19 would "prefer virtual method" as 1st point of contact with their doctor
	<p>June 2020</p> <ul style="list-style-type: none"> About half of respondents had virtual medical visits since pandemic started, which they "overwhelmingly" enjoyed Most would prefer more virtual visits in future, even after COVID ends
	<p>November 2020</p> <ul style="list-style-type: none"> Virtual care in Canada: 10-20% primary care visits in 2019 → 60% in March and April 2020 91% who received virtual care during the COVID-19 were "satisfied with the experience" Users of health tech: ✓ 90% saved time ✓ 80% better able to manage health ✓ 53% avoided in-person visit 90% want technology that puts them "in greater control of their health"

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10. CONCLUSIONS

1. Poorly controlled diabetes is a major health, productivity & safety risk for employees & organizations in Canada.
2. Improving diabetes outcomes will require a multifaceted approach, including more effective data-driven glucose management strategies, with advanced glucose sensor technology, integrated remote monitoring and virtual clinical care.
 - ⦿ This is especially true for patients requiring insulin, vulnerable to glycemic variability
3. Real-time continuous glucose monitoring [rtCGM] technology has the clinical evidence, pivotal technical specifications, and real-time cloud-based data ecosystem to anchor comprehensive digital diabetes care.
4. COVID-19 has accelerated the need, adoption & acceptability of health technology & virtual care among Canadians.
 - ⦿ This health innovation stream is uniquely applicable and fundamental to diabetes care, and a shining example of how technological advancements can improve the lives of patients living with chronic illnesses.

11. RECOMMENDATIONS

1. Public & private payers should prioritize appropriate patient access to real-time continuous glucose monitoring [rtCGM] technology, as a cornerstone investment into digital diabetes care strategies
 - ⦿ Patients requiring insulin to manage their diabetes → Automatic rtCGM coverage requirement
 - ⦿ Don't forget about patients with Type 2 diabetes treated with insulin
2. Health Insurers & Employers should leverage opportunities to integrate the rtCGM data ecosystem into other programs & services within their Health Plans to fully engage employees and improve outcomes
 - ⦿ Chronic Disease Management ⦿ Health Coaching ⦿ Telemedicine ⦿ Virtual Care
 - ⦿ Absence / Disability Case Management ⦿ Occupational Health & Safety Protocols
 - ⦿ Remote Monitoring ⦿ Mobile Apps
3. Stakeholders should seek-out like-minded partnerships to accelerate the adoption of data-driven virtual diabetes care in Canada.

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- ① Transition rtCGM coverage from Extended Health Care to Pharmacy Benefit status
- 12. OPERATIONALIZING MEMBER ACCESS & ENGAGEMENT**
- ② Automate prior authorization at point-of-sale for plan members on insulin

- ③ Integrate & leverage real-time glucose monitoring technology within other employee diabetes management strategies & health plan programs

- ✓ Telemedicine & virtual care
- ✓ Remote monitoring
- ✓ Health coaching
- ✓ Case management & EAP
- ✓ Occupational health & safety standards
- ✓ Pharmacy services & PPN interventions
- ✓ Mobile apps & digital health marketplaces



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