

# Reduce Diabetes Management Spend and Improve Outcomes by Building an Effective CGM Strategy

## The New Glucose Monitoring Standard

Monitoring glucose levels is crucial for people with diabetes. With proper data, people with diabetes are able to see how their medications, nutrition, sleep, exercise, and more impact their glucose levels which in turn allows them to change their behaviors in order to improve their glucose control efforts. In recent years, continuous glucose monitoring (CGM) technology has advanced significantly, providing less invasive and more convenient alternatives to traditional fingerstick and blood draw methods.

To help people living with diabetes reach their goals, the American Association for Clinical Endocrinology ([AACE](#)) [recommends](#) CGMs be offered to all members with diabetes earlier in their diagnosis. The most effective CGM is one that aligns with an individual's health needs, circumstances, and their health care provider's recommendations.

## Prevalence of Diabetes

In 2021, there were over [38.4 million Americans](#), 11.6% of the population, living with diabetes. Diabetes has become [the fastest growing, most expensive chronic disease](#) in the world with an additional [1.2 million](#) Americans being newly diagnosed every year. The costs of diabetes in the U.S. is [\\$412.9 billion](#), including \$306.6 billion in direct medical and \$106.3 billion in indirect costs which include reduced employment due to disability (\$28.3 billion), presenteeism (\$35.8 billion), and lost productivity due to premature deaths (\$32.4 billion). Care for those diagnosed with diabetes accounts for [1 in 4 U. S. health care](#) dollars, and employers are footing the bill.

## The Problem

Member access to the preferred or most effective CGM may be hindered by:

- Exclusion of a specific CGM in favor of a CGM connected to a rebate.
- Use of step therapy or prior authorizations.
- Other benefit design factors like pharmacy tier placement, copays and coinsurance.

## The Solution

Removing unnecessary barriers and designing a health plan strategy based on standards of care will allow employers to reduce costs and improve the quality of life for members with diabetes.

## LOOK FOR THIS ICON



This Action Brief provides information for employers about the advantages of using digital glucose monitors (CGMs) and the importance of offering all brands of CGMs equally in order to meet the recommendations of the American Diabetes Association and the American Association of Clinical Endocrinology. As you review the Action Brief look for this icon, which highlights quotes from health benefits professionals.

## Quick view: Employer Action Steps

1. Analyze data to better understand the business impact of diabetes.
2. Design medical, pharmacy, and/or diabetes management programs to support members with diabetes and include equitable coverage of all CGMs.
3. Work with partners such as carriers, TPAs, PBMs, providers, navigators, and point solution providers to identify, communicate with, and support members with diabetes.

[See page 6](#) for a full set of action steps.

[Click here](#) for a PDF of the action steps.

## Diabetes Types

**Type 1 diabetes** (T1D) is an autoimmune condition where the body's immune system mistakenly attacks and destroys insulin-producing beta cells in the pancreas.

**Type 2 diabetes** (T2D) is a metabolic disorder where the body either doesn't produce enough insulin or becomes resistant to insulin's effects.

### Use Person-First & Destigmatizing Language

The [CDC's Health Equity Principles](#) emphasize the importance of **inclusive and respectful communication**. When it comes to describing someone with diabetes, these principles advocate for using **person-first language**. This means putting the person before the condition, such as saying "a person with diabetes" instead of "a diabetic".

Use person-first language to destigmatize the disease.



## Health Equity

Health equity in diabetes is a critical issue for employers. Racial and ethnic minority groups, as well as individuals with lower socioeconomic status, face [disproportionately higher rates of diabetes](#) and its complications. For example, Black Americans are 75% and Hispanic individuals are 70% more likely to have a diagnosis of diabetes compared to [White Americans](#). The prevalence of diagnosed diabetes is 12.1%, 11.7%, and 6.9% for Black, Hispanic, and White Americans, respectively.

## Impact to Employees

Diabetes can have several impacts on an employee's work life and overall well-being, including:

- **Time Spent on Self-Care:** People with T2D, spend 234 minutes a day on self-care and those with T1D spend 305 minutes.
- **Economic Burden:** The cost of managing diabetes, including medications, medical appointments, and potential hospitalizations, can be a financial strain on employees. Health care costs are [2.6 times higher](#) for a person with diabetes compared to those without diabetes.
- **Discrimination and Stigma:** Employees with diabetes may face discrimination and stigma which can affect mental health and job satisfaction. Many with diabetes experience [anxiety](#), depression, hopelessness, frustration, and burnout.

Addressing these challenges requires access to appropriate health care and effective diabetes management programs.

*"CGMs may be initially more expensive to cover but they come with better data, outcomes and adherence. In the long run, it's the right thing to do both financially and for our members."*



*Benefits Leader*

## Impact to Employers

The economic impact of diabetes includes increased health care costs, lower worker productivity and higher costs associated with worker limitations.

- **Health Care Costs:** Employers will face higher health care costs and productivity losses due to diabetes-related absenteeism and presenteeism. People with diabetes incur an additional [\\$12,022](#) in medical expenses annually.
- **Health-Related Absenteeism:** Employees with diabetes may experience more frequent health-related absences due to complications such as high or low blood sugar levels, infections, and other diabetes-related conditions. On average, employees with T2D diabetes miss [4.2 more workdays](#) per year compared to employees without diabetes.
- **Presenteeism:** While at work, employees with diabetes may not be fully productive due to managing their condition, dealing with symptoms, or feeling unwell. This can lead to reduced efficiency and effectiveness on the job.
- **Work Limitations:** Diabetes can lead to physical and mental health challenges that limit an employee's ability to perform certain tasks. This might include restrictions on heavy lifting, prolonged standing, or tasks requiring high levels of concentration.

Employers can play a crucial role in creating a more inclusive and accommodating workplace for employees with diabetes. They can reduce the total cost of care by designing benefit plans to promote early detection and provide access to the most cost-effective treatment options to manage diabetes.

In one study, hospitalizations were reduced by [66%](#) and work absenteeism by [58%](#). In fact, patients who switched from traditional blood glucose fingerstick tests to a CGM saw an average 0.6% A1c reduction compared to those who switched from a CGM back to traditional blood glucose fingerstick test (0.2% A1c reduction).



## Diabetes Treatments

- **Multiple Daily Injections (MDI):** (T1D or T2D) – Therapy involving long-acting insulin injections once or twice a day accompanied by additional injections of fast acting insulin at mealtime.
- **Basal Insulin Using Patients (T2 Basal):** (T2D) - Involves injecting long-acting insulin once or twice a day.
- **Non-Insulin Using Patients (Non-IUP):** (T2D) In some cases, T2D is treated without insulin using lifestyle changes alone or together with prescription oral medication(s), injectable GLP-1s, or weight loss surgery.

For both type 1 and 2 diabetes, maintaining a healthy glucose level is important. One of the most important things people with diabetes can do is [monitor glucose levels regularly](#) to manage the condition effectively using finger sticks or continuous glucose monitors.

[Blood glucose control](#), particularly in the early stages of T2D, increases the probability of disease remission and helps keep treatment costs down. Effective glucose management can reduce the risk of eye, kidney and nerve disease by [40%](#).

### Over the Counter CGMs

There are many digital health companies that leverage CGM-gathered glucose data as part of their pre-diabetes and metabolic health programs. There are now CGMs available over the counter for non-insulin users and those without diabetes. However, they have no alerts for hyper/hypoglycemia, provide less data, are not approved for treatment decisions, and can't integrate with electronic medical records.

## Methods of Monitoring Blood Glucose Levels

### 1. Finger-Stick Tests (Glucometers)

#### Advantages:

- Accuracy: Provides precise blood glucose readings when needed.
- Cost: Generally, less expensive upfront compared to CGMs.
- Familiarity: Widely used and understood method with well-established protocols.

#### Disadvantages:

- Invasiveness: Requires frequent pricking of fingers (as many as 10 per day), which can be painful and lead to calluses or infections. May lead to lack of adherence and barriers to monitoring. Only [one out of three](#) patients stay adherent because fingersticks can be painful, data is incomplete, social stigma exists, and results may be difficult to interpret.
- Limited Data: Provides a snapshot of blood glucose levels at a moment in time, missing trends and fluctuations.
- [Sensitive to](#) blood oxygen levels, external temperature/humidity, and interfering substances including but not limited to vitamin C and acetaminophen.
- Requires transport of additional supplies such as a reader, lancet strips and alcohol wipes, making on-the-go outings more cumbersome.
- Manual Tracking: Users must manually log results, which can be inconvenient and prone to errors.
- Compliance tends to be low (as low as 26%) due to factors including fear of needles, fingerstick pain, dexterity issues, inconvenience, lack of motivation and issues with device calibration.



### 2. Continuous Glucose Monitors (CGMs)

#### Advantages:

- Provides real-time data on glucose levels, including trends and patterns throughout the day and night. Can help the user and their providers understand the impact of medications, foods, and activity. [Ninety-five percent](#) of users in a recent study report they understand their glucose fluctuations better.
- Produces a surrogate A1c known as glucose management indicator ([GMI](#)) that can be used for clinical decision making without the need for a blood draw at a lab.
- Reduces the need for frequent finger pricks, as sensors are worn on the body.
- Alerts users to high or low glucose levels and provides actionable insights to improve management (this feature may not be available in all CGMs).
- Integrates with smartphones and insulin pumps, [enhancing diabetes management](#) through connected devices.
- [Significantly Improves](#) HbA1c for people with diabetes and gives caretakers/providers/point solutions/patients access to data.
- Lowers hypoglycemic episodes as reported by [77% of users](#) in a recent study.
- Eases the management of meal-time glucose according to [92%](#) of users in a recent study.

#### Disadvantages:

- Cost: Higher initial and ongoing costs compared to traditional glucometers.
- Sensor Issues: Sensors can sometimes be uncomfortable, cause skin irritation, or become dislodged.
- Wear: Devices must be worn on the body.
- Technical Challenges: Requires the user to understand and manage technology which can involve a learning curve for some users.



Ultimately, **the choice between fingerstick glucose meters and CGMs depends on individual needs, preferences, and circumstances.** Some people may benefit from the continuous data and cost-effectiveness of CGMs. Consulting with a health care provider can help determine the best approach for managing diabetes.



## A Tale of Two Individuals with Similar HbA1c Levels

Gabriella and Peter are two people living with T2D who both treat with Metformin, a GLP-1 and basal insulin. Gabriella wears a personal CGM to monitor her blood glucose while Peter monitors his with a fingerstick glucose meter.

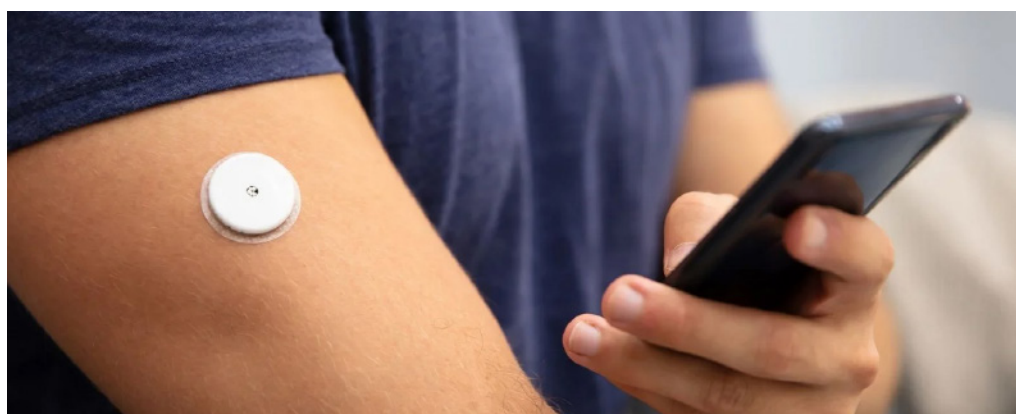
Since both have an HbA1c of 7.7%, it appears their T2D is effectively managed. However, because Gabriella's CGM supplies her with 1,440 data points compared to Peter's 3 - 4 daily data points, she

and her provider know her blood glucose varies only a minor amount even when she sleeps. What Peter does not know is that his blood glucose has multiple periods of high variability throughout the day and night. When Peter takes a reading, he is not aware if his blood glucose is on its way up or down and he does not get readings while asleep. Without this knowledge, Peter is not able to take proactive action and as a result, his time-in-range is

not as consistent as Gabriella's. Spending time in range for longer periods of time impacts damage to the eyes and kidneys. In fact, every 10% decrease in time-in-range increases the occurrence of eye damage by 64% and kidney damage by 40%.



*"I have a member who switched to a CGM and they haven't had an episode since."*  
Benefits Leader



Only 34% to 60% of U.S. adults with T2D meet an A1C goal of less than 7%.



### Breakdown of Diabetes Health Care Expenditures

Supplies, such as CGMs, used for diabetes management are only about 1% of total costs incurred by people with diabetes.

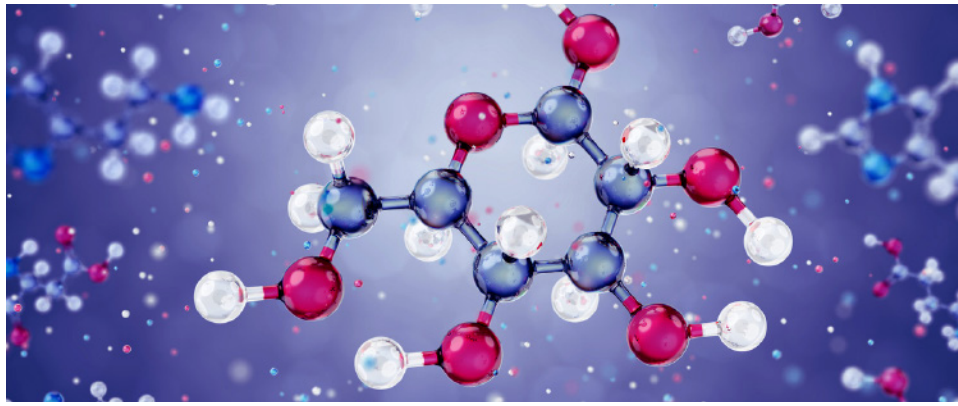
## What is a Continuous Glucose Monitor (CGM)?

A CGM is a form of digital medical technology that is advancing the care of diabetes. CGMs are sensor-based systems that provide real-time glucose readings day and night without the need for routine fingersticks. They provide a complete picture of glucose patterns so patients and providers can make informed decisions about their care. With CGMs, patients can:

- Track glucose levels in real time, anytime.
- Uncover hidden glucose trends.
- Receive alerts when levels are too high or low.
- Make more informed decisions about nutrition, lifestyle and insulin dosage.
- Improve overall glucose control and lower A1C.

CGMs can be integrated with electronic medical records (EMRs) and connected to smartphones, allowing for easier data management and sharing with health care providers and caregivers (nurses, family members, etc.).

**Time in Range (TIR)** is a crucial metric for managing diabetes, as it measures the percentage of time a person's blood glucose levels stay within the target range (usually 70-180 mg/dL). Every 10% change in TIR is associated with a 0.8% change in HbA1c.



## Not All CGMs are Created Equally

CGMs continue to advance and vary in several ways, making each model unique. Here are some key differences:

1. **Sensor Make-up:** The chemicals used in sensor adhesives vary, which is important as some individuals may be allergic to one brand's particular adhesive but not others. This may result in the user experiencing blisters and rashes.
2. **Duration:** The duration of sensor wear also varies, with some lasting [7 days](#) and others up to [15 days](#).
3. **Calibration Requirements:** Certain CGMs need regular fingerstick calibrations to maintain accuracy, while others are factory-calibrated and do not require additional fingersticks.
4. **Real-Time (rtCGMs) vs. Intermittently Scanned Continuous Glucose Monitors (isCGMs):** RtCGMs provide continuous glucose readings and alerts, while isCGMs require users to scan the sensor to get glucose readings.
5. **Integration with Other Devices:** Some CGMs can integrate with insulin pumps and smartphones, offering seamless data sharing and management. Others may not have this capability.
6. **Cost and Insurance Coverage:** The cost of CGMs and their sensors can vary significantly, and insurance coverage may differ based on the model and the user's insurance plan.

Offering a variety of CGM options addresses individual needs, preferences, and lifestyle and covering them equally within the benefit plan(s) allows the patient and health care provider to determine the best option for effective diabetes management without having to consider cost differences.



## Standards of Care

American Diabetes Association [\(ADA\)](#)



Recently released

ADA's Standards of Care in Diabetes 2025 states CGM use is recommended for diabetes management in adults and youth who are on multiple daily injections (MDI) or continuous subcutaneous insulin infusion (CSII) who are capable of using the devices safely, either by themselves or with a caretaker. They should also be offered to adults who are managing their diabetes with basal insulin as well as adults with T2D treated with glucose-lowering medications other than insulin to achieve and maintain individualized glycemic goals.

American Association of Clinical Endocrinology [\(AACE\)](#)



The use of a **CGM** is [highly recommended](#) for people with diabetes to help them reach their goals. Clinical trials have demonstrated the use of a CGM is associated with increased time in range (TIR), improved A1C, and decreased hypoglycemia.

Centers for Medicare and Medicaid Services [\(CMS\)](#)

[Medicare.gov](#)

Medicare will cover a CGM and related supplies if a person is:

- living with diabetes, or
- take insulin or have a history of low blood sugar.



*"What stood out to me was the improvement in A1c with a CGM versus with a fingerstick."*

*Benefits Leader*



## Employer Action Steps

### Quick view

1. Analyze data to better understand the business impact of diabetes.

- Examine medical and pharmacy claims to understand the prevalence and financial impacts of diabetes – use ICD, DRG, CPT, NRC, HCPCS, and GPI codes. Request prevalence data from point solution and health risk assessment providers.
- Review health plan demographics data to identify high-risk populations and those with limited access to providers and diabetes management resources.
- Check STD and LTD claims to understand the number of lost workdays and cost of absenteeism attributed to diabetes.

*"We took away barriers and have not seen a spike in costs for covering CGMs. It makes good business sense to cover all CGMs equally."*

*Benefits Leader*



2. Design medical, pharmacy, and diabetes management programs to support members with diabetes and include equitable coverage of all CGMs.

- Establish key performance indicators (KPIs) to measure outcomes and keep partners accountable.
- Understand how all supplies/monitoring devices are covered; including tier placement, co-pays and coinsurance as well as what utilization management criteria are in place (step therapy, prior authorization).
  - ✓ Consider eliminating PAs with high first-time authorization or appeal approval rates.
  - ✓ Consider covering all diabetes supplies and monitoring devices equally for MDI, T2 Basal, and Non-IUP populations.
  - ✓ Consider eliminating or reducing the member cost share in plans that have deductibles and/or coinsurance including in HDHPs.
- Understand if CGMs are covered in medical, pharmacy, or both benefits. Also, understand how they are covered by point solution providers, if applicable. If covering under the medical plan, ensure all members have sufficient access to in-network DME providers.
- Improve access to CGMs for those high-risk demographics who do not have convenient geographic access to providers.



3. Work with partners such as carriers, TPAs, PBMs, providers, navigators, and point solutions providers to develop a communication plan to support members with diabetes.

- Identify and follow-up with those who are nonadherent with follow-up visits, treatments and monitoring of glucose levels.
- Communicate with and educate members on the benefits of effective glucose monitoring and the advantages of using monitoring devices such as CGMs. All partners should be aware of what is available and how resources are covered.
- Remove barriers to engage with solutions and alternatives.
- Ensure nutrition and physical activity support is provided.

### Plan Coverage

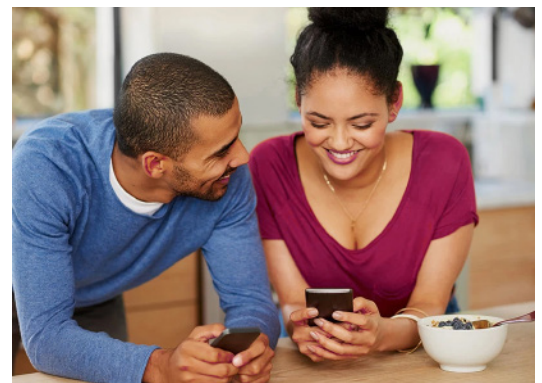
1. Is the decision on how to cover CGMs primarily based on rebates or standards of care?
2. Are CGMs covered in the medical plan, pharmacy plan, and/or through a point solution provider?
  - Are all devices like Dexcom, Freestyle Libre, and Medtronic covered?
  - If providing CGM coverage, are all devices [covered equally](#)? (i.e. same pharmacy tier?)
  - If multiple devices are included in the point solution provider's program, are they covered equally or are certain brands preferred?
  - If covered, are CGMs subject to deductible, prior authorization (such as insulin usage or hypoglycemic events), step therapy (such as trial and failure of one CGM before another is allowed), and/or other management programs?
3. If not covering in medical, pharmacy or via a point solution provider, why not? What is the appeal process (and steps) for CGMs that aren't covered?
4. If covered, are vendor partners collecting data from the CGMs to help manage the population with diabetes?
5. What is the total cost for each covered CGM?
  - How does this cost compare to the pharmacy or list price from the manufacturer?
  - Does the coverage of CGMs differ from clinical guidelines recommended by [ADA and AACE](#)?

### Diabetes Management:

1. How many members with diabetes are adherent in using BGM (blood glucose monitoring) versus CGMs (continuous glucose monitoring), broken down by type of CGM?
  - How is adherence measured?
2. What percentage of members with diabetes who are prescribed a blood glucose monitor (BGM) have an average A1c below 7%? How does this compare to those who are prescribed a CGM (if possible, broken down by CGM device)?
  - The National Committee for Quality Assurance ([NCQA](#)) uses the Healthcare Effectiveness Data and Information Set (HEDIS) as a tool to measure performance on important dimensions of care and service. A1c is a HEDIS measurement used to evaluate performance. More than 235 million people are enrolled in plans that report HEDIS results; therefore, this information should be available from your health plan provider.
3. How many plan members with T2D have had an emergency department visit(s) for hypoglycemia during this past year, 2 years, and 3 years?
  - What actions are taken when this happens?
  - How many of these visits are members who have been prescribed a BGM? CGM?
4. How many members have regained control of their diabetes or have been able to discontinue their oral hypoglycemia or insulin prescriptions in the past year, 2 years, and 3 years?
  - What is the breakdown by glucose monitoring method (BGM and CGM)?

## Conclusion

CGMs have been shown to be effective diabetes management tools for people with diabetes regardless of their course of treatment (MDI, T2 Basal, Non-IUP). Rather than basing plan design on financial decisions to chase rebates, employers should align plan designs with diabetes standard of care recommendations. They should also consider removing administrative barriers, such as PAs and step therapy, and allowing equal access to all CGMs. Designing a plan properly, allowing equal access to all CGMs and removing barriers can lead to a reduction in costs, improve the quality of life for members, and set them up for success by allowing their needs, lifestyles, and providers' recommendations to drive their diabetes management efforts.





## About MBGH

Midwest Business Group on Health (MBGH) is a 501c3 non-profit supporting employers seeking solutions to better manage the high cost of health care and the health and productivity of their covered populations. Founded in 1980, MBGH offers members leading educational programs, employer-directed research projects, purchasing opportunities and community-based activities that increase the value of health care services and the health benefits they offer to members. MBGH serves over 150 companies who provide benefits to over 4 million lives, with employer members spending more than \$15 billion on health care each year.

[mbgh.org](https://mbgh.org)

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