

PREMERA DIABETES MANAGEMENT SOLUTION

# Impact report

**PREMERA** 

## Summary

Diabetes, like other chronic conditions, requires daily self-management and vigilance to control symptoms and prevent costly disease-related complications. However, a significant number of patients with diabetes, both type 1 and type 2, struggle to meet treatment goals. In 2020, to address the gap between provider visits—where the real work of living with diabetes occurs—Premera implemented a Diabetes Management program to enable real-time monitoring of blood glucose levels with personalized interventions to improve diabetes self-management.

Premera performed an independent total cost of care (TCOC) and clinical effectiveness analyses of our Diabetes Management program (DMP).

## High Level Program Participant Results



Increased treatment adherence contributed to a short-term increase in total cost of care

The findings from our independent total cost of care (TCOC) and clinical effectiveness analyses show:

- Participation in the Premera Diabetes Management solution can **significantly improve glycemic control and member satisfaction** in patients with diabetes.
- Increases in adherence to diabetes treatment and medication protocols led to a slight increase in TCOC for participating members.
- We believe these increased costs will **ultimately yield savings** as members better manage their risk of future progression with disease-related complications.

## The High Cost of Diabetes

According to the Centers for Disease Control and Prevention (CDC), more than **1 in 9 adults** have diabetes, affecting more than 38 million Americans. People with diagnosed diabetes now account for **one of every four healthcare dollars spent** in the United States. Diabetes can cause serious complications, including morbidity from a weakened immune system, heart disease, kidney failure, nerve damage, and blindness. In 2022, the total estimated cost of diagnosed diabetes was \$412 billion in medical costs and lost productivity<sup>2</sup> with an estimated 24.8% of avoidable inpatient hospitalizations<sup>3</sup>.

Clinical research and cost models find that better glycemic control leads to reductions in the longerterm economic burden of diabetes by preventing expensive complications.

# Achieving HbA1c target significantly lowers diabetes-related total and component costs<sup>4</sup>

The American Diabetes Association (ADA) has identified a target hemoglobin A1c (HbA1c) of less than 7% as appropriate for most adults with diabetes. Studies demonstrate that at all thresholds, those who achieved the HbA1c target had significantly lower mean diabetes-related total and component costs. In fact, the lower the A1c, the lower the annual diabetes-related total costs. Furthermore, costs increased as the HbA1c threshold increased.

Results from multivariable analyses that control for patient characteristics, pre-period general health and comorbidities, pre-period resource use, and pre-period medication use.<sup>4</sup>

HbA1c is a common test used to assess average blood glucose (BG) over the past three months; it is the primary clinical indicator used to assess how well a person with diabetes is managing their BG. The American Diabetes Association recommends targeting HbA1c <7%. The Premera diabetes management program strives to reduce HbA1c for those starting >= 7% and to keep HbA1c under 7% for those starting <7%



#### Estimated Annual Diabetes-Related Costs (U.S. \$)

## Impact of Diabetes Management Program Results

CLINICAL EFFICACY - Improved glycemic control

Fair (8 - < 9)

Poor (>= to 9)

15%

12%

20%

30%

10%

7%

0%



**improving.** This is an indication that Premera's Diabetes Management program is positively impacting participants' HbA1c control. The percent of participants with Good or Excellent control (<8) increased from 73% to 85%.



50%

60%

40%

## Impact of Diabetes Management Program Results

#### MEMBER SATISFACTION

#### **Positive Net Promoter Score**

## NPS: +51 Premera member scored (reported directly to Premera's DMP vendor surveys).

Pre-program survey results compared to ongoing results show improvements in diabetes empowerment scale and reduction in chronic condition management stress.

#### Improved diabetes empowerment and distress scales

Using the diabetes empowerment scale from the Behavioral Diabetes Institute, a nationally accepted standard, participants' survey results show overall improvement in all areas of psychosocial self-efficacy. Diabetes distress is the emotional response to living with diabetes, the burden of relentless daily self-management, and the prospect of its long-term complications. Greater diabetes distress is associated with suboptimal diabetes self-management and worse A1c levels. It is also associated with impaired general emotional well-being. Highlights from these survey results<sup>6</sup> show improvement with participants feeling increasingly empowered and less distressed across all 28 standard questions. Highlights include:

+51

NET PROMOTER

SCORE

Diabetes empowerment scale	Pre-program	Last survey	Change
I am able to turn my diabetes goals into a workable plan.	3.88	4.11	0.23
I can ask for support for having and caring for my diabetes when I need it.	4.01	4.17	0.16
I know what helps me stay motivated to care for my diabetes.	3.96	4.12	0.16
I know what part(s) of my diabetes I am dissatisfied with.	3.94	4.11	0.17
Diabetes distress scale	Pre-program	Last survey	Change
Feeling overwhelmed by the demands of living with diabetes.	2.48	2.08	-0.40
Feeling that I am often failing with my diabetes routine.	2.58	2.12	-0.46

### Impact of Diabetes Management Program Results

#### Timely and appropriate care drives strong clinical outcomes

In year two, DMP members had an average annual total cost of care about \$2,200 higher than the comparison group chiefly due to increased adherence with insulin medications, high blood pressure medications, and non-insulin hypoglycemic agents. These increasing costs of medical and pharmacy claims appear to be related to members adhering more strongly to their treatment plans.

The clinical effectiveness showed that these costs appear to be a good thing as the number of members in "Good" or "Excellent" control of their glucose levels increased, which will result in health benefits in the longer term. Increased and consistent medication usage can better manage the risk of progressive course of disease-related complications.

#### **About Our Diabetes Management Solution**

Premera partners with Teladoc Health (previously Livongo) to offer chronic condition management programs that empower people with chronic conditions to live better and healthier lives.

Upon enrollment in the Diabetes Management program, members receive an advanced blood glucose meter, unlimited strips and lancets, and 24/7 personalized coaching by certified diabetes care and education specialists (CDCES) all at no out-of-pocket costs. One-on-one coaching and support is available by phone, email, text, or mobile app. Engaged participants can get help with questions about nutrition or lifestyle changes and live interventions triggered by acute alerts. The Diabetes Management solution is currently available to add to 500+ Insured (non-Preferred Choice), 50+ OptiFlex, and all self-funded health plans. The Diabetes Management program will be embedded in most insured member plans in 2025.

#### Check with your Premera Sales Representative for information.

#### Methodology<sup>7</sup>

We obtained data for one group that participated in the DMP and another comparison group that did not. Each group is nationally representative and has a sufficient sample size to detect differences between time periods. For each DMP participant, we matched them to their most identical comparison group counterpart coded with a diabetes diagnosis per CMS's chronic condition warehouse (CCW) logic using propensity score matching (PSM). We measured the efficacy of the DMP through claims utilization before and after engagement with the program and comparing that utilization to that of the comparison group. For the clinical effectiveness analysis, we used remotely captured blood glucose data from members linked to medical claims data for the DMP participant group. Medical claims, but not blood glucose, data were available for members not enrolled in the DMP.

#### Citations

7 Premera Health Care Economics team, 2023

<sup>1</sup> Healthcare Net Promoter Score (2023 NPS Benchmark) from May 18, 2023. According to Retently's NPS data for the past five years, the average Net Promoter Score for healthcare lies in the range of 34 with the lowest having a value of 20.

<sup>2</sup> Economic Costs of Diabetes in the U.S. in 2022 | Diabetes Care | American Diabetes Association (diabetesjournals.org)

<sup>3</sup> Disparities in diabetes-related avoidable hospitalization among diabetes patients with disability using a nationwide cohort study Scientific Reports, 2022; 12: 1794

<sup>4</sup> The Association Between HbA1c and 1-Year Diabetes-Related Medical Costs: A Retrospective Claims Database Analysis - PMC (nih.gov)

<sup>5</sup> Glucose Management Indicator (GMI): A New Term for Estimating A1C From Continuous Glucose Monitoring | Diabetes Care | American Diabetes Association (diabetesjournals.org)

<sup>6</sup> Diabetes Empowerment and Distress Surveys: There were 1,552 from the pre-program survey and 1,740 respondents from their last survey.