OPTUMRx DIABETES MANAGEMENT PROGRAM

Addressing the needs of all diabetic members
Market problem

Diabetes imposes a substantial burden: higher medical costs, lost productivity, premature mortality, and reduced quality of life. ¹

Diabetes is one of the top 5 chronic conditions in the U.S. ¹

More than 20% of all health care spending is for diabetes. ¹

Unmanaged diabetes can lead to kidney failure, amputations and blindness. ²

Diagnosed diabetes costs were $327 billion in 2017 up 26% from 2012. ¹

The OptumRx® Diabetes Management program can control costs and help members achieve positive health outcomes.

Diabetes requires careful management. This program provides targeted guidance and services designed to prevent costly and clinically dangerous complications.
# Diabetes in the workplace

## Impact to employers

$\textbf{327 billion}$: total cost of diagnosed diabetes in 2017. This includes $\textbf{237 billion}$ in direct medical costs and $\textbf{90 billion}$ in reduced productivity.

**Indirect costs include¹:**

<table>
<thead>
<tr>
<th>Amount</th>
<th>Description</th>
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<tbody>
<tr>
<td>$2B$</td>
<td>Reduced productivity for those not in the labor force.</td>
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<tr>
<td>$3B$</td>
<td>Absenteeism</td>
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<tr>
<td>$20B$</td>
<td>Lost productivity due to early death.</td>
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<tr>
<td>$27B$</td>
<td>Reduced job productivity while at work.</td>
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<tr>
<td>$38B$</td>
<td>Due to disease-related disability and inability to work.</td>
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$\textbf{90 BILLION REDUCED PRODUCTIVITY}$
Controlling diabetes

Reduces disease complications and overall health care costs

People with Controlled Diabetes

- Have fewer hospitalization and emergency room visits
- Adhere to medications
- Regularly test blood glucose levels and participate in preventive screenings
- Maintain a healthy lifestyle, including diet and exercise

UP TO 10% DECREASE IN COSTS³

People with uncontrolled diabetes¹

- Use more Rx drugs
- Experience more ER and physician office visits
- Risk: cardiovascular, kidney/eye disease, cancer, obesity, hypertension, fractures, amputations

AVERAGE COST: $17,000 PMPY¹
Breadth of services

Our proactive program can help drive down total cost of care

Designed to meet all member needs:

- Years of claims and medical information in our system helps us understand and deliver the best care
- We regularly monitor information to understand changes in health
- Data insight is used to offer appropriate levels of support and education

Key components include:

- Member engagement
- Education
- Case management provided by Certified Diabetes Educators
- Gaps in care analysis
- Ongoing adherence monitoring
Flexibility to fit business needs

Our differentiated solution offers a continuum of care and full service capabilities

- Offering goes beyond standalone features

- Simple to implement and built to adapt to current client business models

- Clients can choose from modular options:

  1. Full service
  2. Vendor or current capability support
  3. Reporting only
Market leading technology

Accelerate decision-making through innovation

Through machine learning and artificial intelligence, data insights:

- Predict varying risk levels for disease progression and complications
- Identify high-risk individuals before their conditions worsen
- Tailor clinical interventions and outreach
- Help us understand member background and behavior to offer the right level of support
Evidence-based engagement strategy varies by risk

**Lower-risk diabetics** need proactive care

**High-risk diabetics** need higher-touch care

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**STANDARD SOLUTION FOR ALL MEMBERS**

- **Educate**
  - Diabetes literacy
- **Monitor**
  - Medication adherence
- **Resolve**
  - Close gaps in care

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**HIGH-RISK RECEIVES STANDARD AND ENHANCED ENGAGEMENT**

- **Connected Devices**
  - Cloud meter and digital
- **Counseling**
  - One-on-one
- **Providers**
  - Engaged for therapy changes
- **Incentives**
  - Free supplies (no copay)

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**OPTUMRx IQ MACHINE LEARNING MODEL**

- Predicts high-risk factors
- Categorizes high vs. low risk diabetics
Connected Devices and Enhanced Technology

**Monitoring and Tracking**
- Members obtain complimentary blood glucose meters and testing supplies
- App download and personalized set up

**Portal Integration**
- Members access blood glucose readings online in real-time
- OptumRx Certified Diabetes Educator (CDE) pharmacists can access readings for monitoring out of range blood glucose trends

**Multichannel Outreach - Members**
- Clinical alerts are triggered to members through push notifications when blood glucose level trends are out of range
- Members connect live through IVR call and hand-off to CDEs for tailored support and education on ways to reduce risk and improve glucose control

**Multichannel Outreach - Providers**
- Providers are engaged through multiple communication channels to increase awareness and visibility, improving the overall care for our members
Using machine learning to identify risk

Population

- OptumRx data warehouse
- Behavior pattern trends
- Diabetes-specific and comorbidity history (depression, high cholesterol, stroke, hypertension, heart disease)
- Provider and pharmacy behavior history

Individual

- Disease/Claims history
- Demographics
- Socioeconomic factors
- Behavior pattern trends
- Risk scores
- Diabetes complications
- Adherence history
- Drug combination history

Propensity Model

Predicting Risk

The likelihood that an individual will be at high risk for diabetes
Optimizing therapy management

OptumIQ advanced analytics and pharmacist engagement combine for improved health care outcomes.

DATA SOURCES

CLOUD DATA
- Machine learning
- Rx claims
- Medical claims
- Lab data
- Member reported data

DATA MINING

A1C GOAL: 7.5

ENGAGEMENT

At Goal
- Reinforce adherence and lifestyle management

Not at Goal
- Recommend therapy change to provider, as appropriate
- Member adherence coaching

COMORBIDITIES
(e.g. statin and hypertension meds)

- Recommend therapy change to provider, as appropriate
- Member adherence coaching
One-on-one counseling

For high-risk members with diabetes

Pharmacist-certified diabetes educators drive personalized consultations.

Diabetes education

Testing regimen

A1C scores captured

Lifestyle, exercise and wellness tips

Clinical assessment and medication review

Actions plan with member-specific goals

Automation drives better health outcomes

- Captures A1C scores from cloud-based meter
- Compares A1C levels with standard medication ranges
- Scans for gaps in care, safety and adherence across all diseases
- Stores profile information for a complete member snapshot
- Engages providers for clinical concerns

Personalized care and ongoing monitoring are key to improving diabetes health.
Medication adherence monitoring

For all members with diabetes

Targets member and providers at key therapy points using multiple channels.

Covers key medication classes
- Anticoagulants
- Anticonvulsants
- Antidepressants
- Antiplatelet Agents
- Antipsychotics
- Antiretroviral
- Asthma/COPD (controllers)
- Cystic Fibrosis
- Diabetes
- High Cholesterol
- Hypertension
- Inflammatory
- Inflammatory Bowel Disease-Orals
- Multiple Sclerosis
- Osteoporosis -Injectables
- Osteoporosis Meds- Bisphosphonates
- Transplant
Closing Gaps in Care

For all members with diabetes

We evaluate each member’s claim history after a prescription has been dispensed. Our goal is to identify prescribing issues that are unsafe, ineffective, or inconsistent with evidence-based standards of care, and then alert the prescribing physicians.

- Identify and close gaps in medication therapy
- Improve compliance and lower health care costs
- Effective with chronic conditions like diabetes and cardiovascular disease

### Identification
- Retrospective review of member claims
- Identify gap closure opportunities

### Intervention
- Provider intervention and provider-specific reporting
- Lists members and clinical rationale

### Evaluation
- Post-intervention evaluation via claim review
- Clinical issues resolved & total health care savings
Cloud-based connected care

**Every diabetes program participant receives a $0 copay smart meter and testing supplies.**

- **Premium formulary** member receive a cloud-based OneTouch Verio® Flex meter.
- **Select formulary** members receive a cloud-based OneTouch Verio® Flex meter or Accu-Chek® Guide meter.

- Members receive a letter explaining how to get their and supplies.
- Their doctor can provide a prescription can be filled at the pharmacy of their choice.
- Members can call their Certified Diabetes Educator (CDE).
- Meter testing results are shared via mobile app or on the web.

OptumRX integrates testing data from the cloud-based meter into a member’s profile for enriched coaching.
Diabetes member journey: John’s story

High-touch engagement helps prevent serious/costly events

John, age 57
Suffers from diabetes, hypertension and high cholesterol

OptumIQ machine learning identifies John as a high-risk diabetic based on his medical history, utilization patterns and other data points. He is enrolled in the high-risk component of the OptumRx Diabetes Management program.

When John receives his welcome letter, he calls to request his free cloud-based meter and supplies. He begins coaching with Judy, an OptumRx pharmacist and certified diabetes educator.

Judy assesses John’s adherence, gaps in care and general health information. Using data from John’s meter, Judy determines that John’s blood glucose levels were out of normal range the past few weeks. Judy calls John for a second session and he admits that he has not been consistent with his medication or testing.

Judy develops a nutrition plan and goals for John to maintain until their next session. She also reinforces the importance of adherence, testing and annual eye/foot exams. John learns to set an alarm to test and take medications. John’s adherence begins to improve, and his blood glucose levels remain consistent.

1:1 counseling supports John in making better health choices and getting the most from the program.
Diabetes member journey: Maria’s story

Helping a diagnosed member prevent complications

Maria, age 43
Taking metformin for diabetes

Engaged low-risk members may avoid health issues later.

Alerts and outreach help identify and resolve adherence issues.

Our rules engine and provider engagement help close gaps in care.

Members can save time and money through home delivery.

1. Machine learning flags Maria as low-risk for diabetes complications. So she is enrolled in the low-risk, proactive component of the OptumRx Diabetes Management program.

2. Maria receives a welcome letter. When she forgets to refill her metformin prescription, the system identifies her as “late to refill.”

3. OptumRx calls Maria and connects her to her last dispensing pharmacy. The pharmacist refills Maria’s metformin and the adherence issue is closed.

4. Maria is diabetic but she is not currently on a medication to protect her kidneys. The automated clinical rules engine flags this as a “gap in care.”

5. OptumRx alerts Maria’s provider, who recommends lisinopril. Per Maria’s request, the doctor calls in a 90-day supply to OptumRx Home Delivery Pharmacy.

6. OptumRx Home Delivery Pharmacy ships the lisinopril prescription and the gaps-in-care issue is closed. Maria is adherent to her new medication moving forward, which successfully keeps her kidney function intact.
How our Diabetes Program compares

Flexibility to meet individual needs across the care continuum

**Member Benefits**
- Monthly risk scoring using advanced data sets
- Case management and adherence engagement
- Individualized education and support
- Free cloud meters and test strips
- Daily adherence tracking
- Monitoring for out of range blood glucose trends

**Client Benefits**
- Comprehensive reporting
- Quarterly or annually
- Flexibility in setup
- Tailored outreach to at-risk populations
- Programmable high-risk threshold targeting
- Accuracy in assessing financial impact
- Member engagement drives case management program costs
- Preferred test strip use drives down member cost

**Provider Benefits**
- Engagement to optimize therapy for high-risk members
- Alerts for primary nonadherence and low adherence
- Recommendations on gap closure opportunities
- Continued communication for out-of-range blood glucose readings

Comprehensive and modular solution, offering more than simples standalone features

- **Stratify member risk levels** through OptumIQ data insights and MachineL earning
- **Provide individualized care** beyond current conditions to support total well-being
- **Offer expert guidance and care** for members through certified Diabetes specialists
Proven success

The program delivered the following results through clinical outcomes reporting:

- **77%** of diabetic members experienced an improvement in A1c.
- **1.5** point average A1c reduction in engaged diabetic members.
- **63%** adherence intervention success rate converting nonadherent diabetic members to adherent.
- **21%** of diabetic members transitioned to A1c goal less than 7%.
- **~11%** gaps in care closure success rate relative to cardiovascular and kidney protective medications.
Flexibility to meet individual needs across the care continuum

What clients are saying:
“We saw an opportunity to leverage another program to support our members dealing with this disease. The identification of high-risk members through prescriptions makes sense and supplies the data we need to help our members, both telephonically through the OptumRx program and in-person with our on-site nurse.”

“The variety of programs that OptumRx offers is incredible. The programs are always presented to us without pressure and the team makes sure that they make sense for our membership population so we can make educated decisions. The members appreciate the convenient online resources so they can continued to stay educated and handle their prescription medications effectively and efficiently.”

– Northwestern Ohio Plumbers and Pipefitters Local 50

What members are saying:
The pharmacist went over my medications with me. She did an excellent job and was very cordial, polite and explained everything. She talked with me about things I could do if my sugar got low or high and I appreciated that. Thank you for allowing her to call me and spend a few minutes with me on the phone about my medicine and things I don’t understand about diabetes.

– Related to an OptumRx High-Risk Counseling Session
What to expect

The OptumRx Difference

Better outcomes and total cost of care
- Multichannel outreach and engagement with members and providers
- Tailored education and counseling
- Synchronized care across the Optum enterprise

Our Commitments to Our Clients

- Putting our clients first, offering flexibility and options to problem-solving
- Partnership and understanding to meet business as well as member health needs
- Integration and ongoing operational excellence in approach
- Innovation, data and clinical insight and advanced technologies to optimize program results
See how we can help

OptumRx is a full-service pharmacy care services company serving more than 65 million members with innovative prescription drug benefits services. Our resource library is full of great ideas and examples of how we are helping clients achieve better health outcomes and lower overall costs.

OptumRx is part of Optum®, a leading information and technology-enabled health services business dedicated to making the health system work better for everyone.

Statement regarding financial influence

This article is directed solely to its intended audience about important developments affecting the pharmacy benefits business. It is not intended to promote the use of any drug mentioned in the article and neither the author nor OptumRx has accepted any form of compensation for the preparation or distribution of this article.

References:
4. High-risk members that registered a baseline A1c of 8% or higher. Results may vary based on intervention opportunities and member engagement. Figures included represent our OptumRx commercial direct client book of business analysis from January 2019 – July 2020.