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Together 2 Goal®
AMGA Foundation

Together 2 Goal® Innovator Track Cardiovascular Disease Cohort

Case Study

Premier Medical Associates

Organizational Profile

Established in 1993, Premier Medical Associates (Premier, premiermedicalassociates.com) is a multispecialty physician practice located in the eastern suburbs of Pittsburgh, Pennsylvania. Powered by more than 400 employees—including 100 providers—Premier serves more than 100,000 patients. An affiliate of the Allegheny Health Network, Premier offers 24 medical services and specialties across 10 locations.

Executive Summary

According to the *2017 National Diabetes Statistics Report* from the Centers for Disease Control and Prevention (CDC), an estimated 30.3 million Americans had diabetes. Approximately 5% had Type 1 diabetes and the remaining 95% had Type 2 diabetes. Over the last 20 years, the number of adults with diabetes has more than tripled, and the total direct and indirect estimated cost of diagnosed diabetes in the United States in 2012 was $245 billion.[1]

Due to factors such as high blood sugar, high blood pressure, and obesity, cardiovascular disease (CVD) is the leading cause of death for people with diabetes. The American Heart Association (AHA) considers diabetes to be one of the seven major controllable risk factors for cardiovascular disease. However, statistics indicate that people with diabetes are two to four times more likely to die from heart disease than people without diabetes. At least 68% of people age 65 or older with diabetes die from some form of heart disease; and 16% die of stroke.[2]

Premier elected to participate in the Together 2 Goal® (T2G) Innovator Track Cardiovascular Disease Cohort (CVD Cohort) to explore innovative interventions and success metrics to better identify and manage cardiovascular risk among its more than 4,000 patients with Type 2 diabetes.

Program Goals and Measures of Success

The primary goal of the CVD Cohort was to improve cardiovascular management in patients with Type 2 diabetes. Measures of success (see Appendix) were set forth by the AMGA Foundation based on industry-standard measures including: NCQA-HEDIS; United States Preventive Services Task Force; 2013 American College of Cardiology/American Heart Association (ACC/AHA) Prevention Guidelines; and 2018 American Diabetes Association (ADA) Standards of Care.

Benchmarks were established for most of these measures, and Premier focused on three of them:

- Percentage of patients who are tobacco non-users: 88%
- Percentage of patients on any statin for secondary prevention: 85%
- Percentage of patients on a high-intensity statin for secondary prevention: 42.1%

In addition to setting goals for improving these measures, Premier also set goals to reduce CVD risk through blood pressure control (tracked by measuring systolic and diastolic blood pressure) and through utilization of appropriate medication classes shown to reduce cardiovascular risk in patients with diabetes (tracked by measuring utilization of the SGLT-2 and GLP-1 medication classes).

Existing Diabetes Population and Care Structure

Premier cares for more than 4,300 patients with diabetes at its five family practice sites, two internal medicine sites, and two endocrinology sites. To assist in diabetes care, the organization employs 27 providers (19 family practice, seven internal medicine, and one endocrinologist), a registered dietician and certified diabetes educator who sees patients, and two Pharm.D. clinical pharmacists.

Premier manages its diabetes patients by utilizing Allscripts for its outpatient electronic health record (EHR) platform and Epic for its inpatient EHR platform. For the CVD Cohort, Premier identified patients with concurrent diabetes and heart disease by utilizing Optum® One analytics.

Primary care physicians are responsible for the care of patients with diabetes. Patients visit their primary care physician three to four times each year for routine management of their diabetes; those with more complex cases see an endocrinologist three to four times a year. Premier encourages its diabetes patients to follow up with the dietician for an

in-depth diabetes education session. Diabetes patients with heart disease also follow up with their primary care physician several times a year or, as appropriate, their cardiologist.

Interventions

Premier developed an action plan that was informed by reports pulled from Optum® One Analytics.

All providers received a list of their patients that had concurrent diabetes and CVD which noted the following for all patients:

- Statin prescription
- High-intensity statin/high-dose statin prescription
- LDL cholesterol measurements
- Antiplatelet or aspirin prescription
- Smoking status
- Prescription for novel antiglycemic agents with cardiovascular benefit

One of Premier's "quick wins" during the CVD Cohort was to develop lists of patients who were not on a statin, who were on the wrong statin, or who were on the wrong dose of statin. Once these patients were identified, the pharmacology team conducted targeted outreach to adjust medications according to guidelines.

Premier continued to leverage the CVD risk calculator throughout the CVD Cohort, but the organization added best practice alerts (BPAs) to its daily provider dashboards that provide information according to CVD risk.

Prior to the CVD Cohort, Premier was part of the T2G Bundle collaborative. As a result, all providers and staff have received ongoing education about the various elements of the "diabetes bundle" (i.e., HbA1c control, blood pressure control, lipid management, and medical attention for nephropathy) since 2016. To keep providers updated on the latest information about diabetes and CVD, Premier educated physicians via meetings and e-mail messages about the 2018-19 ADA guidelines regarding aspirin/antiplatelet prescribing, appropriate statin prescribing, smoking cessation, and novel antiglycemic agents with cardiovascular approval.

Premier had patient education efforts in place prior to the CVD Cohort, including the distribution of information packets for patients who had a new diagnosis of diabetes and the provision of diabetes education sessions with a dietician. During the CVD Cohort, Premier expanded the dietician's role as a diabetic educator and increased the number of classes, locations, and times to better meet patient needs.

During the CVD Cohort, Premier piloted two impedance cardiography (ICG) machines that measure a patient's physiology related to vascular resistance, cardiac output, and circulating volume. Premier started using the ICG machines as tools to help control patient blood pressure, as it has been demonstrated that a reduction of systolic blood pressure by only 12-13 mm Hg can reduce all-cause mortality by 13%.[3] The technology is integrated with the EHR so that patient information—medical conditions, lab values, age, gender, ethnicity, and current medications—is combined with ICG data gathered during the visit to provide the patient with medication suggestions. Integrating this technology involved several meetings for both providers and staff regarding education on its use.

Premier's data team conducts a monthly analysis that looks at all patients with diabetes and CVD and all measures tracked throughout the cohort. This data is distributed to all offices monthly and shared with all providers and staff.

Outcomes and Results

Performance data was reported on a quarterly basis during the 12-month initiative. Premier experienced improvement in five of the six CVD Cohort measures (see Appendix).

The data collected throughout the CVD Cohort suggest that overall, the interventions used were successful. The most significant change was seen in statin prescribing, most notably in the 25% improvement in high-intensity statin prescribing. As statin prescribing increased, Premier also observed an increase in patients who are able to attain an LDL < 70 mg/dL.

Lessons Learned and Ongoing Activities

The CVD Cohort helped the Premier team understand how treating diabetes and CVD together requires a team effort and constant vigilance to ensure patients are cared for correctly and with the most up-to-date approach.

Premier also learned that involving the whole team—especially the pharmacology team—is crucial to improvement in prescribing statins and prescribing the right dose of statin.

Premier presumed that trying to change behaviors such as smoking would be more challenging, and they found that to be accurate. At the beginning of the CVD Cohort, Premier piloted a survey to determine smokers' willingness to quit smoking. Conducting the survey was found to be cumbersome and did not lead to any changes in smoking cessation, so it was eliminated.

One of the more successful initiatives during the CVD Cohort was the pilot of the ICG machines. Since the machines have been in use, Premier has observed an improvement in blood pressure tracking and an increase in patients who are able to attain a blood pressure less than 140/90 mg/dL. As a result, the project has been expanded to all primary care locations throughout Premier's footprint.

Given the progress Premier made during the CVD Cohort, the organization plans to continue tracking measures of aspirin, statin, and novel antiglycemic agent prescribing for all of its providers.

References

1. Centers for Disease Control and Prevention. National Diabetes Statistics Report, 2017. https://www.cdc.gov/diabetes/pdfs/data/statistics/national-diabetes-statistics-report.pdf. Accessed October 10, 2019.

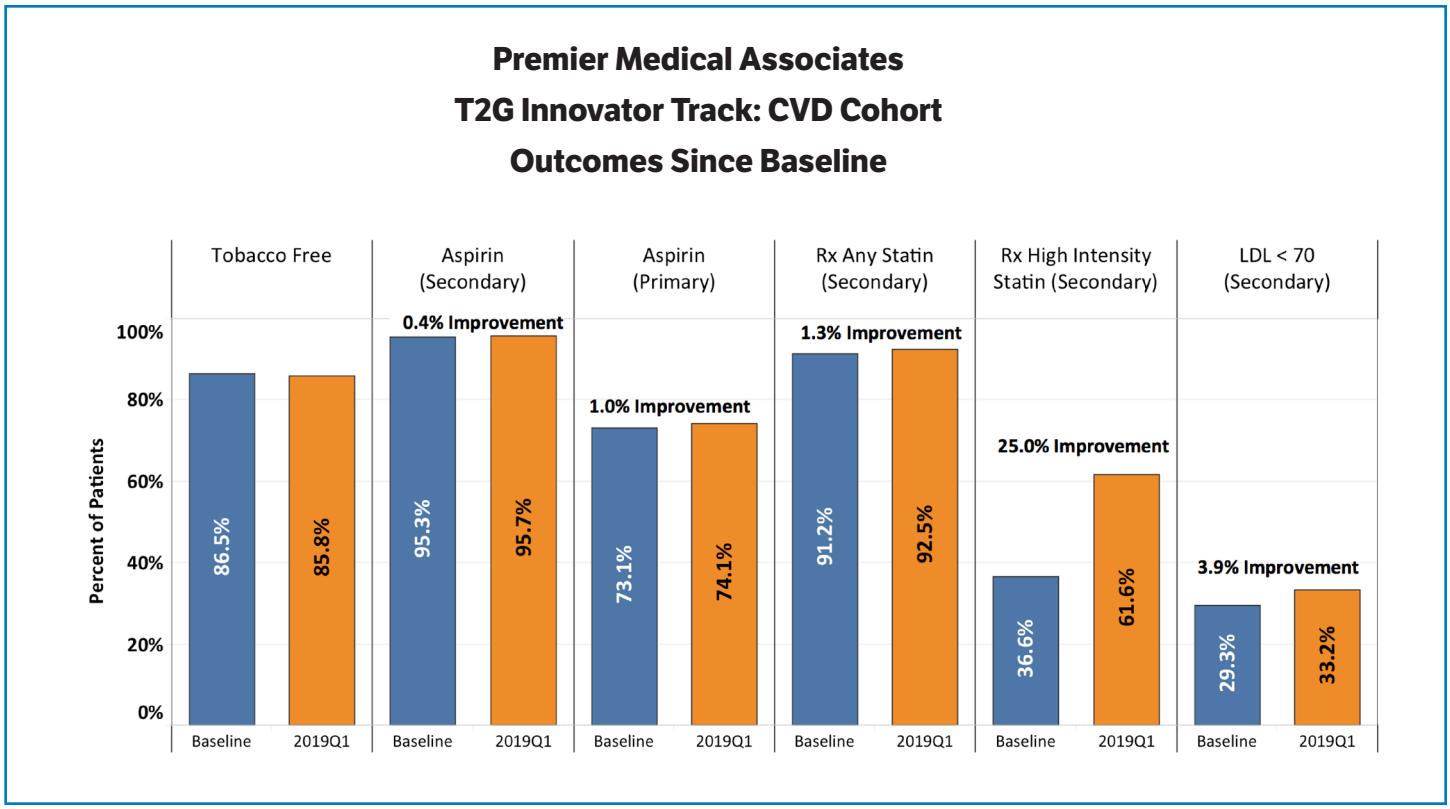
2. Cardiovascular Disease and Diabetes. American Heart Association website. heart.org/en/health-topics/diabetes/why-diabetes-matters/cardiovascular-disease--diabetes. Updated August 30, 2015. Accessed October 10, 2019.

3. Centers for Disease Control and Prevention. 2014. Blood Pressure: Make Control Your Goal Infographic. Retrieved from cdc.gov/bloodpressure/infographic.htm.

Measures of Success for Cohort

	Measure	Measure Description
1	Non-tobacco user	Proportion of T2G patients whose most recent tobacco status is determined to be “tobacco-free”.
2a	Daily aspirin or antiplatelet in patients age ≥ 50, secondary prevention	Proportion of T2G patients eligible for secondary prevention with documentation of daily aspirin or another antiplatelet, or documented exception or contraindication during the measurement period.
2b	Daily aspirin or antiplatelet in patients age ≥ 50, primary prevention	Proportion of T2G patients eligible for primary prevention with documentation of daily aspirin or another antiplatelet, or documented exception or contraindication during the measurement period.
3a	Any statin, secondary prevention	Proportion of T2G patients eligible for secondary prevention on a statin during the measurement period.
3b	High-intensity statin, secondary prevention	Proportion of T2G patients eligible for secondary prevention on a high-intensity statin during the measurement period.
3c	LDL cholesterol < 70 mg/dL, secondary prevention	Proportion of T2G patients eligible for secondary prevention with a measured LDL < 70mg/dL.

Appendix


Premier Medical Associates
T2G Innovator Track: CVD Cohort
Outcomes Since Baseline
Tobacco Free
Aspirin (Secondary)
Aspirin (Primary)
Rx Any Statin (Secondary)
Rx High Intensity Statin (Secondary)
LDL < 70 (Secondary)
Percent of Patients
100%
80%
60%
40%
20%
0%
86.5%
85.8%
0.4% Improvement
95.3%
95.7%
1.0% Improvement
73.1%
74.1%
1.3% Improvement
91.2%
92.5%
25.0% Improvement
36.6%
61.6%
3.9% Improvement
29.3%
33.2%
Baseline
2019Q1

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