



Together 2 Goal® Innovator Track Cardiovascular Disease Cohort Case Study

Kelsey-Seybold Clinic

Organizational Profile

Kelsey-Seybold Clinic (KSC, kelsey-seybold.com) was established in 1949, modeling the Mayo Clinic system. KSC was the first of its kind in the Houston area. KSC joined specialists, general practitioners, nurses, and a multitude of other health teams to provide multispecialty treatment within the Houston Medical Center.

Currently celebrating 70 years of patient care, the organization has witnessed enormous growth and now includes 19 clinics, two Ambulatory Surgical Centers (ASCs), and one of the first freestanding cancer centers within its region. KSC has more than 360 employed full-time equivalent physicians offering services in more than 55 specialties, and the system logs more than one million visits annually. Approximately 50% of KSC business is primary care.

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 (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 CVD. 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

KSC elected to participate in the Together 2 Goal® (T2G) Innovator Track Cardiovascular Disease Cohort (CVD Cohort) to continue its efforts to identify best practices that will improve the treatment the organization provides to people with diabetes. During the CVD Cohort, KSC implemented the following interventions:

- Provider dashboards to allow internal and family medicine physicians to monitor a variety of metrics, including statin orders for patients with diabetes and CVD
- Quarterly health maintenance reports to promote friendly competition between internal and family medicine physicians
- A study to determine the use of the atherosclerotic CVD (ASCVD) risk calculator and its implications
- Activation of best practice alerts (BPAs) to help physicians know when a patient might be a candidate for high-intensity statin medication
- A pharmacy-led virtual hypertension clinic utilizing pharmacotherapy for patients with diabetes and CVD by monitoring hypertensive patients and ensuring medication adherence and smoking cessation counseling

KSC improved on three of six measures and met its identified goals on five of six measures.

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.

At the start of the CVD Cohort, KSC set aside time to review collaborative specifications with its project team and tackle the areas that appeared to be an immediate concern. Benchmarks were set for each measure as follows:

- Tobacco Free: KSC adopted the collaborative goal of 88%
- Daily Aspirin for Secondary Prevention: KSC set an internal goal of 85%
- Daily Aspirin for Primary Prevention: KSC set an internal goal of 50%.

- Any Statin Use: KSC adopted the collaborative stretch goal of 92%.
- High-Intensity Statin Use: KSC adopted the collaborative goal of 42.1%.
- LDL cholesterol less than 70 mg/dL: KSC established an internal goal of 35%.

Existing Diabetes Population and Care Structure

At KSC, patients with diabetes make up about 10% of the patient population. These patients are seen at all 19 clinics and two ASCs. KSC identifies its patient population by diabetes and ASCVD diagnosis codes given at the time of visit or, if it is an active diagnosis, on the problem list. All of these designations are found in Epic, KSC's electronic health record (EHR).

Patients with diabetes and ASCVD are cared for by a team of people—including primary care physicians, diabetes nurses, clinical education professionals, an endocrinologists, and cardiologists—who work together in close collaboration. The relationship between the patient's primary care physician, endocrinologist, and cardiologist creates a dynamic that ensures the best treatment for KSC patients.

Interventions

After the KSC team reviewed the baseline data, they realized a need for monitoring statin use in real time. As a result, the team developed and activated provider dashboards in the organization's internal database. These dashboards allowed internal and family medicine physicians to monitor a variety of metrics, including their statin orders for patients with diabetes and CVD. The use of the dashboards allowed KSC to better understand statin usage patterns, and that understanding prompted providers to engage in a team effort to encourage each other in prescribing facilitating statin medications.

KSC also studied and encouraged the use of the EHR-based ASCVD risk calculator. The team conducted a study on the ASCVD risk calculator and determined that physicians who utilize this tool are more likely to prescribe a statin compared to those who do not use the tool. Given what they learned, the project team encouraged physicians to utilize the ASCVD risk calculator to help identify the right patients to which statin therapy should be prescribed. Another EHR-related intervention that KSC employed was to activate BPAs for high-intensity statin use. These alerts let physicians know that a patient's medication regimen needed to be assessed related to statin use. If patients weren't on a statin—or were on the wrong dose of statin—physicians were encouraged to write the appropriate prescription.

During the CVD Cohort, KSC placed a focus on hypertension by implementing a pharmacy-led virtual hypertension clinic. As a part of this program, KSC monitored hypertensive patients to ensure that they were adhering to their medications and receiving smoking cessation counseling.

Outcomes and Results

KSC reported performance data on a quarterly basis during the 12-month CVD Cohort and experienced improvement in three of six measures (see Appendix).

Tobacco Free

Although there was no observed improvement during the CVD Cohort, KSC did meet or exceed the adopted collaborative goal (88%) throughout the CVD Cohort with 88.2% at baseline and 88.0% at conclusion.

Daily Aspirin for Secondary Prevention

Although there was no observed improvement during the CVD Cohort, KSC did exceed its internal goal for this measure (85%) throughout the CVD Cohort with 86.9% at baseline and 86.7% at conclusion. The highest rate achieved during any point of the collaborative was 87.4%.

Daily Aspirin for Primary Prevention

Although there was a slight improvement during the CVD Cohort (47.5% at baseline to 47.6% at conclusion), KSC did not meet its internal goal of 50% for this measure. The highest rate achieved during any point of the collaborative was 48.1%.

Any Statin Use

KSC observed a slight improvement in this measure during the CVD Cohort (93.3% at baseline to 93.5% at conclusion), exceeding the adopted collaborative stretch goal of 92%.

High-Intensity Statin Use

Although there was a decline in high-intensity statin use (45.2% at baseline to 42.4% at conclusion), KSC was able to

maintain a result throughout the Cohort that was above the adopted collaborative goal of 42.1%. The highest rate achieved during any point of the collaborative was 45.7%.

LDL < 70 mg/dL

KSC observed an improvement in this measure during the CVD Cohort (33.3% at baseline to 36.8% at conclusion), exceeding the internal goal of 35% by the end of the collaborative.

Lessons Learned and Ongoing Activities

During the CVD Cohort, KSC learned that educating clinical staff on how to talk to patients about aspirin use is important. The organization also learned how challenging it can be to properly document aspirin use, and as a result, identified an opportunity to work with the nurse education staff to develop educational material addressing the correct way to approach medication reconciliation.

The team at KSC struggled with setting aside time to fully engage in the collaborative as originally planned, which prompted difficulty in developing and implementing solutions to identified problems. As a result, the organization learned the importance of ensuring that all team members have the bandwidth to participate in all aspects of the collaborative to increase the chances that they will be fully engaged.

KSC found competing priorities to be a significant challenge, as many team members were enthusiastic about participating but were unable to prioritize this project due to others that were deemed more important.

Moving forward, KSC will share information about CVD Cohort interventions and results with various committees, including the Diabetes Care and Medical Standards committees. KSC will work with these committees to identify next steps and determine what measures will continue to be tracked.

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.

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 \ge 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 \ge 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



Project Team

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The Together 2 Goal[®] Innovator Track CVD Cohort was sponsored by the Boehringer Ingelheim and Lilly USA Diabetes Alliance. BI and Lilly were not involved in the development of content for this publication.

