Organizational Profile

Kelsey-Seybold Clinic (KSC) was established in 1949, modeling the Mayo Clinic system. Kelsey-Seybold was the first of its kind in the Houston area, joining specialists, general practitioners, nurses, and a multitude of other health teams to provide multispecialty treatment serving Houston, Texas, and surrounding communities and suburbs.

Currently celebrating 70 years of exceptional patient care, the organization has witnessed enormous growth and now includes 20 clinics, two Ambulatory Surgical Centers (ASCs), and one of the first freestanding cancer centers within its region. KSC has around 374 FTEs and 79 APPs offering services in more than 55 specialties, with approximately 50% of KSC business in primary care. KSC has used Epic as its electronic health record (EHR) since 2008. KSC logs more than one million visits annually to over 500,000 patients.

Executive Summary

According to the 2020 National Diabetes Statistics Report from the Centers for Disease Control and Prevention (CDC), more than 34 million Americans have diabetes, with up to 95% of those having Type 2 diabetes.¹

Diabetes is the leading cause of new cases of blindness in adults, and diabetes-related blindness costs the United States about $500 million annually.² The American Diabetes Association (ADA) recommends that people with diabetes get an eye exam following their diagnosis and at regular intervals every one to two years thereafter.³ Despite these recommendations, a significant portion of patients with diabetes are not meeting the recommended screening guidelines.⁴

AMGA convened the Together 2 Goal® (T2G) Innovator Track Eye Care Cohort (Eye Care Cohort) to address this problem by allowing groups to explore ways to increase eye exam rates for people with diabetes.

KSC elected to participate in the Eye Care Cohort to increase eye exam rates among people with diabetes per recommendations, with a target goal of 55% of patients completing eye exams. Throughout the initiative, KSC implemented several interventions, including targeted patient outreach, creation of new Best Practice Alerts (BPAs), and the development and implementation of new media types in the organization’s EHR. These interventions resulted in a 2.4% increase in documented eye exams during a 12-month period.

During the Eye Care Cohort, KSC learned to tactically select project specific physician/nurse champions, communicate more effectively with the Business Intelligence (BI) team and implement new workflows to help achieve the established goal.

Program Goals and Measures of Success

The primary measure of the Eye Care Cohort was the proportion of the Type 2 diabetes patients in the T2G Cohort with a documented screening for diabetic retinal disease. This measure, selected by the Eye Care Cohort Advisory Committee, was based on an adapted version of the HEDIS 2018 Technical Specifications for Physician Measurement: Comprehensive Adult Diabetes Care: Eye Exam Numerator (see Appendix).

At the start of the Eye Care Cohort, KSC set aside time to review collaborative specifications with its project team and tackle the areas that appeared to be of immediate concern. Following that review, the group aimed to create a new workflow for capturing eye exams by February 2019. KSC reviewed the goal of the Minnesota Community Measurement, which dictates that the average medical practice has 66% compliance for diabetic eye exams.⁵ However, given the baseline data, the KSC team decided that increasing documented eye exams from 42% to 55% was a more feasible goal during the Cohort timeframe.

Existing Diabetes Population and Care Structure

KSC identifies patients with diabetes through a variety of means, including, but not limited to, visit diagnoses, claims, and KSC internal homegrown registries. Around 10% of patients seen at KSC are diagnosed with diabetes and each clinic site is effectively equipped to care for patients with diabetes.
Patients who have a diagnosis of diabetes and do not have diabetic retinopathy are required to have an eye exam every two years by an eye care professional. Patients with a diagnosis of diabetes and diabetic retinopathy are required to have a comprehensive eye exam every year by an eye care professional. Comprehensive eye exams are required to include a dilated eye exam that will help to detect common visual conditions such as diabetic retinopathy, glaucoma, cataract, or age-related macular degeneration (AMD).

At KSC, eye exam referrals are given to the patient at the time of their annual physical exam. The referral is entered into Epic for the patient to see an eye care professional. After the referral is made, it becomes the patient’s responsibility to seek an exam with an eye care physician. During the Cohort, KSC identified a gap in the completion of the patient portion that was addressed within the Cohort timeframe.

**Interventions**

During the Eye Care Cohort, KSC implemented several interventions, including targeted patient outreach, creation of new BPAs, and the development and implementation of new media types in the organization’s EHR.

KSC conducted targeted patient outreach in June 2018, contacting the “Kelsey-Care Advantage” (KCA) population. The KCA population—comprised of KSC’s Medicare Advantage patients—makes up a significant portion of the KSC patient population. KSC contacted all KCA patients who were due for an eye exam using two methods: telephone calls and messages via MyKelseyOnline, an online portal which produces relatively high response rates among KCA patients. Both methods encouraged the KCA patients to schedule their eye appointments and follow up with primary physicians.

KSC also set up BPAs starting in August 2018. These BPAs were released in the Family and Internal Medicine departments and were created as another referral options smart set.

Lastly, KSC set up a new “External Eye Exam” media type so that the organization could more easily account for patients who did not receive claims/charge data. The media type addition was included to address an accuracy gap in the way KSC reports eye exam data. KSC realized that the reports were having a difficult time abstracting scanned documents, so the team created an “External Eye Exam” tag that allowed for reports to recognize imported documents. This process was a collaborative effort combining KSC’s BI team, physician and clinical staff, and Quality Improvement Department. It was received well by the clinical and non-clinical staff and helped to improve reporting rates.

KSC has two report writers specifically designated to the Quality Improvement Department who can abstract patient care data directly from Epic using the Microsoft SQL Server database management system. The ongoing efforts of KSC report writers assisted in analyzing data to help foster the interventions created to tackle the eye exam concerns. Since eye exam data is pulled directly from Epic, KSC is able to obtain information on their patients in almost real time. Timely information improves the probability of quickly identifying and addressing non-compliance to reduce gaps in care that can lead to diabetes-related complications. All intervention updates and data were shared between KSC physicians, clinical staff, the Diabetes Care Committee, and the Quality Improvement Department.

**Outcomes and Results**

KSC saw a 2.4% increase in documented screening for diabetic retinal disease over the course of the Cohort, from 42.1% at baseline to 44.5% at the end of the Cohort (see Appendix). This reflects a nearly 6% relative increase in documented screening in the Cohort timeframe. With the interventions and collaborative effort, KSC was able to see an improvement but was not able to meet its established goal. KSC plans to continue with implemented methods of improvement and hopes to see a continued increase over time.

**Lessons Learned and Ongoing Activities**

KSC learned that strategically selecting project-specific physician/nurse champions helps facilitate change and reduce staff resistance. At KSC, schedule overload of the BI team is often an issue, so maintaining a good working relationship with them is also helpful. New plans often require change in workflow and that increases the time it takes to...
perform tasks. To increase buy-in, it was important for KSC to explain to staff the importance of why the change was happening.

Following the improvements observed during the Eye Care Cohort, KSC leadership approved the purchase of three new cameras (Topcon TRC-NW400) to be placed in Primary Care Departments at three different clinic sites: Main Campus, Fort Bend, and Pasadena. The cameras were purchased to allow an easier way of performing same-day eye exams in the KSC offices, thus eliminating the referral process to an outside eye physician and creating a more efficient process and means of documentation. If the implementation of these three cameras is successful, the plan is to provide the cameras to all clinics in the near future.

KSC plans to continue with current interventions and methods in the KCA population until goal rate of documented eye exams is met. Once that occurs, plans are to expand its approach to the entire diabetes patient population.

References


Eye Care Cohort Measure

Measurement is a cornerstone of all facets of the T2G campaign, including the Innovator Track. During the Eye Care Cohort, groups measured rates of documented screening for diabetic retinal disease among the T2G Cohort with Type 2 diabetes and tracked improvement.

In keeping with AMGA Foundation’s philosophy to measure improvement using existing industry-standard measures when possible, the denominator for the Eye Care Cohort was defined to be the same as the T2G Cohort for the campaign (i.e., patients with Type 2 diabetes who meet the T2G campaign criteria to be included in the four individual core components and the diabetes bundle measure). This denominator is broadly defined as patients age 18–75 with:

- Two or more eligible ambulatory encounters with an eligible primary care, endocrinology, cardiology, or nephrology provider in the last 18 months AND
- At least one Type 2 diabetes on a claim or problem list in that same 18-month period.

For complete denominator measure specifications with inclusion and exclusion criteria, see Together 2 Goal® Campaign Measurement Specifications (v3, April 2019).

The numerator for the measure was determined to be those T2G Type 2 diabetes patients who met the criteria for HEDIS 2018 Technical Specifications for Physician Measurement: Comprehensive Adult Diabetes Care: Eye Exam Numerator.

Screening or monitoring for diabetic retinal disease was identified by electronic data or medical record review and included:

- A retinal or dilated eye exam by an eye care professional (optometrist or ophthalmologist) in the measurement year;
- A negative retinal exam (negative for retinopathy) by an eye care professional in the year prior to the measurement year; or
- A bilateral eye enucleation anytime during the patient’s history through the end of the measurement period.

Eye Care Cohort participants were provided detailed measure specifications and relevant HEDIS value sets.
Appendix

KSC Eye Care Cohort Results

![Bar chart showing KSC Eye Care Cohort Results over different quarters.](chart.png)

- 2018 Q2: 42.1%
- 2018 Q3: 42.5%
- 2018 Q4: 43.0%
- 2019 Q1: 43.5%
- 2019 Q2: 44.5%

Group weighted averages:
- 51.3% 2019Q2
- 45.7% Baseline

Baseline (2018 Q2): 45.7%
Group weighted average (2019 Q2): 51.3%
Project Team

QI Team (From Left to Right)

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