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Advancing High Performance Health

Together 2 Goal®
AMGA Foundation

Together 2 Goal® Innovator Track Eye Care Cohort

Case Study

The Baton Rouge Clinic, AMC

Organizational Profile

The Baton Rouge Clinic, AMC (BRC, batonrougeclinic.com), is a multispecialty, physician-owned clinic in Baton Rouge, Louisiana. BRC was founded in 1946 by four local physicians and has since grown to offer a comprehensive range of healthcare services.

BRC's internal medicine department is one of the largest in its area, and BRC employs the largest number of endocrinologists in its region. With 10 locations, BRC has 146 physicians, 30 nonphysician providers, 19 different specialties, and an onsite full-service lab and radiology department.

All BRC departments and providers document information in a unified electronic health record (EHR) using the Epic platform. They treat more than 140,000 patients who log 560,000 visits per year.

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. BRC elected to participate in the Eye Care Cohort to help redesign the way care is provided to patients with diabetes when it comes to eye health.

During the Eye Care Cohort, BRC worked to achieve its primary goal of increasing utilization rates of retinal exams for diabetes patients by purchasing a high-definition retinal imaging system, developing workflows within the medical record to alert providers of care gaps, and contacting diabetes patients without a completed annual visit to encourage them to schedule an appointment with their primary care provider (PCP).

BRC maintained performance or achieved an increase in all metrics the organization monitored during the Eye Care Cohort.

Program Goals and Measures of Success

The primary measure of the Eye Care Cohort was the proportion of 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).

As a T2G participant, BRC has reported on five other measures since 2016: hemoglobin A1c (A1c) control, blood pressure (BP) control, nephropathy screening, lipid management, and the T2G diabetes bundle measure. The organization continued to track these measures as a part of the Eye Care Cohort, as they allow clinical staff to measure the total quality of care provided to patients with diabetes.

BRC worked to improve the various measures through focused efforts to schedule diabetes patients for appointments so that PCPs could focus on the whole patient at the time of the encounter as opposed to an episodic review.

In 2014, BRC hired its first optometrist to assist in managing the growing population of patients with diabetes and took steps to obtain external eye exams and get them into medical records. Other than these interventions, BRC had not developed a structured eye care plan. During the Eye Care Cohort, BRC developed a more robust strategy for its eye care plan.

Existing Diabetes Population and Care Structure

The team of people caring for diabetes patients at BRC consists of 39 internal medicine physicians, six endocrinologists, two diabetic educators, two dieticians and an optometrist. This team cares for more than 10,000 diabetes patients per year.

Patients with diabetes are identified through registries set up in the EHR based on the problem list and encounter diagnosis. BRC has also developed best practice alerts (BPAs) within the EHR to identify quality gaps for patients in need of certain interventions, specifically targeting retinal exams and A1c testing.

Interventions

During the Cohort, BRC implemented strategies to achieve its goals, including purchasing a high-definition retinal imaging system, developing workflows within the medical record to alert providers of care gaps, and contacting diabetes patients who have not completed an annual visit to encourage them to schedule an appointment with their PCP.

BRC purchased a high-definition retinal imaging system (i.e., Topcon TRC-NW400) and placed it in the laboratory located on the organization's main campus in Baton Rouge.

BRC enabled EHR functionality and developed BPAs within Epic to identify patients with diabetes requiring an eye exam. To ensure redundancy, a specialty comment was also added to the Department of Internal Medicine's notes alerting physicians of patients' eye exam needs.

BRC initiated telephone outreach for patients with diabetes who had not completed a yearly visit and scheduled needed appointments with the PCP. BRC ran reports from the EHR identifying patients who had not been seen by their PCP in more than a year. BRC called these patients to schedule their yearly appointment.

BRC activated several operational strategies to help increase the completion of retinal exams when patients came in for appointments, including placing specialty comments in Epic to alert the physician of the needed test. BRC also added the test to the BPA to make it easy for the ordering physician to be notified of the gap during a scheduled visit. Patients were then encouraged to go to the laboratory to get the test performed the same day or with follow-up blood work. BRC chose not to perform dilated eye exams in order to make the test more convenient for the patient. Images from the test were sent to BRC's in-house optometrist for interpretation. Results were then sent to the ordering physician for notifying the patient.

Outcomes and Results

BRC improved in all identified measures during the study period.

During the yearlong Eye Care Cohort, BRC achieved a 5.7% absolute increase (15% relative increase) in documented screening for diabetic retinal disease (see Appendix). Of the BRC patients who had an eye exam done, 11% were diagnosed with diabetic retinopathy. BRC believes that the increase in retinal exams is likely due to the ease of the operational strategies put into place (e.g., no appointment needed for the test, no dilation needed, the speed of the test, and the physician alerts to send patient to the lab for testing).

During the study period (2018 Q2 – 2019 Q2), BRC also achieved a 1.1% relative increase in A1c control, a 0.7% relative increase in BP control, a 0.9% relative increase in nephropathy screening, a 0.2% relative increase in lipid management, and a 2.6% relative increase in the T2G diabetes bundle.

BRC achieved these increases despite the fact that BRC's diabetes patient population grew by 4% during the study period.

Lessons Learned and Ongoing Activities

BRC maintained performance or notably increased from baseline in all measures tracked throughout the study period, suggesting that the procedures and processes BRC put in place during the Eye Care Cohort had a positive effect on the quality of care for BRC's diabetes patients.

BRC attributes the majority of its success in increasing diabetic retinal exam rates to the purchase of the high-definition retinal imaging system. Of note, however, is the burden that placing orders for all patients with care gaps can have on available capacity. During the Cohort, BRC identified a need to renovate its lab and add extended weekend hours to increase capacity and better handle the workload.

During this collaborative, information technology (IT) leadership and physician buy-in were crucial factors in how BRC improved the quality of the capture and interpretation of retinal images for diabetes patients. At the outset of the Cohort, the quality of BRC's eye exam images was not ideal. Initially, 22% of images were considered to be of poor quality due to the optometrist's viewing platform. The IT team updated BRC's system and added the pictures to the Picture Archiving and Communication System (PACS), which improved reliability and quality. In addition, BRC educated staff, provided opportunities to practice reading images, and offered on-the-job training for camera operators. Combined, these efforts decreased BRC's rate of unusable images to 17%. The increase in usable images helped BRC get better physician buy-in during the project.

BRC also realized during the Eye Care Cohort that care gap information is needed during the clinic encounter in order to be the most successful.

Moving forward, BRC plans to continue annual standing order protocols for all patients with diabetes. BRC will place annual standing orders for gaps such as eye exams and urine microalbumin to improve overall compliance with diabetes measures. The organization will continue to monitor T2G and other diabetes measures (A1c control, BP Control, nephropathy screening, lipid management, and medication adherence). Finally, BRC plans to build a more efficient EHR so that providers can see gaps during the patient encounter.

References

1. Centers for Disease Control and Prevention. 2020. National Diabetes Statistics Report, 2020 (Rep.). Retrieved from cdc.gov/diabetes/pdfs/data/statistics/national-diabetes-statistics-report.pdf.

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3. Solomon, S. D., Chew, E., Duh, E. J., Sobrin, L., Sun, J. K., VanderBeek, B. L., Wykoff, C.C., Gardner, T. W. (2017). Diabetic Retinopathy: A Position Statement by the American Diabetes Association. *Diabetes Care*, 40(3), 412-418. doi:10.2337/dc16-2641.

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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).

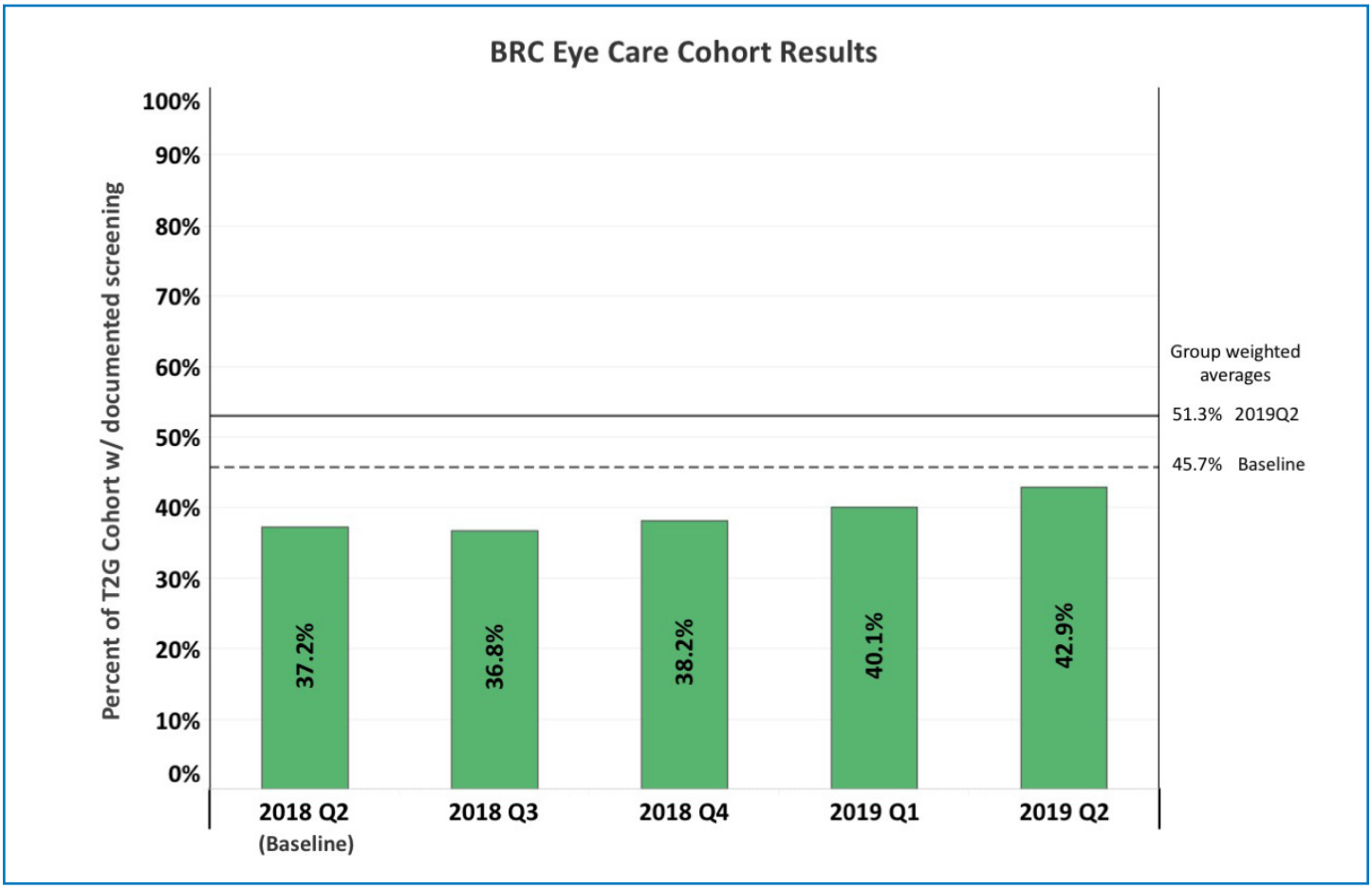
The numerator for the measure was determined to be those T2G Type 2 diabetes patients who met the criteria for HEDIS 2018 Technical Specifications for Physician Measurement: Comprehensive Adult Diabetes Care: Eye Exam Numerator.

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.

BRC Eye Care Cohort Results



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