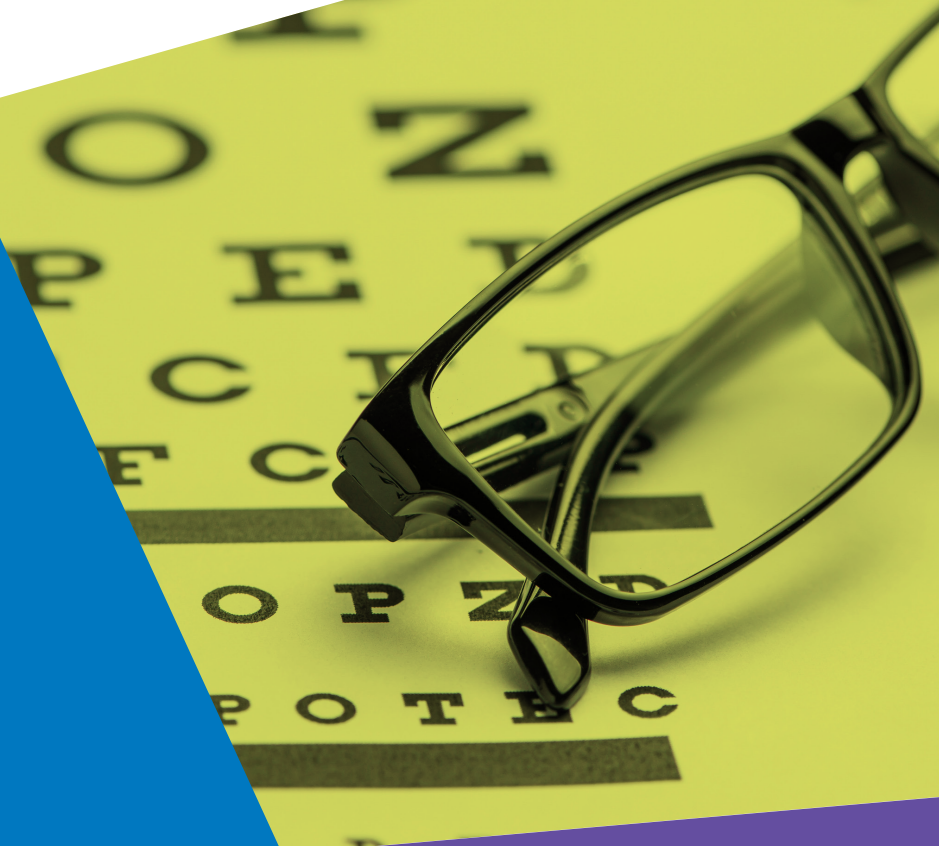**AMGA**™
Advancing High Performance Health

Together2Goal®
AMGA Foundation

Together 2 Goal®
Innovator Track
Eye Care Cohort
Case Study

Henry Ford Health System

Organizational Profile

Henry Ford Health System (HFHS, henryford.com) is a comprehensive, integrated health system that delivers acute, primary, and specialty healthcare services—including optometry services—and provides health insurance. HFHS has six regional hospitals and is based in southeastern Michigan. The 1,600 physicians and researchers in more than 40 specialties in 30 medical centers complete 3.7 million outpatient visits annually. With a large academic mission, HFHS trains more than 900 medical students and more than 675 residents and fellows in 50 accredited programs every 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.

HFHS elected to participate in the Eye Care Cohort because of the significant need to increase the number of HFHS diabetes patients who scheduled and completed their recommended retinal exams. To address this need, it was essential for HFHS to update the electronic health record's (EHR's) health maintenance (HM) registry. HFHS engaged a multidisciplinary team to analyze the root causes of why patients with diabetes were not getting retinal exams and, in cases where they were getting them, to assess why results were not getting

entered into the registry. The results of this analysis facilitated development of three core interventions:

- Creating and implementing an integrated interface to accurately capture eye exam data from the Optometry Division in the EHR

- Launching a pilot program to capture retinal images in the primary care setting and to send them to Ophthalmology to be read

- Developing a fax-back process to improve the approach for obtaining outside eye exam results

HFHS noted an 8.6% improvement (21.3% relative improvement) in the rate of documented diabetic retinal exams over 12 months. This means that, at the end of the Eye Care Cohort, more than 3,100 additional Cohort patients had a documented screening.

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).

The primary goal for HFHS during the Cohort was to improve the capture rate of diabetic retinal exams in the EHR by 5%. Measures of success for HFHS were to ensure the interface between the Optometry Department and Epic was active so that results automatically flow to the HM Registry; to expand use of the remote retinal camera (RetinaVue 100™) in primary care; and to implement use of the fax-back process to obtain diabetic retinal exam results done outside of HFHS.

Existing Diabetes Population and Care Structure

HFHS serves around 38,000 total patients with Type 2 diabetes. During the Eye Care Cohort, the interventions involved approximately 185 HFHS-employed primary care physicians and advanced practice providers. At HFHS, diabetes care is a collaborative effort between primary care, endocrinology, and diabetes services (15 diabetes educators and four clinic pharmacists) embedded in primary care. HFHS offers eye care services in 19 optometry and 12 ophthalmology locations.

Since 2012, HFHS has used the Epic EHR platform. Results of retinal exams are captured in the Epic HM registry as well.

Interventions

Create Registry Interface

HFHS has a large optometry service. The exams of these patients are documented in a retail-inclusive EHR, which is different from the Epic EHR used by the rest of the health system. Prior to the Eye Care Cohort, a team had been working diligently to complete an interface which facilitates the transfer of needed information to Epic on an automated basis. The Eye Care Cohort team collaborated with the Optometry Department as well, and this interface became active in December 2019, after the Eye Care Cohort had ended. Approximately 350 Henry Ford Medical Group primary care patients with diabetes are seen by HFHS optometrists per month. Given this, HFHS anticipates a robust improvement in retinal exam capture rates now that information from Optometry's EHR is automatically populating in the Epic HM registry.

Institute Remote Retinal Exams in Primary Care

Prior to participation in the Cohort, a plan was in place to pilot a program to expand use of the remote retinal camera (RetinaVue 100™) in primary care by capturing images in the primary care setting and sending them to an ophthalmologist to be interpreted at a later time. Work to prepare for this project began prior to the Eye Care Cohort initiative, but several challenges prevented implementation, including difficulties identifying patients, securing and training staff to complete the exam, and identifying space to conduct the exams. HFHS was able to launch the pilot during the time of the Cohort with a limited number of clinics and a smaller cohort of patients, based on insurance. As of November 2018, the pilot had an average volume of 10-15 identified potential patients. Images were captured for only 16% of these patients, although 84% of those images were adequate for assessment by an ophthalmologist. A team is working to identify and overcome the obstacles preventing identified patients from having an eye exam (e.g., staff training, exam location, etc.). There are plans to expand the pilot in the future.

Create and Initiate a Fax-Back Process to Obtain Results of Exams Done Outside of HFHS

Some patients get eye exams outside of HFHS, which has presented a challenge in obtaining the results. Prior to the Cohort, the primary care physician and team were responsible for obtaining the results of exams done outside of HFHS. Results were obtained on an individual and inconsistent basis. HFHS designed a system to send outreach faxes via the EHR to solicit the results of dilated eye exams from eye care providers. HFHS also used this system on a short-term basis to obtain legacy results from HFHS optometrists. The Optometry-to-Epic interface is now complete, but retroactive data is not available. HFHS also designed a complementary system to ensure results received were entered in a discrete field in the EHR (enter-edit results).

Outcomes and Results

HFHS reported performance data for 35,000 to 36,000 T2G Cohort patients on a quarterly basis during the 12-month initiative (see Appendix). From baseline, the percent of patients with a documented retinal screening improved from 40.4% to 49.0% (8.6% absolute and 21.3% relative improvement). In the final reporting period, this meant that over 3,100 additional patients had a documented screening as a direct result of the improvement rate achieved during the initiative.

Lessons Learned and Ongoing Activities

During the Eye Care Cohort, the HFHS team learned that by taking the time to identify the right people to engage, a synergy of activity can occur that can lead to the identification of a workable and cohesive plan to progress forward. Due to HFHS' organizational size, the team found that it can take time for all key stakeholders to agree on specifics of process improvement initiatives. However, relatively simple solutions such as fax-back letters can produce quick results.

HFHS also learned that any information technology (IT) solution in the EHR will take time and several meetings. IT resources are limited with numerous competing needs. Training for IT solutions can be difficult in large groups. An effective solution is to develop short videos for this type of training.

HFHS' next step is to continue implementation of the fax-back process within primary care. The spread of the fax-back letter and enter-edit results process is being discussed for other key quality metrics as well. The interface between the Optometry EHR and system's Epic EHR is now live. As a next step, there are plans to obtain results retroactively from the past two years.

HFHS has appointed a new project manager for remote retinal cameras who will assist in the identification and resolution of several of the obstacles preventing identified patients from having the images taken. Once this is done, the spread of remote retinal cameras in primary care is planned for nine additional clinics with expansion to additional payers.

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.

2. Centers for Disease Control and Preventions. n.d. Diabetic Retinopathy. Retrieved from cdc.gov/visionhealth/pdf/factsheet.pdf.

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.

4. Garg, S. & Davis, R. (2009). Diabetic Retinopathy Screening Update. *Clinical Diabetes*, 27(4), 140-145; doi: 10.2337/diaclin.27.4.140.

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.

HFHS Eye Care Cohort Results

HFHS Eye Care Cohort Results
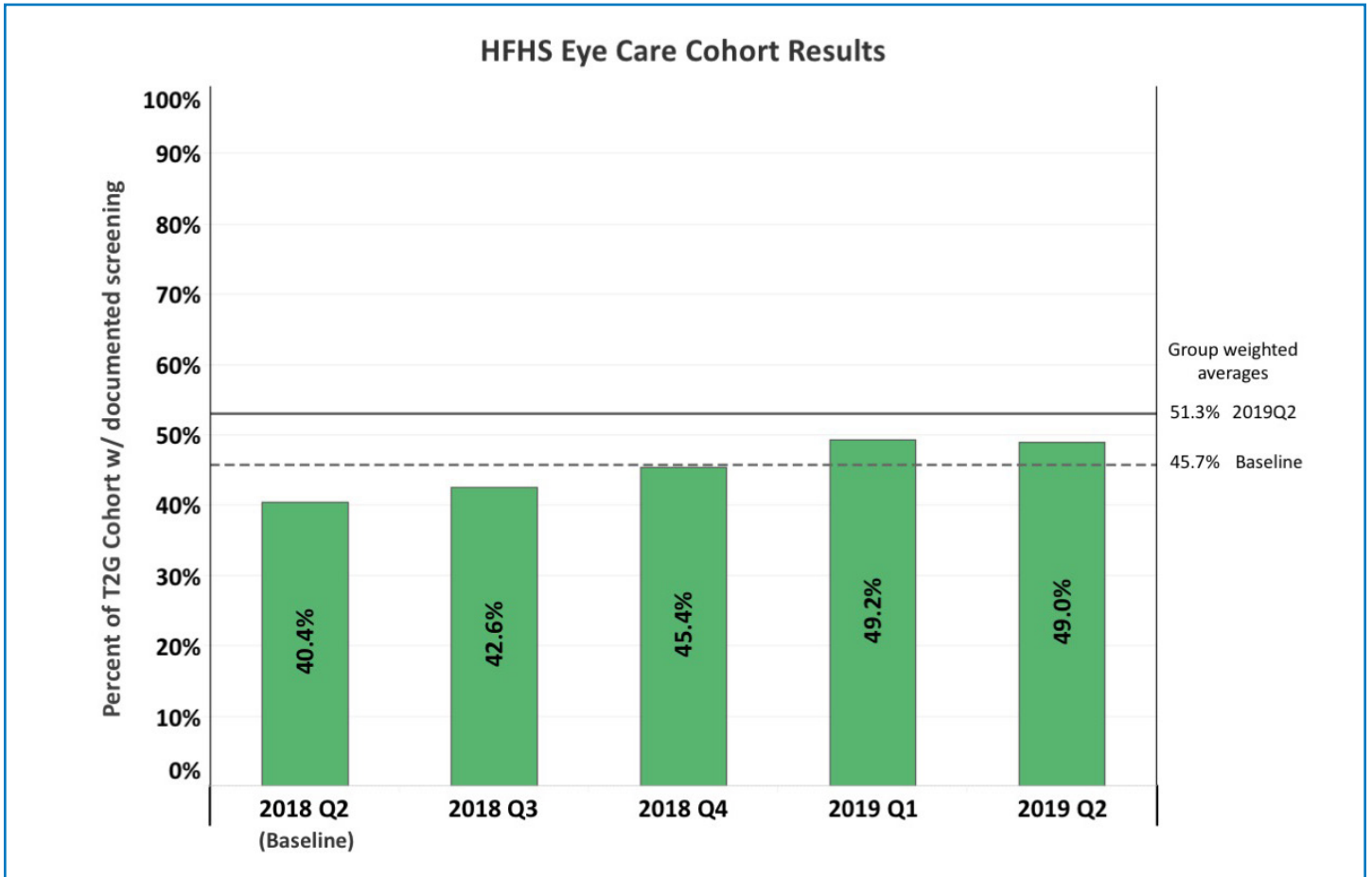
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