



Advancing High Performance Health

Together2Goal.
AMGA Foundation

**Together 2 Goal®
Innovator Track
Eye Care Cohort
Case Study**

Ballad Health Medical Associates

Organizational Profile

Ballad Health and Ballad Health Medical Associates (BHMA, balladhealth.org), were formed in February 2018 by a merger of Wellmont Health System and Mountain States Health Alliance. Ballad Health is an integrated healthcare system with 21 hospitals and 252 practice sites spanning Northeast Tennessee and Southwest Virginia. BHMA offers 27 specialties that are staffed by more than 700 providers.

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 following.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.

Having already improved its diabetes bundle measures since joining T2G, BHMA elected to participate in the Eye Care Cohort to further improve diabetes care by helping patients preserve their sight.

During the Eye Care Cohort, BHMA focused its efforts in three main areas: patient-centered care, provider engagement, and data capture. Multiple interventions were implemented to address the concerns in these three areas.

Program Goals and Measures of Success

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

Additional goals for BHMA included: (1) increasing outreach efforts, (2) increasing the return rate of fax-back sheets, and (3) improving the accuracy and standardization of data entry.

Existing Diabetes Population and Care Structure

BHMA has 72 primary care providers who participate in the T2G campaign, representing more than 10% of the organization's overall provider population. These providers operate in 50 different sites and see nearly 8,000 patients, or nearly 25% of BHMA's patient population. Epic is the system's electronic health record (EHR).

When a patient is identified in the EHR with a diagnosis of diabetes, the Health Maintenance (HM) function lists recommended tests that are overdue for each patient. Providers and staff are reminded to act on overdue tests through Best Practice Alerts (BPAs). Outreach to patients is accomplished through the patient portal and by email.

Primary care providers have the option to refer diabetes patients to endocrinology. BHMA also developed an internal "tele-endocrinology" program to allow endocrinology providers to perform follow-up visits at remote locations via video technology. Diabetes educators are available to support both primary care and endocrinology providers—and at times have been embedded in busier practices. The system also sponsors an annual Diabetes Symposium to keep providers current with the most recent best practices for managing this patient population.

Interventions

During the Eye Care Cohort, BHMA focused its efforts in three main areas: patient-centered care, provider engagement, and data capture. Interventions were implemented to address the concerns in these areas as follows:

Patient-Centered Care

- To improve the ease of completing eye exams for diabetes patients, BHMA piloted the deployment of handheld retinal cameras (RetinaVue 100 devices) to the two sites with the highest prevalence of diabetes. The organization also purchased five additional cameras. Quality and clinical staff members were trained on the equipment throughout the system.
- To provide expanded access to patients, Eye Care Clinic Days were implemented once per week throughout BHMA's 23-county region. The quality team monitored reports to identify patients who were due for an eye exam and contacted those patients ahead of the eye clinic day. The BHMA team feels that this intervention holds promise, as it was successful at getting patients to the clinic for eye exams (see Outcomes and Results section).
- To enhance patient awareness of the importance of retinal exams, Healthwise content was included in the after-visit summary, personalized MyChart messages were sent, and additional training from diabetes educators was provided when needed.

Provider Engagement

- BHMA's T2G providers were introduced in a series of newsletters for providers and staff to educate everyone on the importance of eye care.
- The group hosted a five-hour provider retreat with a dedicated focus on the care of patients with diabetes.
- Provider-level reports were developed with drill-down capability to the patient. This enabled the provider teams to conduct outreach to patients. In some areas, reports were used to facilitate pre-visit planning. If the centralized team recognized a gap, it was noted on the provider's schedule.
- BHMA provided unblinded reports to leadership and providers with provider rankings.

Data Capture

- BHMA improved fax-back forms to capture patient attention, printing "Save Your Eyes - Be sure to take this form to your doctor" at the top of the form. Populations that did not have access to a retinal camera were encouraged to take the form to their eye care specialist.
- BHMA made an effort to ensure that once outside eye reports were received, the enter-edit result function was used to capture discrete data.

Outcomes and Results

Overall, the percentage of patients completing an annual diabetic eye exam did not change significantly during the measurement period—remaining at or around 40% (see Appendix).

The BHMA team was encouraged, however, by results from two of its most recent Eye Care Clinic Days, which were attended by 80% of patients scheduled. In addition, the pilot sites screened 45 more patients in the first 3 quarters of 2019 than in all of 2018 (see Appendix).

BHMA will continue these promising interventions (see next section) to achieve results that have patient impact. This is demonstrated in the following patient story from the Eye Care Cohort:

BHMA had a patient who was noncompliant with eye exam recommendations due to transportation issues, despite a diagnosis of diabetes in 2015. Due to new workflows and the availability of retinal cameras in the BHMA pilot clinic, the patient agreed to be screened. The results showed that the left eye has severe non-proliferative diabetic retinopathy without macular edema and the right eye had proliferative diabetic retinopathy with macular edema. The patient was referred for definitive care, saving eyesight in at least one, if not both eyes.

Lessons Learned and Ongoing Activities

Despite having the ability in the EHR to track and give reminders, BHMA found it difficult to improve retinal exam rates. Obtaining results from outside eye care specialists proved to be challenging. Implementing improvement activities in the midst of a large system merger coupled with the departure of the Quality Director and Eye Care Cohort champion only added to those challenges.

Nonetheless, BHMA learned some key lessons during the Eye Care Cohort. The installation of retinal cameras in high-prevalence clinics helped patients get sight-saving retinal exams. With eye exams being accomplished in-house, it mitigated the difficulty in obtaining outside data.

Implementing retinal cameras at sites with T2G champions and select pilot sites yielded better results, and specially designated Eye Care Clinic Days proved to be successful.

Going forward, BHMA will continue Eye Care Clinic Days in centralized locations to improve access. BHMA is appointing high-performing providers to be T2G champions who will serve as resources for other providers participating in the program.

BHMA will also consider the purchase of additional cameras and/or rotating the deployment of cameras to increase availability at more practice sites. Finally, BHMA will explore options for an interface to receive electronic data into Epic.

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](https://www.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).

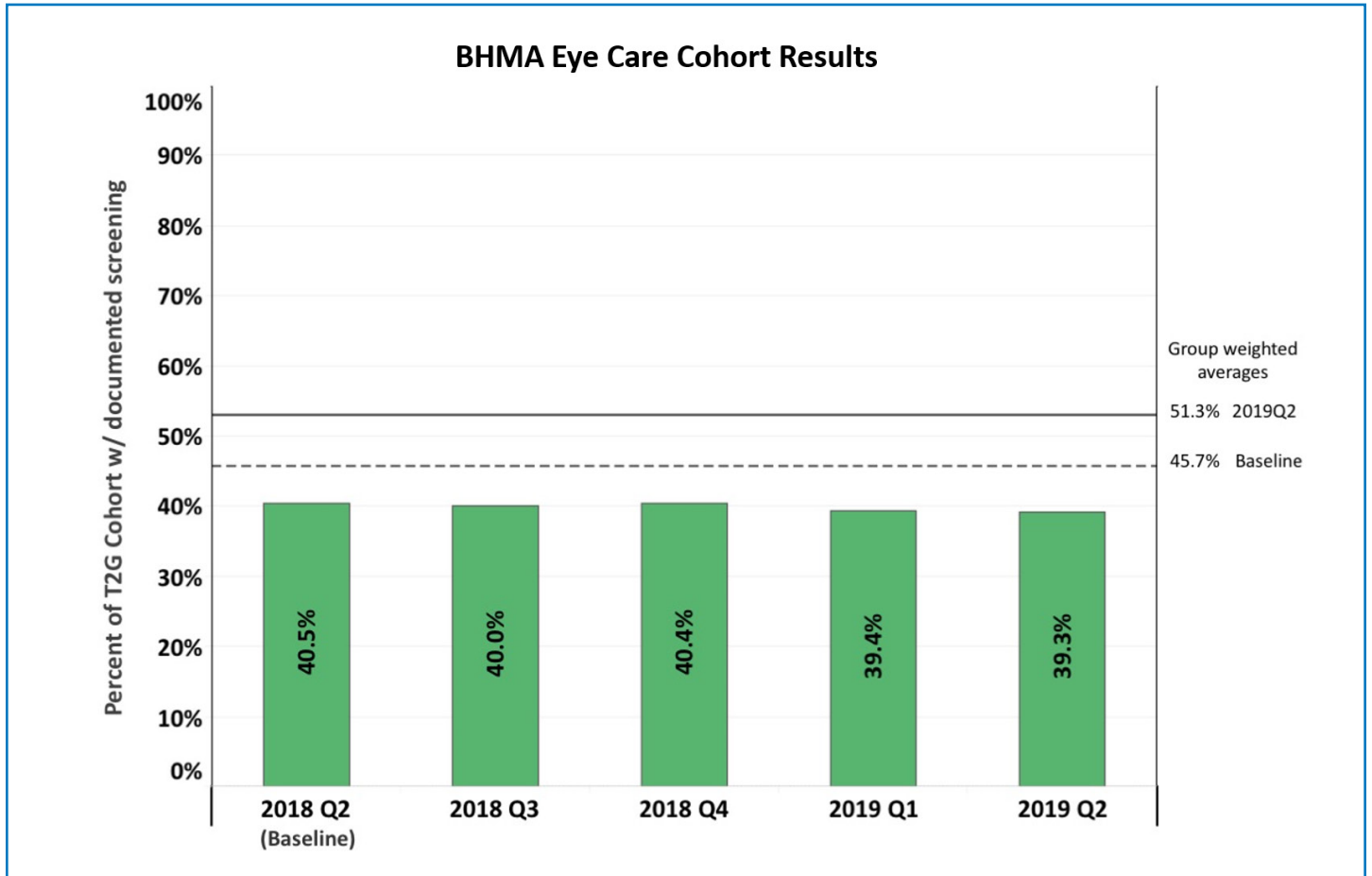
The numerator for the measure was determined to be those T2G Type 2 diabetes patients who met the criteria for HEDIS 2018 Technical Specifications for Physician Measurement: Comprehensive Adult Diabetes Care: Eye Exam Numerator.

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

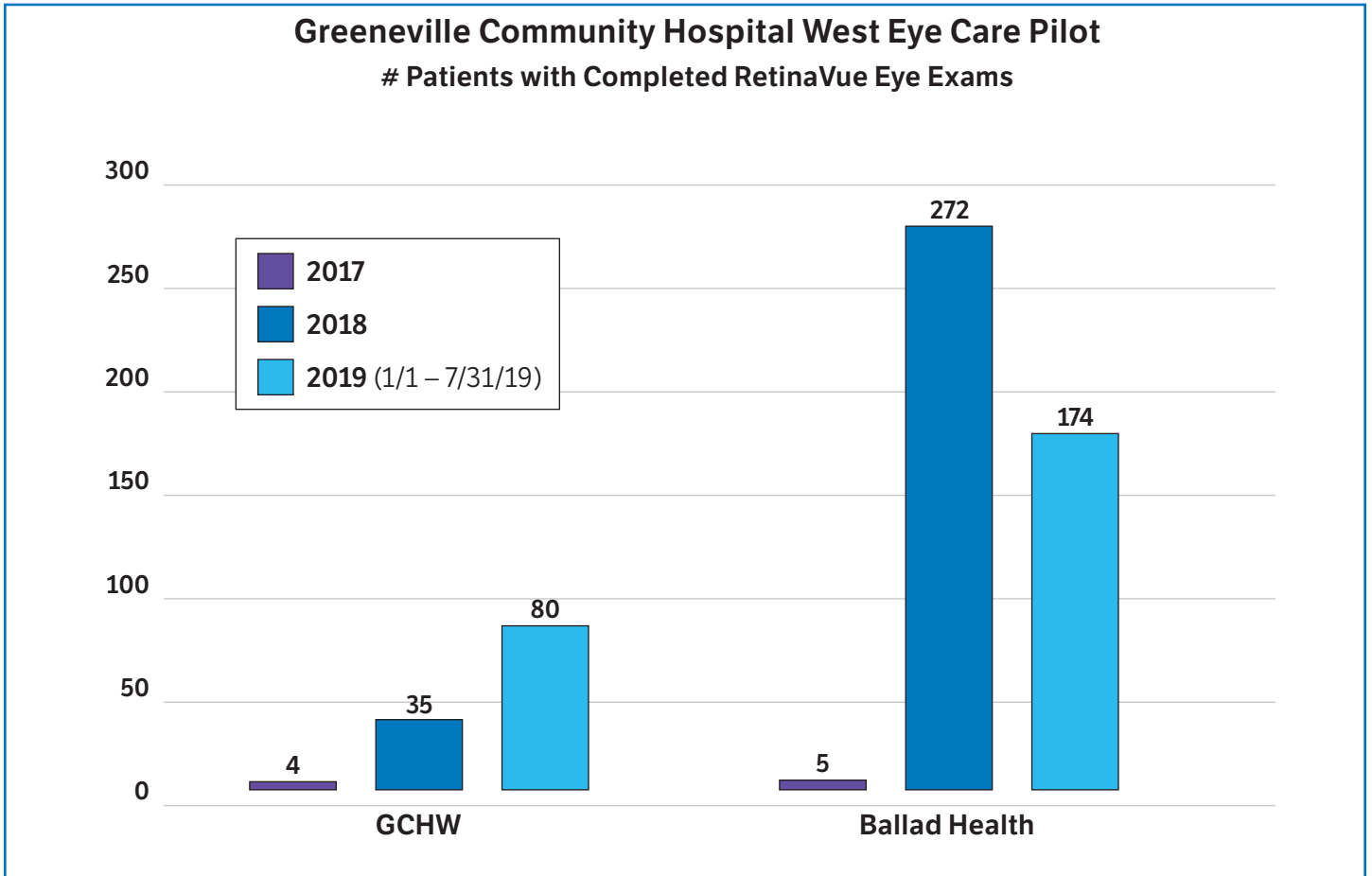
- A retinal or dilated eye exam by an eye care professional (optometrist or ophthalmologist) in the measurement year;
- A negative retinal exam (negative for retinopathy) by an eye care professional in the year prior to the measurement year; or
- A bilateral eye enucleation anytime during the patient's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

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

BHMA Eye Care Cohort Results



Greeneville Community Hospital Pilot Results



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