Together 2 Goal®
Innovator Track
Eye Care Cohort
Case Study

Utica Park Clinic
Organizational Profile

Utica Park Clinic (UPC), a multispecialty medical group, is part of Ardent Health Services and Hillcrest HealthCare System’s physician group. UPC has 89 locations serving the greater Tulsa metropolitan area and small rural communities throughout Northeast Oklahoma.

UPC employs 175 physicians and 91 Advanced Practice Providers across its 89 sites. Primary care is a significant part of the UPC network, accounting for 30 of its 89 clinics and approximately 70% of its employed providers. UPC primary care clinics conduct 600,000 outpatient visits annually.

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.†

Diabetes is the leading cause of new cases of blindness in adults, and diabetes-related blindness costs the United States about $500 million annually.‡ 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.§ Despite these recommendations, a significant portion of patients with diabetes are not meeting the recommended screening guidelines.¶

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.

UPC joined the Eye Care Cohort to learn from other healthcare organizations who were actively addressing eye care among their diabetes patient populations.

Multiple interventions were utilized within the UPC clinic system during the Cohort, including previsit planning for upcoming primary care visits; implementation of a standardized documentation process within the electronic medical record (EMR) health maintenance (HM) guidelines; modifying patient scheduling to maximize the use of UPC’s embedded retinal cameras; establishing collaborative care agreements with eye care providers; and using referrals to eye care providers.

Overall, UPC documented retinal screenings for nearly 300 additional patients as a direct result of improvement in rates achieved over the course of the Cohort. Of the exams performed during the Cohort, 10.6% of the patients were identified as having retinopathy ranging from mild to severe. An additional 11% were found to have another pathology, most frequently age-related macular degeneration.

Program Goals and Measures of Success

UPC’s goals for the Cohort were to increase the number of documented eye exams for patients with diabetes completed within its system, to collaborate with ophthalmology providers in local communities to better capture eye exams for referred patients, and to update diabetes education material for staff and patients in order to emphasize the importance of annual eye exams.

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).

Existing Diabetes Population and Care Structure

At the start of the Eye Care Cohort, UPC cared for more than 13,000 patients with Type 2 diabetes. That number grew by 11% during the Cohort to nearly 15,000 patients. These patients are seen in 30 primary care clinics staffed by 122 primary care providers (PCPs), 38 embedded care managers, four diabetes educators, three social workers, and three transition of care nurses supporting population health management. PCPs are the primary drivers for referring a patient to an eye care provider, as UPC does not employ ophthalmology or optometry specialties.
A diabetes diagnosis adds a patient to the diabetes registry within Epic, UPC’s EMR. All new patients to UPC are asked to give a medical history and identify past eye care providers; this information is updated in Epic. UPC utilizes a previsit planning process to identify patients who need a diabetes eye exam based on Epic’s HM guidelines section at the time of their PCP visit. UPC also has protocols in place to notify patients via Epic MyChart alerts of their need to have an eye exam. In network, payers make patients’ diabetes eye exam status available to UPC based on submitted claims data.

Endocrinologists associated with Hillcrest HealthCare System are part of a different provider group and do not share an EMR with UPC. All sharing of eye exam data is accomplished via requests for updated information or faxing of a completed eye exam report. Previously, UPC did manual scanning and updating of HM guidelines, performed only as time allowed. Eye exam status reports were pulled via a Population Health database that interfaced with NextGen, UPC’s previous EMR.

In the two years leading up to the Cohort, UPC conducted a pilot embedding fundus cameras in three of its clinics, which was later expanded to include eight different locations within the UPC clinics. This pilot allowed UPC to improve its process prior to the start of the Cohort.

**Interventions**

During the Eye Care Cohort, UPC implemented interventions focused in the areas of provider and staff education, patient education, information technology, clinical support, workflow, and point-of-care services.

**Provider and staff education**

UPC implemented a number of strategies to educate providers, care managers, and back-office staff. These strategies included holding data webinars, developing eye care pictographs, sending provider newsletters, and sharing “how to document” emails.

To support the implementation of the Epic EMR—which happened for all UPC clinics and hospitals during the Cohort—UPC sent step-by-step instructions on how to update HM guidelines to care management and back-office staff. In addition, UPC instructed providers and referral coordinators on how make appropriate referrals to outside ophthalmologists for patients needing additional follow-up.

**Patient education**

Prior to the Cohort, UPC patient diabetes workbooks were used to help patients understand how to self-manage their condition. While the need for annual eye exams was included in the workbook, this information was not emphasized. Through a collaborative effort between clinic care managers and diabetes educators, UPC updated its patient diabetes workbook with pictures and colorful graphics to draw patient attention to the need for an annual diabetes eye exam.

**Information technology**

During the Cohort, an additional field was added to the EMR to designate the result of the eye exam for inclusion in the next measurement year. Linking the eye exam report directly in the Epic HM guideline allows for easy access from the HM screen.

In order to optimize the transfer of outside provider eye exam reports, UPC utilized an electronic capture function for faxed reports, which eliminated manual scanning of faxed reports and expedited the availability of the final results of the eye exam. This allowed the provider to be able to see the eye exam results in the HM guidelines section.

**Clinical support**

During the Cohort, all PCPs completed standing orders for the performance of diabetes eye exams. These standing orders are initiated by a registered nurse (RN), certified diabetes educator (CDE), or a licensed practical nurse (LPN). These standing orders were implemented during regularly scheduled visits with providers, diabetes educators, and care manager patient visits (see Appendix).

Visual cues and time-sensitive follow-up campaigns were also used to engage and support clinic staff. One rural clinic with an embedded eye camera generated excitement by posting a thermometer display tracking the number of completed or reported eye exams. It was updated on a weekly basis. The clinic achieved 72% of patients with documented screenings at the end of the reporting period, a high percentage compared to other UPC clinics.

A second urban clinic elected to refer all patients to eye care providers, but committed to closing the loop on all referrals within a 30-day timeframe. One of the clinic’s providers achieved the highest performance among 122 providers, having 78% of patients with documented screenings.
There were several clinics who elected to initiate “Care Compact” agreements with Tulsa area eye care providers. Care Compact agreements set the standards for data sharing and sending needed results to the PCP. Eye care providers also agreed to add the patient to their annual callback/outreach process to encourage an annual visit. UPC noted that some clinics having Care Compacts with area ophthalmologists increased their performance.

Workflows implemented to support eye exam process
An additional intervention was to utilize the functionality within Epic to initiate outreach to patients’ eye care providers. The workflow includes the requirement of adding the name of the patient’s eye care provider to the patient care team within Epic. On an annual basis, a letter is automatically generated from Epic to the patient’s eye care provider shortly after the previous eye exam date, requesting an update. This request is generated in a batch process and allows multiple outreaches through a simple outreach report.

Pre-visit planning outreach utilizes Care Coordinator nurses who are embedded in each clinic to contact patients one to two weeks prior to a scheduled appointment in an effort to complete any lab or other testing/screening prior to the PCP appointment. Diabetes eye exams are part of the pre-visit planning outreach and can be performed at several locations within UPC clinics. Additionally, ophthalmology referrals can be made to the patient’s designated eye care provider.

Nurses, medical assistants, and diabetes educators can initiate standing orders by protocol. At the time of a diabetes education session, the health diabetes educators can initiate an order for a diabetes eye exam with an in-office retinal exam or with a referral to an ophthalmologist.

Point-of-care services
UPC implemented point-of-care services for five strategic locations within the service area. These point-of-care locations are branded as UPC Wellness Points and offer walk-in services without an appointment for the completion of HM guidelines. Any UPC patient may come to a Wellness Point for a diabetes eye exam.

Outcomes and Results
During the Cohort, UPC improved its completed and captured screening rate by 2% from baseline (5.3% relative improvement). UPC was pleased with this achievement, but had hoped to sustain its initial improvement trajectory throughout the Cohort. UPC improved its screening rate for documented diabetic retinal disease by 6% (13.8% relative) from baseline to the second active quarter (i.e., Q2 2018 to Q4 2018), but its screening rates began to decline through the end of the Cohort (see Appendix).

There are a number of reasons why the increase in screening rate was not sustained. Throughout the Cohort, UPC saw an increase of new diabetes patients added to the T2G patient population. In fact, the total diabetes population grew by more than 1,000 patients from Q4 2018 to Q1 2019 and continued to increase in Q2 2019 (see Appendix). It is possible that this growth, combined with issues in how UPC captures diabetes diagnoses, led to the overall decline in recommended eye exams. In review, this may be attributed to how Epic captures the diagnosis of diabetes in the problem list. It is also possible that the rate declined due to the fact that two of UPC’s fundus cameras needed repair/upgrades and were not in use. A final possible reason could be that UPC added a new primary care clinic in the middle of Q4 2018, which contributed to the overall increase in the denominator.

Another quality metric that UPC tracked was the number of retinal image readings returned as inadequate. Prior to the Cohort, about 4.4% of images were unreadable. A review of the data indicated that one retinal specialist had a higher return of inadequate images, and after sharing that information with the contract service, another retinal specialist was added to the team. As a result, the number of unreadable images was reduced to 2.4% during the Cohort.

Lessons Learned and Ongoing Activities
UPC encountered a variety of challenges during the Cohort. One of the biggest challenges UPC faced was the variation in availability of eye care providers in rural communities. The team found that working through the PCP care manager to engage
the office manager of the local eye care provider established a good foundation for building a strong relationship between the care teams. Additionally, UPC found that patients in rural communities often cited their reason for declining a diabetes eye exam as the inability to afford one. As a result, UPC’s medical director has approved a proposal to lower the cash price rate for self-pay patients.

Additional lessons learned during the Cohort, include:

- How important it is to engage clinic leadership in efforts to increase the rate of performing retinal exams at available screening locations and to develop an approach to ophthalmology referrals.

- How designating a subject matter expert to oversee the diabetes eye exam process and serve as the resource person for continued staff education proved helpful in developing a standardized, sustainable process.

- How creating a standardized process can lead to success. One of UPC’s largest clinics demonstrated this, as their standard process of sending patients down to the lab for eye exams led to one of the most successful rates of completing eye exams at the time of the visit.

- How beneficial it is to have the right number of retinal cameras. UPC felt that it could have achieved better results by embedding three more cameras in key clinic locations.

- How cash pay rates can affect eye exam completion rates. UPC felt that a lower cash pay rate for patients without insurance coverage could have helped prompt self-pay patients to complete eye exams in the primary care setting.

UPC also learned from the below interventions that didn’t work:

- UPC implemented an initial workflow where several clinics used new patient forms which asked for information on past eye exams and eye care providers. This information was often scanned into Epic without updating the HM guidelines or securing a copy of the report, meaning that UPC didn’t capture accurate information. This was probably the most time-consuming process for UPC to correct. Entering the data collected in Epic prior to scanning was helpful, as was educating staff on the correct location for scanning referral reports.

- UPC created a rotation schedule to float a fundus camera between clinics in an effort to increase camera availability. However, care managers were not as confident in using the floating camera and found it hard to sustain a regular schedule given the rotation.

**Next steps: sustainability and scalability plans**

UPC plans to continue its efforts to improve eye exam completion rates, including:

- Upgrading and acquiring three additional fundus cameras for use in UPC primary care clinics

- Continuing to develop and implement UPC Wellness Points to provide patients with convenient, walk-in access to services including eye exams

- Engaging payers to share claims data on eye exams performed elsewhere

- Engaging payers who were previously not willing to pay for eye exams in an effort to increase their HEDIS rating for this metric by providing some financial incentive outside of filing a claim

**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.

Standing Order for Diabetes Eye Exams

Diabetic retinopathy screening referral (Z13.5 screening for eye and ear disorders) Patient age: 18 – 75;

- If the patient has not had retinopathy-screening exam in the past 12 months, a referral may be placed to an optometrist or ophthalmologist based on the patient’s preference and the in-network provider list.
- If the clinic has access to a retinal camera (i.e., Welch Allyn RetinaVue camera) and the patient has not had retinopathy-screening exam in the past 12 months, the staff may refer the patient for a retina scan.

PRECAUTIONS:

Patients with glaucoma, known retinal eye disease including macular degeneration and retinopathy should be referred to an ophthalmologist.
UPC Eye Care Cohort Results

![UPC Eye Care Cohort Results](chart)

- **Percent of T2G Cohort w/ documented screening**
  - **2018 Q2 (Baseline)**: 37.8%
  - **2018 Q3**: 42.7%
  - **2018 Q4**: 43.8%
  - **2019 Q1**: 41.1%
  - **2019 Q2**: 39.8%

**Group weighted averages**:
- 2019Q2: 51.3%
- Baseline: 45.7%
# UPC Population Growth Over Cohort Periods

<table>
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<tr>
<th>Measurement Period*</th>
<th>T2G Cohort: Patients with T2DM diagnosis (Denominator)</th>
<th>Growth in T2DM denominator patients from prior period</th>
<th>Cumulative growth in T2DM denominator patients from BL</th>
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<td>BL: 2018 Q2</td>
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<td>N/A</td>
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<td>2019 Q2</td>
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<td>11.2%</td>
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</tbody>
</table>

*Measurement period is a rolling 12-month period ending on the last day of the quarter specified. BL=baseline.
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