



Improving Diabetic Eye Disease Follow-up Via Electronic Communication

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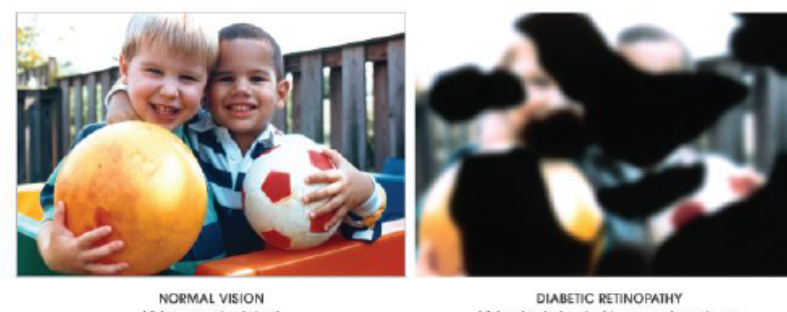
Background

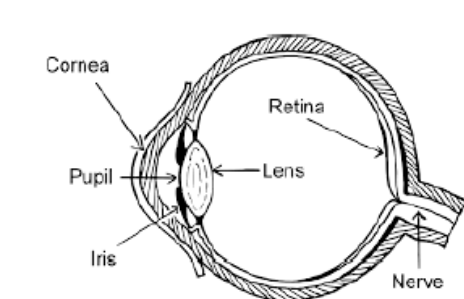
- According to the Centers for Disease Control and Prevention, 34.2 million Americans have diabetes. It is also the number one cause of adult blindness in the USA.¹
- The American Academy of Ophthalmology reports that only 60% of patients with diabetes have recommended yearly screenings for diabetic retinopathy.²
- Systemic improvements are needed to increase patient completion of recommended eye exams. This includes increasing referral rates of patients with diabetes to eye specialists. This would help avoid preventable loss of vision and improve overall care for patients with diabetes.

Aim Statement

- In order to improve compliance with recommended exams, all patients with diabetes who were seen by Dr. Dale Spencer at CHPG Primary Care Broadmoor during a three-month span were contacted via telephone and email in order to provide education about diabetic eye disease and to encourage follow up with an ophthalmologist or optometrist.

Diabetic Eye Disease

- 1 Who can get diabetic eye disease?**
All people with diabetes can get diabetic eye disease. The longer someone has diabetes, the higher the risk becomes.
- 2 What is diabetic eye disease?**
Diabetes can impact your vision in many ways. Some possible problems include:
 - **Diabetic retinopathy** – Diabetes can damage blood vessels in the retina, the part of the eye that is sensitive to light. Diabetic retinopathy is the leading cause of blindness in the US among people aged 20-74.
 - **Cataracts** – Diabetes can make the lens of the eye become cloudy.
 - **Reading glasses** – Diabetes can make people need reading glasses at an earlier age.
- 3 What are the symptoms of diabetic retinopathy?**
Early diabetic retinopathy may not have any symptoms. Over time, vision may become blurry. More advanced disease can cause sudden and severe vision loss.
 
- 4 What can I do now to protect my vision?**
All people with diabetes can act now! This includes:
 - **Eye exams** – All patients with diabetes need a yearly dilated eye exam by an ophthalmologist or optometrist.
 - **Blood sugar** – Control your sugar levels as your doctor advises.
 - **Blood pressure** – You should keep tight control of your blood pressure.
 - **Cholesterol** – Keep your cholesterol low with a healthy diet and plenty of exercise.



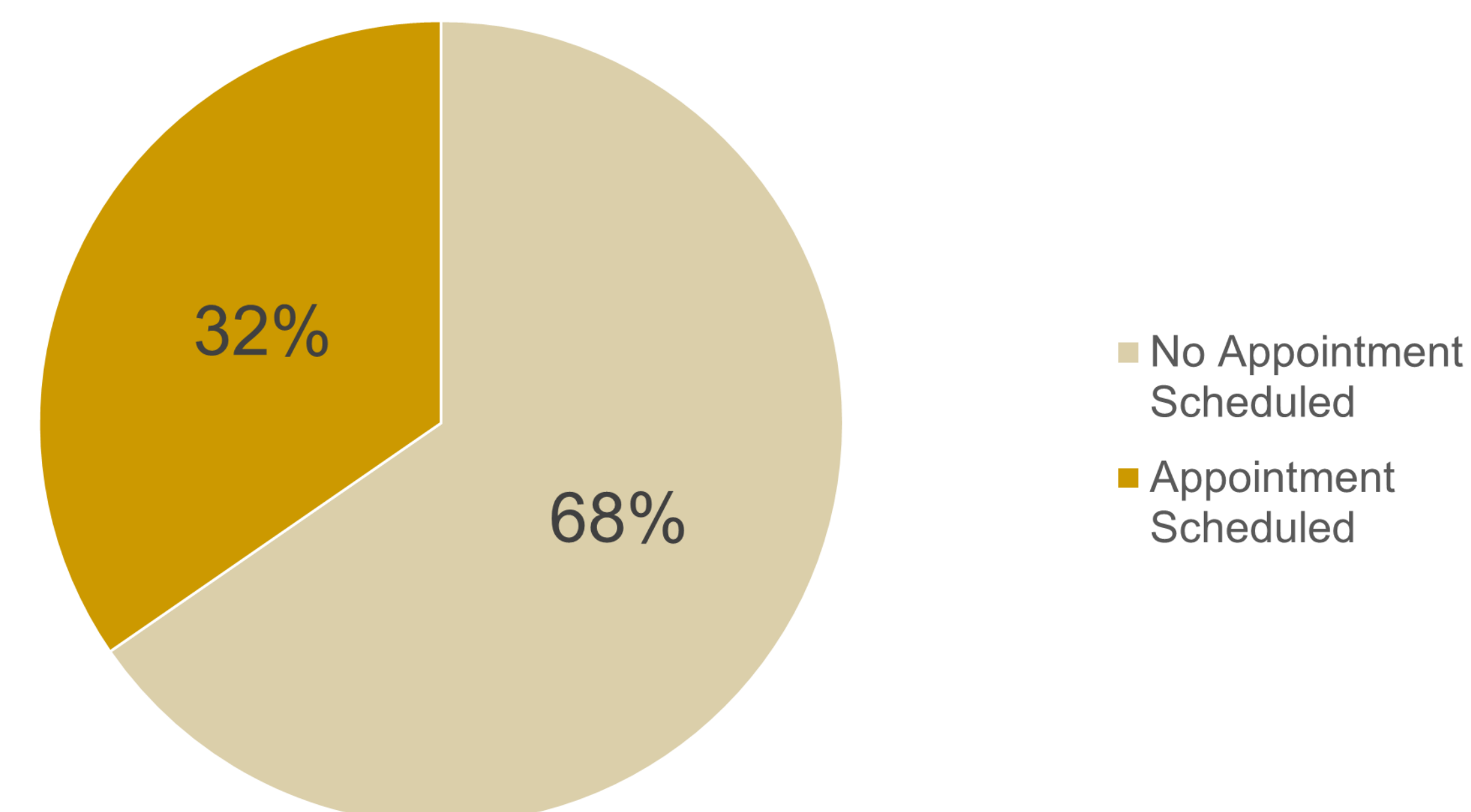
Act now!
See the next page for contact information for local optometrists and ophthalmologists to schedule an eye exam today!

Project Description

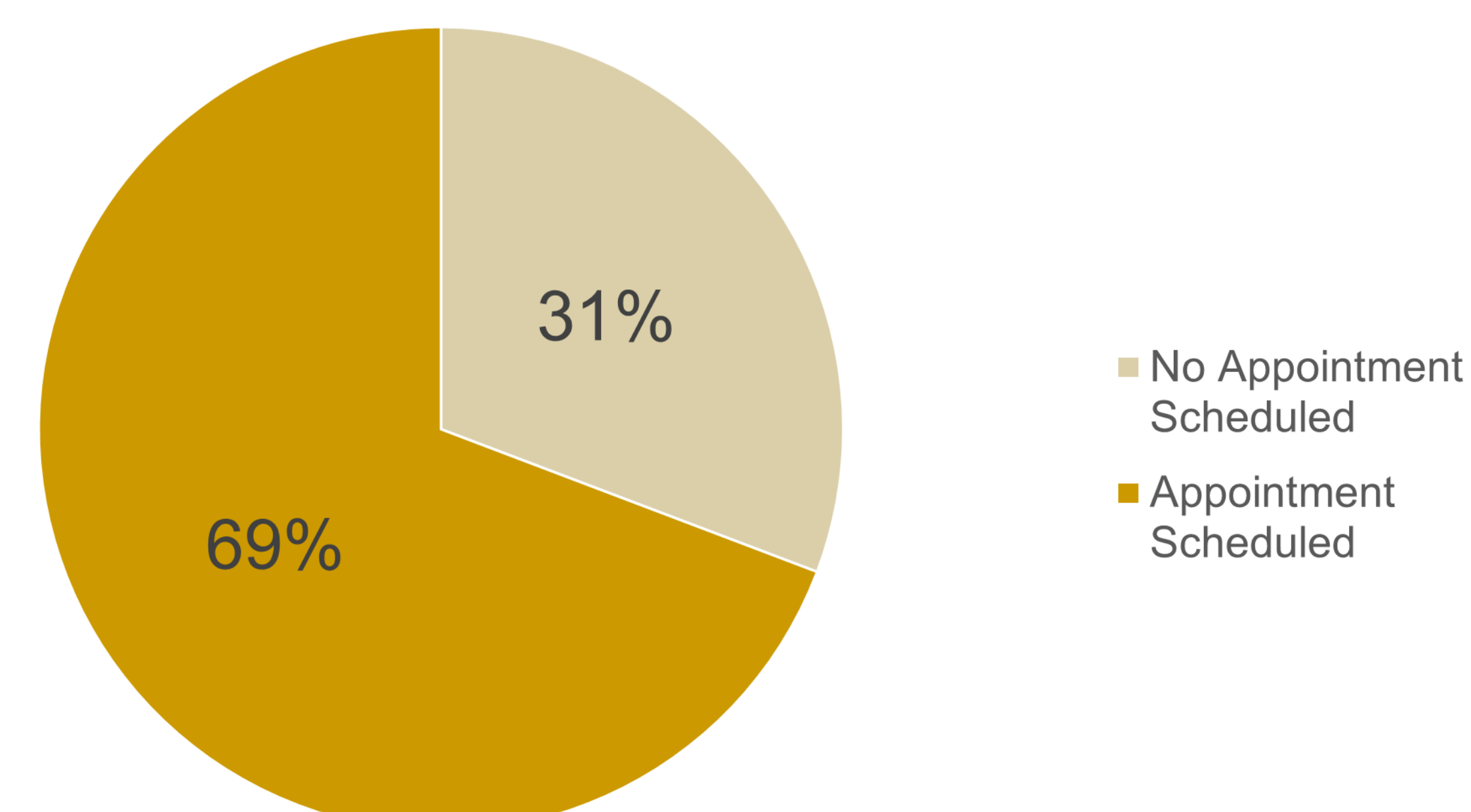
- All patients with diabetes were contacted via telephone. They were asked if they currently get regular eye exams, how often the exams are performed, when their last exam was, and if they are scheduled for follow-up.
- Patients were offered an informational packet that contained educational material (see left column) as well as contact information for and eye specialist. This was sent to interested patients via email.
- Follow-up calls were carried out to assess how many patients took the initiative to schedule exams following this intervention. Assistance was also offered to patients who had problems scheduling exams.

Results

Initial Contact



Follow up Contact



Discussion

- The number of patients who have been diagnosed with diabetes but are not consistent in obtaining regular eye exams is large. This gap in patient care has significant impacts on patients' quality of life. In this sample, 68% of patients were did not have their next exam scheduled.
- By using personal telephone contact, providing digital education resources, and implementing close follow up, many patients are willing and able to take individual action to address this gap in care. In our clinic, this is demonstrated by the fact that 69% of patients who originally had no planned exam had a scheduled appointment at the time of follow-up.
- Although patients are typically aware of the need for regular exams, encouragement from a primary-care physician is particularly effective in drawing attention to the importance of eye exams.
- While telephone communication provides an easy way to initiate personal contact with patients, it is an inconsistent tool as people are not reliably available by telephone. It can also be difficult to communicate via phone as one loses helpful visual cues.
- Providing educational materials via email is a possible alternative to physical copies or verbal instruction only. It is easy to distribute to either selected individuals or large groups. This flexibility could be harnessed by medical providers in order to provide educational material more frequently or in a timelier manner.
- Patients are more open to telephone and email communication from a provider's office than may be expected.
- With the anticipated rise in telehealth visits, providers should not shy away from using technology as an educational tool for their patients.

Conclusions

- There is a gap in patient care regarding patients with diabetes obtaining yearly eye exams that can and should be addressed with the help of primary care physicians placing referrals and encouraging adherence to advised screening.

References

1. "About Diabetes." *Centers for Disease Control and Prevention*, Centers for Disease Control and Prevention, 11 Mar. 2020.
2. Flaxel C, Bailey S, Fawzi A, et al. "Diabetic Retinopathy PPP 2019." *American Academy of Ophthalmology*, 8 Jan. 2020.