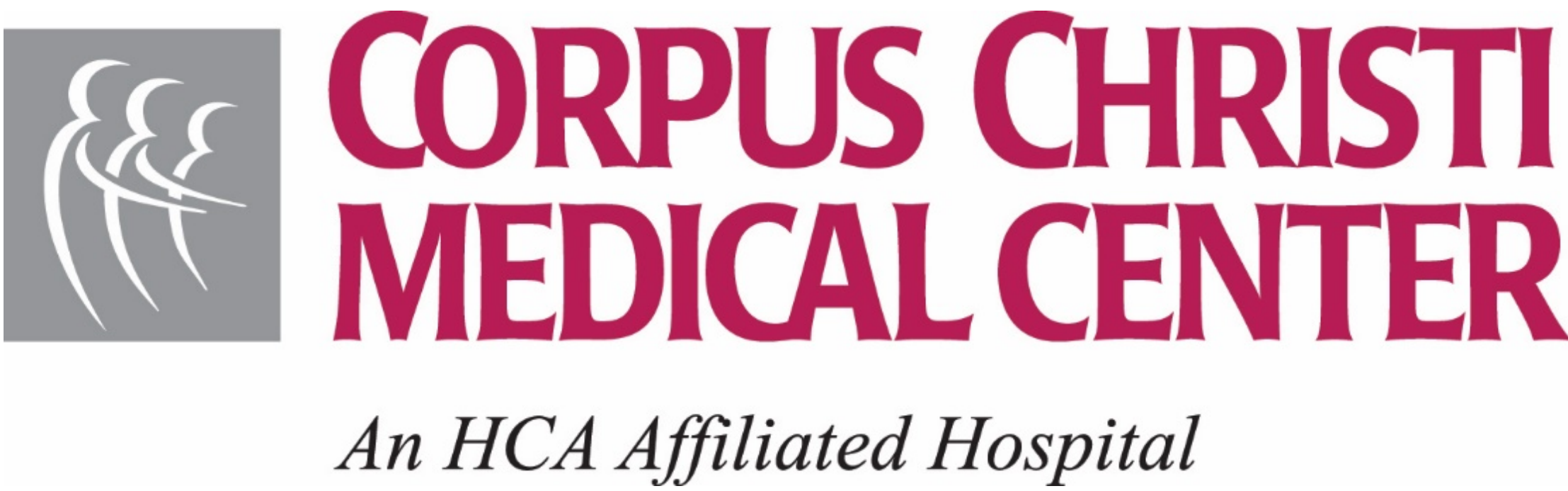


# A Quality Improvement Project to Increase Diabetic Retinopathy Screenings

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## Background

Type 2 diabetes mellitus is one of the major causes of vision loss in the United States, and it is estimated to cause diabetic retinopathy in around 4.2 million adults in the United States (Zhang et al., 2010). Although current diabetic retinopathy screenings are very effective, many diabetes mellitus patients are not up-to-date on routine eye exams (Lu et al., 2016).

## Aim Statement

The aim of our project is to improve the diabetic retinopathy screenings from 5% to 20% until February 2022 within the endocrinology clinic.

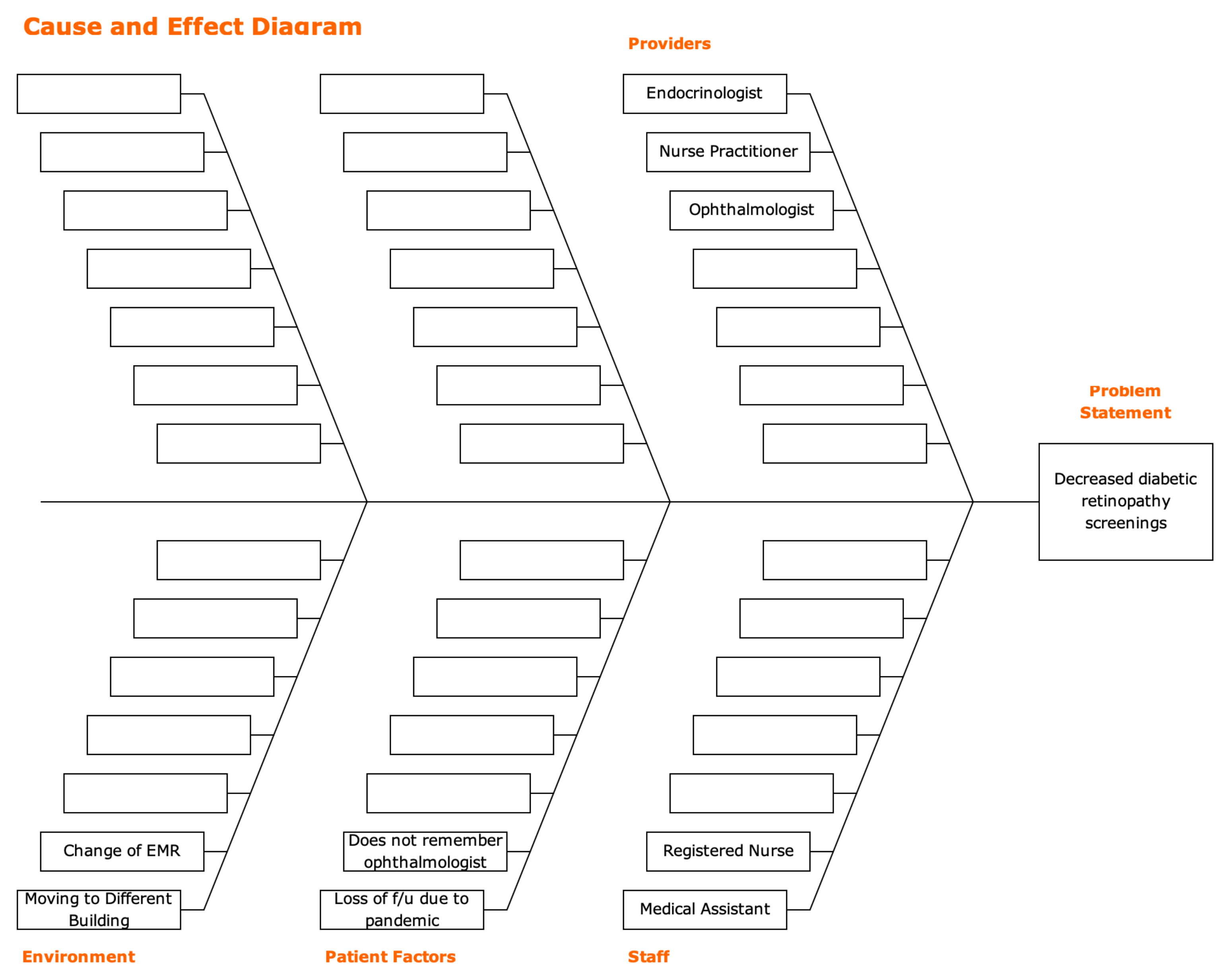
## Methods

- Medical records of patients with diabetes mellitus were evaluated from June 2021 to November 2021 (N=1270).
- At the start of the project, the percentage of patients who have up-to-date eye exams from ophthalmologists was obtained.
- After 3 months of interventions, patient's records were re-evaluated to obtain percentage of patients who have up-to-date eye exams from ophthalmologists after the interventions.

## Intervention

- We will re-educate all staff that are responsible for encountering diabetic mellitus patients to ask about their last ophthalmology follow-up eye exam.
  - Education will consist of re-enforcing staff every day the need to ask patients.
  - The staff will then ask patients their ophthalmologists and obtain the last progress note from the ophthalmology clinics.
  - If patients do not have an ophthalmologist or has not followed up with the ophthalmologist within the last 12 months, follow-up with ophthalmology will be emphasized during the clinic visit.

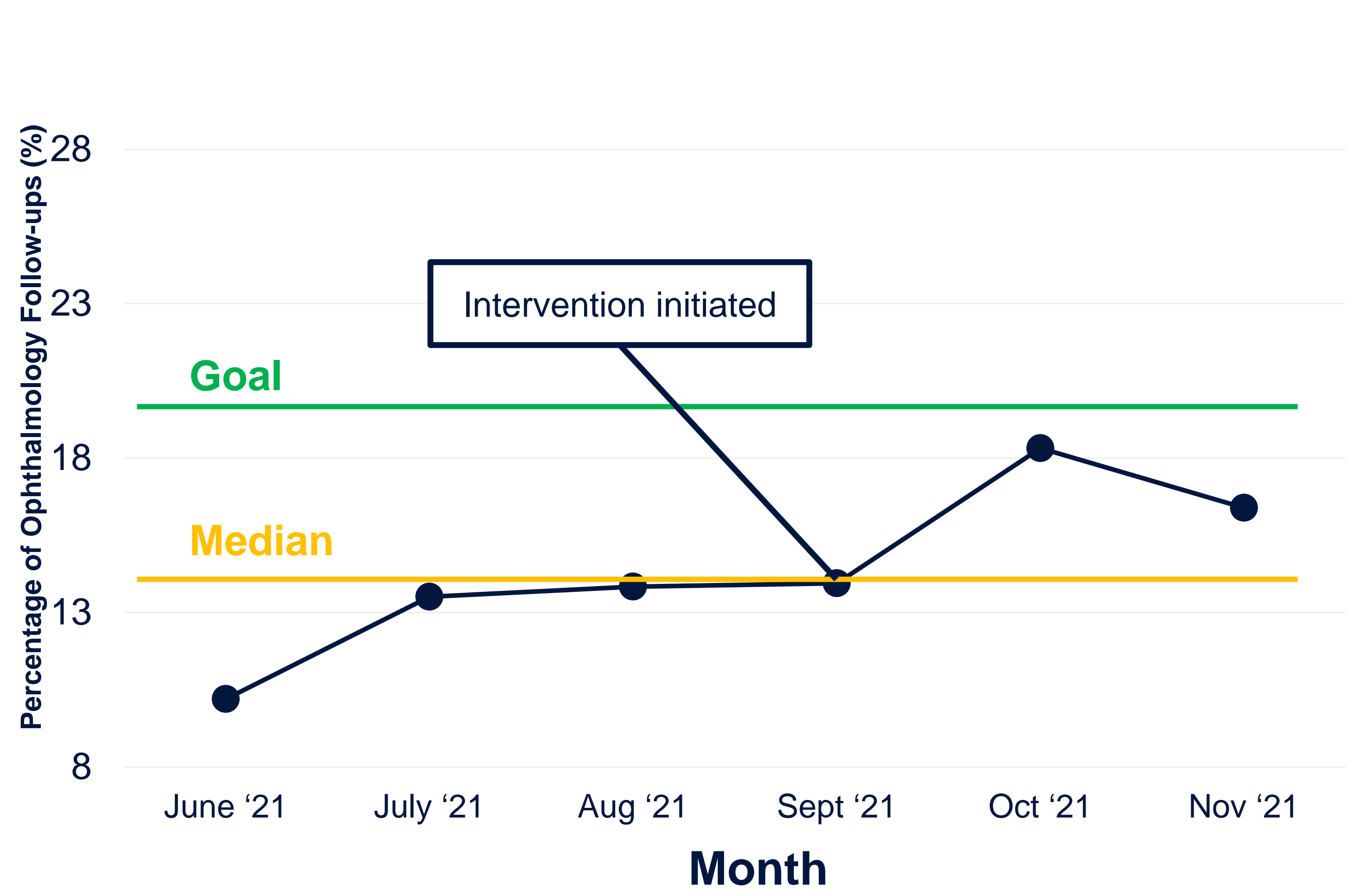
## Quality Tools



## Results

Prior to Intervention			
	DM (# pts)	Retinopathy (# pts)	Percentage (%)
6/2021	245	25	10.2%
7/2021	222	30	13.51%
8/2021	318	44	13.84%
Total	785	99	12.61%
After Intervention (Educating Staff)			
	DM (# pts)	Retinopathy (# pts)	Percentage (%)
9/2021	172	24	13.95%
10/2021	191	35	18.32%
11/2021	122	20	16.39%
Total	485	79	16.29%

## Results



## Next Step

- In addition to the staff asking patients about ophthalmology follow-ups, the endocrinologist will ask patients with diabetes mellitus about ophthalmology follow-ups every visit.
- After another 3 months of interventions, the percentage of patients who have up-to-date eye exams from ophthalmologists will be obtained and evaluated.

## References

- Zhang X, Saaddine JB, Chou CF, et al. Prevalence of diabetic retinopathy in the United States, 2005-2008. JAMA. 2010;304(6):649-656. doi:10.1001/jama.2010.1111
- Lu, Y., Serpas, L., Genter, P., Anderson, B., Campa, D., Ipp, E. (2016). Divergent perceptions of barriers to diabetic retinopathy screening among patients and care providers, Los Angeles, California, 2014–2015. Preventing Chronic Disease Public Health Research, Practice, and Policy,13(E140). Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5055399/pdf/PCD-13-E140.pdf>

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