Improve Screening for Diabetic Retinopathy Among Pregnant Patients with Pre-existing Diabetes: A Quality Improvement Initiative

BACKGROUND

Pregnant patients with pre-existing type 1 or type 2 diabetes mellitus are at an increased risk of development or progression of diabetic retinopathy (DR).

Most patients who develop DR have no symptoms. The effect of pregnancy on DR has been addressed in several studies and progression has been observed in 16-85% of patients.

Screening eye exams for DR can lead to primary and secondary prevention, which will decrease the healthcare burden of DR treatment as well as patient morbidity and can prevent irreversible vision loss.

OBJECTIVES

- To obtain baseline eye exam compliance (defined as at least one eye exam during pregnancy) among pregnant women with pre-existing diabetes mellitus.
- To increase the compliance at least 5% above baseline in 6 months among pregnant women with pre-existing diabetes mellitus.

METHODS

- The electronic medical records of 489 pregnant patients with diabetes (including those with gestational and pre-existing type 1 and type 2 diabetes mellitus) enrolled within the institution who delivered between 6/1/20 to 5/31/21 were reviewed.
- With the help of the EPIC (EMR) team and by conducting a manual review of each patient’s chart, data were filtered to include only patients with pre-existing type 1 or type 2 diabetes mellitus.

INTERVENTIONS

- Our interventions included: phone calls to patients while maintaining HIPAA compliance via Doximity, distribution of brochures at office visits to enhance visual learning, presentation at the Ob/Gyn Department Meeting (via Microsoft Teams) to reinforce to the providers the importance of educating patients and counseling them and coordination with Ophthalmology Department to arrange for early appointments for referred patients.

CONCLUSION

- The improvement of the pre-intervention compliance percentage from 17.3% to the post-intervention compliance percentage of 25.5% provides evidence that appropriate interventions can increase patient compliance with an eye exam.
- Further actions that are planned are: Inclusion of questions regarding prior eye exams in the Epic (EHR) order set and note templates used for charting during office visits; providing an early referral to case management services to coordinate insurance issues and inclusion of dietary and nutrition department in the counselling of patients.

REFERENCES