

# **Improving the Timeliness of Retinal Exams**

Laura Edwards DNP RN, Andrew Nydegger DNP RN CNE

## **Structured Abstract**

### **LOCAL PROBLEM**

Diabetic retinopathy (DR) is a deterioration of the retina due to damage caused by diabetes. This condition can cause vision distortion and blindness. Screenings for this condition are an important part of regular diabetes management. Currently there are more than 30 million people with diabetes mellitus. Veterans have a 2.5 higher rate of diabetes than the general public and are therefore at higher risk of DR. It is important that healthcare professionals treating diabetic patients routinely screen for this condition. Early detection can help guide care and prevent deteriorations that could lead to blindness. Currently, the national goal for the Department of Veteran Affairs (VA) is for 91% of diabetics receive screenings for DR every 2 years. Many clinics across the nation fail to meet this goal. The local VA clinic rate was 81.72% for DR screening.

### **PROJECT PURPOSE**

The purpose of this project was to improve the timeliness of diabetic retinopathy screenings through the implementation of an electronic clinical reminder tool. Staff were trained on how to use the tool to identify and communicate with veterans needing screening. This project took place at the Guntersville Community Based Outpatient Clinic in Guntersville, Alabama.

### **METHODOLOGY**

Kurt Lewin's Organizational Change Model guided the implementation of the project. An electronic clinical reminder tool was embedded into the current electronic health record (EHR) that would quickly identify the patients that need retinal screenings. The staff were trained to use this tool to identify and contact the patients and schedule for same day screenings. Pre and post implementation surveys were used to determine the effect that this project would have on staff and workflow. Data regarding the number of patients needing screenings and patients receiving screenings were monitored throughout the process. Results from the project were discussed with stakeholders to determine sustainability of the processes.

### **RESULTS**

Pre implementation tracking records showed an 81.72% rate of timely screening. The rate following implementation was 86.42%. Review of EHR utilization records along with data collected from staff shows a decreased chart review time by 3.5 hours per week. Surveys administered to staff showed that 100% of the staff deemed the tool easy to use and that it saved time. Additionally, staff indicated that they would like to use this electronic clinical reminder system for other screenings such as cancer screenings.

## **IMPLICATIONS FOR PRACTICE**

The results from this project add to the body of literature that supports the use of electronic clinical reminders. It also supports LEAN organizational practices by increasing efficiency of staff, decreasing lag time for screenings and decreasing waste in chart review time. Review of surveys indicate a desire from staff and administration to continue the use of this tool in DR screenings and expand it to other screenings and practices such as cancer screenings. The results show promise that continued use of this tool will increase timely DR screenings that can inform better patient care and decrease negative outcomes of patients with diabetes.

*Keywords:* diabetes, retinopathy, electronic clinical reminder

Team Leader: Dr. Ellen Buckner

Team Member(s): Dr. Laura Edwards, Dr. Andrew Nydegger, Dr. Rebecca Huie