

Improving outpatient diabetic care through EHR-based quality measure tracking

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INTRODUCTION

Type 2 Diabetes mellitus (T2DM) remains one of the most significant causes of mortality in Oklahoma. The condition is especially detrimental in populations affected by poverty and by those in certain indigenous communities within Oklahoma. Among the associated organ systems which can be damaged by long-term lack of adequate glycemic control, ophthalmic, renal, and vascular insults are particularly vulnerable to damage. The Centers for Medicare and Medicaid Services have made annual eye exams, diabetic foot exams, and urine micro albumin screenings quality measures due to their important role in reducing morbidity associated with T2DM.

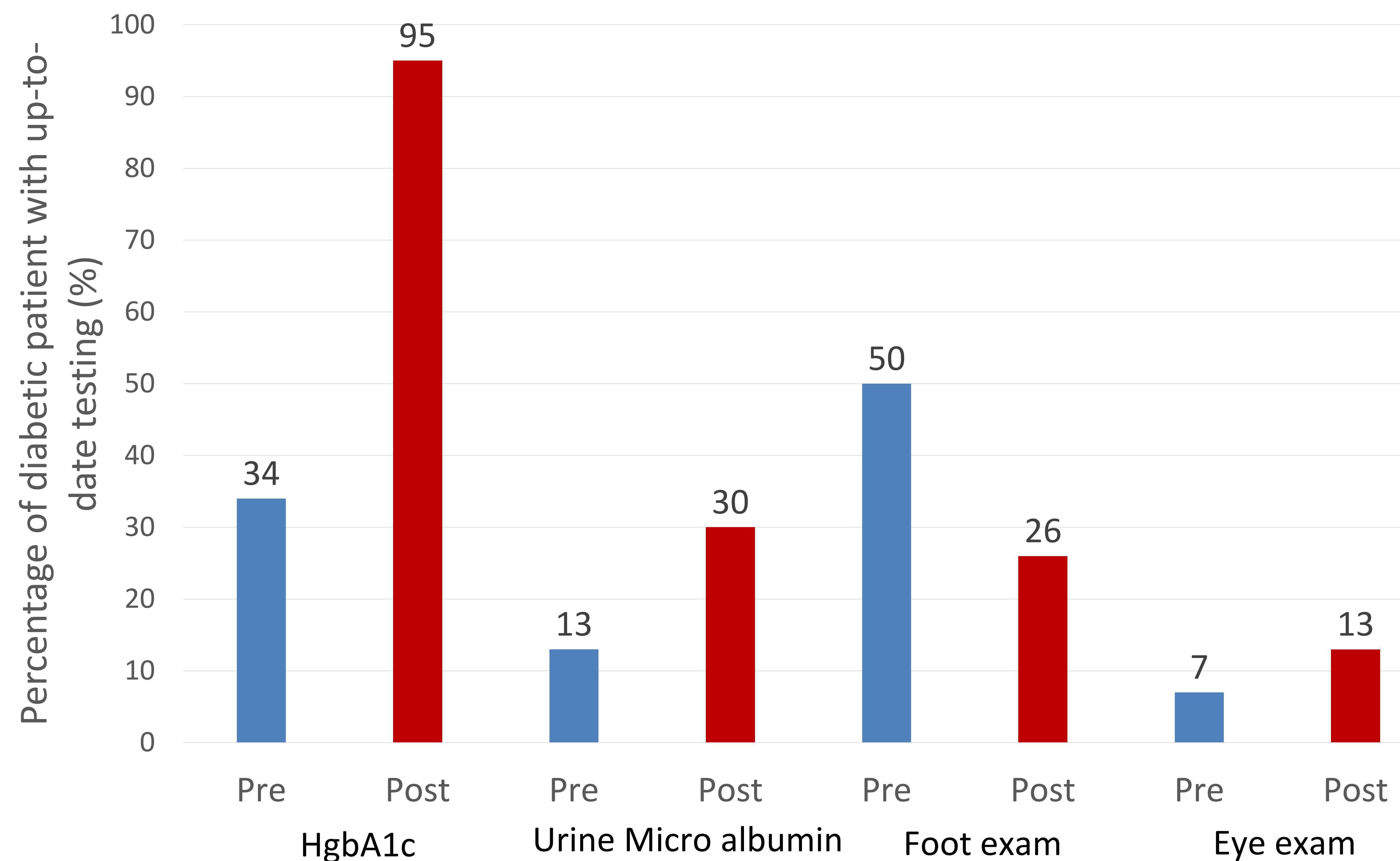
OBJECTIVES

Improve diabetic care in NHS IM resident clinic through promoting annual testing of diabetic foot exam, eye exam, and urine microalbumin in at least a rate of 50% of the diabetic patients per national average of IM clinics.

METHODS

In 2021 Residents were given an instructional module to provide information on the current ADA guidelines and instruct on the use of Cerner to efficiently track and manage annual diabetic exams. Residents were instructed to use the DM Management Expectations feature of the Health Maintenance function in Cerner. This was distributed to the residents in August 2021. In March 2022, the diabetic patients that were seen in the IM clinic during September 2021 to March 2022 was chart reviewed and data was obtained as to whether the patient had testing for HgbA1c, urine microalbumin, monofilament foot exam, and diabetic eye exam documented within the past year.

RESULTS

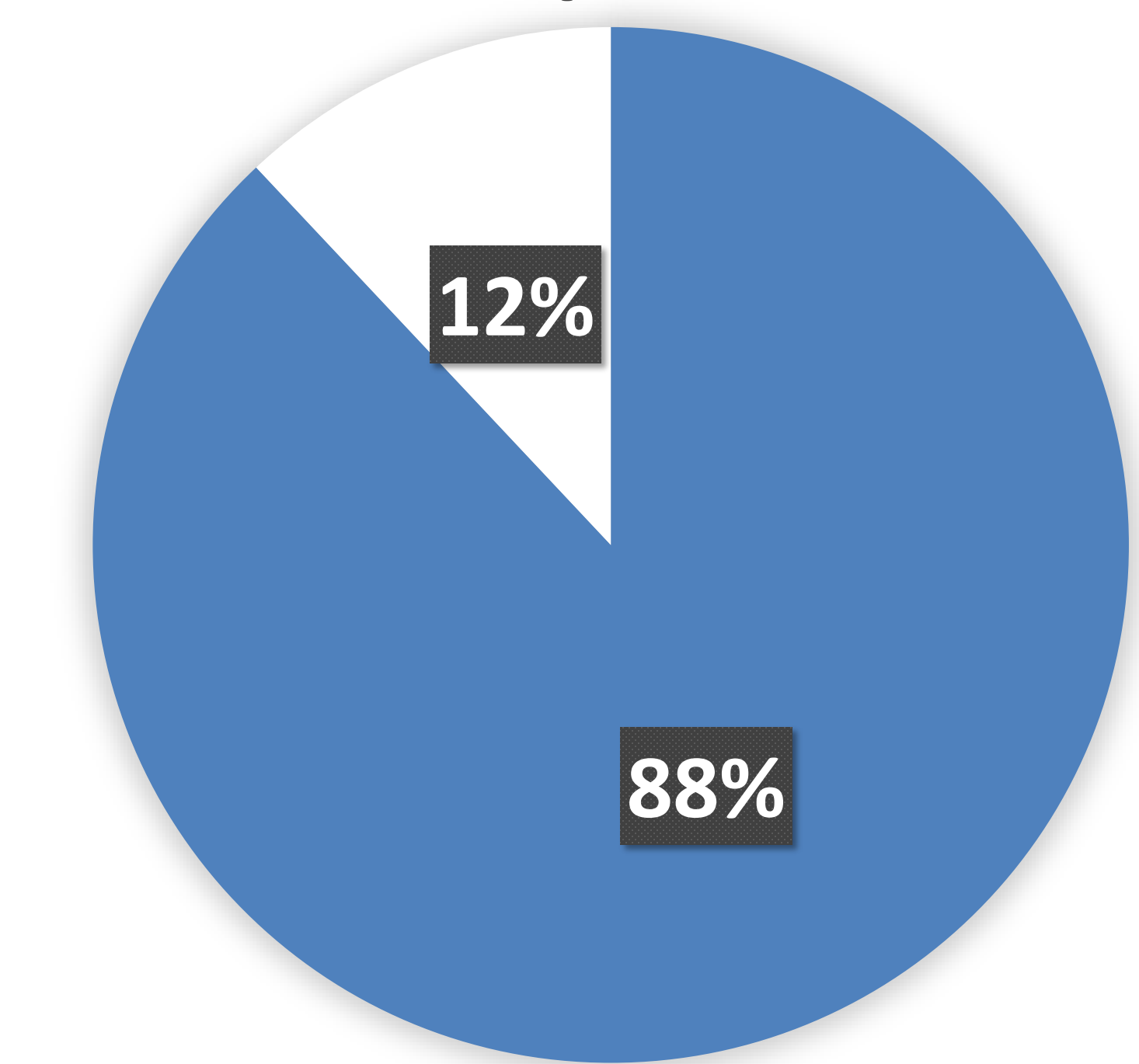


CONCLUSION

The use of EHR-based quality measure tracking improved outpatient diabetic care by increasing the documentation of the microvascular effects of diabetes. Proper and trackable data is crucial in following patient outcomes. Overall, documentation rates improved. However, the changes that were implemented in the internal medicine clinic failed to meet the goal of reaching the national average. The clinic did not meet the goal of 50% for all categories. This is likely multifactorial but possibly due to non-optimal functionality of the health maintenance tab.

There was marked improvement in charting HgbA1c, urine microalbumin, and eye exam using the health maintenance tab. Paradoxically perhaps, the data tracking for foot exam decreased. More information is required to determine any confounding factors leading to reduced data tracking. It is possible that more education toward providers is required, to include location and use of disposable monofilament packs and review of performing the exam. During the implementation of our interventions, it was noticed that there was difficulty improving compliance for eye exam. The eye exam requires patient to see an outside provider. Despite efforts to streamline referral to optometry clinics, there was not much improvement in data tracking for eye exams.

Percentage of diabetic patients tracked with DM Expectations



82 diabetic patients were seen in the IM clinic from February 2021 to August 2021. 67 diabetic patients were seen in the IM clinic from September 2021 to March 2022. Rate for annual HgbA1c testing increased by 61%, urine micro albumin testing increased by 17%, monofilament foot exam decreased by 24%, and documented annual optometric eye exam increased by 6%. 88% of diabetic patients had the DM Expectations utilized in their chart for at least a portion of their recommended screening.

FUTURE RECOMMENDATIONS

- Work more cooperatively with Clinical IT to have HgbA1c, urine microalbumin, foot exam, and eye exam auto populate on the health maintenance tab for any patient with a diabetes diagnosis
- Create EHR alert messages as reminders to providers when documenting information relevant to diabetic patients
- Improve resident education on general use of the health maintenance tab and dot phrases

REFERENCES OR ACKNOWLEDGEMENTS

<https://www.cdc.gov/nchs/pressroom/states/oklahoma/ok.htm>