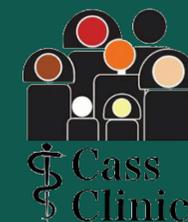




Improving Hemoglobin A1c Guideline Adherence in a Student Run Free Clinic- Yes We Can!

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Introduction

Cass Clinic is a student-run free clinic (SRFC) in Detroit, MI that offers care to patients who are un- or underinsured. Cass Clinic offers hemoglobin A1c (HbA1c) testing to their diabetic patient population. Alarming, Cass Clinic reports low adherence to HbA1c testing guidelines.

HbA1c testing is a vital step for effective diabetes management, however, given the low compliance to testing frequency and, commonly, a subsequent delay in the corresponding treatment modification, HbA1c at the point of care (POC) offers an opportunity for improvement of diabetes care¹. Lack or delay in HbA1c testing can lead to subsequent delay in treatment modification and poor patient outcomes.

Project Aim

This quality improvement initiative aims to educate medical student volunteers on the appropriate HbA1c testing guidelines in order to improve Cass Clinic's adherence to these guidelines and ultimately patient care.

Methods

Medical student volunteers at Cass Clinic were provided an information sheet with HbA1c testing guidelines established by the American Diabetes Association. These guidelines include:

- Assessing HbA1c **at least every 3 months**, and as needed, in patients whose therapy has recently changed and/or who are not meeting glycemic goals.
- Assessing HbA1c **at least every 6 months** in patients who are meeting treatment goals and who have stable glycemic control.

Ordering of a HbA1c test was recorded during each clinic day by medical students in the electronic medical record. 3 months following the intervention, a retrospective chart review and data analysis were conducted to determine if the implementation was successful in improving HbA1c guideline adherence.

ATTN CASS VOLUNTEERS:

Please check if your patient is diabetic **at the beginning of each encounter**; if patient is **diabetic** please reference the ADA's HbA1c guidelines:

- Assess HbA1c **at least every 3 months**, and as needed, in patients whose therapy has recently changed and/or who are not meeting glycemic goals.

-Assess HbA1c **at least every 6 months** in patients who are meeting treatment goals (and who have stable glycemic control).

If your patient needs HbA1c at today's visit, please tell a Cass coordinator ASAP. This will ensure timely HbA1c result.

Figure 1. Informational Sheet Provided to Medical Students in Clinic

Results

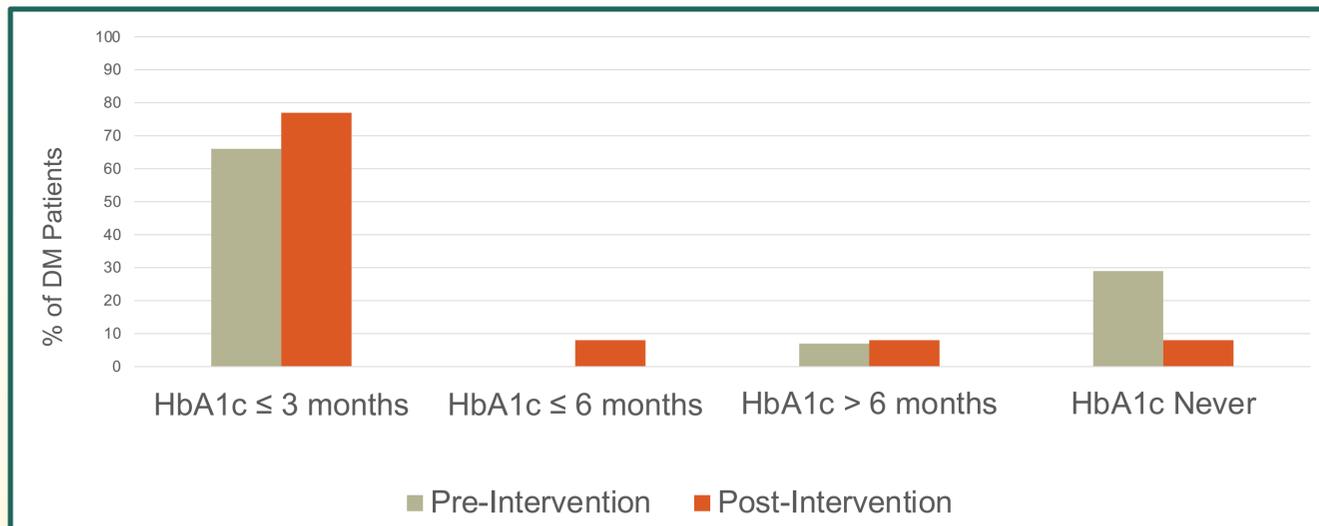


Figure 2. Percentage of Type II DM Patients with HbA1c Measurements Pre and Post Intervention

Prior to the intervention (N=24), 16 type II diabetes patients (66%) who were seen at Cass Clinic had a HbA1c test performed within 3 months of their current encounter, 1 patient (7%) had a HbA1c test > 6 months, and 7 patients (29%) never had a HbA1c test performed.

3 months after the intervention had been implemented (N=13), 10 type II diabetes patients (77%) who were seen at Cass Clinic had a HbA1c test performed within 3 months of their current encounter, 1 patient (8%) had a HbA1c test performed > 3 months, but < 6 months of the current encounter, 1 patient (8%) had a HbA1c test > 6 months, and only 1 patient (8%) never had a HbA1c test performed.

Conclusion

- Quality improvement initiatives can be adapted to fit the needs of a SRFC like Cass Clinic.
- These initiatives can improve laboratory testing guideline adherence and ultimately patient care and outcomes at SRFC.

Future Directions

- Other quality improvement initiatives should be implemented to improve Cass Clinic's adherence to national clinical guidelines and recommendations
- Future initiatives can target total cholesterol, LDL cholesterol, and HDL cholesterol measurements, which are laboratory measurements collected at Cass Clinic

References

1. Schnell O, Crocker JB, Weng J. Impact of HbA1c Testing at Point of Care on Diabetes Management. *J Diabetes Sci Technol.* 2017;11(3):611-617. doi:10.1177/1932296816678263