Introduction & Background

Introduction

• HbA1c is the accepted measure to monitor diabetes.
• ADA recommends poorly controlled diabetes patients (HbA1c 9% or greater) have testing every three monthly.

Background

• Poorly controlled diabetes complications cost the US $98 Billion annually.
• Healthcare Effectiveness Data and Information Set for primary care practices state all poorly controlled Type II Diabetes must have at least one HbA1c annually.
• Primary care practices do not meet HbA1c testing frequency metrics for poorly controlled diabetes patients.

Purpose & Aims

The purpose of this project is to reduce lapses in HbA1c testing in poorly controlled diabetic patients in a primary care practice.

Aim1: To increase the proportion of adult patients with HbA1c of 9% or greater with follow up testing by creation and implementation of reporting systems to track HbA1c due dates with documented outreach to patients who are due or overdue for testing.

Aim2: Examine the rates of placing standing HbA1c orders to ease completion of testing.

Aim3: Initiate point of care testing on 80% of diabetes patients without HbA1c testing at the time of clinic visit.

Methods & Intervention

Design: One group, pretest-posttest design
Sample: 36 adult patients
Setting: Johns Hopkins Greenspring Division of Internal Medicine
Inclusion Criteria: adult patients age 18-75 with poorly controlled (9% or greater) Type II Diabetes

Intervention

• Run Diabetes Epic Report bi-weekly for 12 weeks
• Chart Review to confirm last HbA1c date.
• Outreach to patients via MyChart, letter and/or phone call bi-weekly for a total of 3 outreach attempts to have HbA1c tested.
• Pend standing HbA1c lab orders to providers
• Point of care was not able to be initiated.

Results

• Of the 36 total patients, 64% had HbA1c tested as a result of outreach, while 36% never had HbA1c testing.
  • First outreach occurred on all 36 participants, resulting in 12 HbA1c tests. There were 24 second outreaches with 7 resulting HbA1c tests. There were 15 third outreaches with 4 resulting HbA1c tests.
  • Of the 36 patients, 81% had standing HbA1c orders at the conclusion of implementation.
  • Point of care not analyzed.

Demographic Characteristics (N = 36)

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<thead>
<tr>
<th>Age, mean (SD)</th>
<th>59.36 (13.6)</th>
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<tbody>
<tr>
<td>Sex/ ID, n (%)</td>
<td>Male: 17 (47.2) Female: 17 (47.2) Transgender: 2 (5.6)</td>
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<td>Insurance, n (%)</td>
<td>Commercial: 19 (52.8) Medicaid: 4 (11.1) Medicare: 13 (36.1)</td>
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<tr>
<td>Race/Ethnicity, n (%)</td>
<td>African American: 18 (50) Asian: 1 (2.8) Caucasian: 14 (38.9) Hispanic: 2 (5.6) Other: 1 (2.8)</td>
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A1c Tested

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
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<tr>
<td>36%</td>
<td>64%</td>
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Standing A1c

<table>
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<tr>
<th>Yes</th>
<th>No</th>
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<tr>
<td>81%</td>
<td>19%</td>
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Conclusion

• These findings support an increase in HbA1c testing as a result of initiation of an identification and tracking report with subsequent patient outreach on a bi-weekly basis.
• Patients reported ease of HbA1c testing with the use of standing orders.
• Point of care testing did not occur during implementation but research supports its use to increase testing frequency and patient satisfaction.

Dissemination

• The results of this intervention were shared with the staff, clinical director and ambulatory practice manager during a monthly CUSP meeting.
• The written protocol for the project was left with the practice nurse who continues the project as a practice standard of care.