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Got Sugar? Pharmacist Intervention to Improve A1c

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Background

- Approximately 31% of diabetic patients (22 of 71 patients) at Thursday Jefferson Ambulatory Practice (JHAP) have a hemoglobin A1c > 8.
- Additional Clinical Pharmacist care has been shown to decrease Hemoglobin A1c compared to usual care.\(^1\)
- None of our Thursday JHAP diabetic patients had seen a Clinical Pharmacist before.

**Aim**

Within 6 months, we aim to decrease by 10% the number of our diabetic patients with an A1c > 8 through Clinical Pharmacist referrals.

**INTERVENTION PROCESS MAP**

- **A1c > 8:**
  - Yes
  - No
  - Willing to see Pharmacist
  - Yes
  - No
  - Seen by Pharmacist
  - Yes
  - No
  - Provider visit scheduled
  - Yes
  - No
  - Provider outreach
  - Yes
  - No
  - Lab scripts mailed
  - Yes
  - No
  - Repeat A1c collected
  - Yes
  - No
  - Repeat A1c result

**FISHBONE**

- **Patient/Staff**
  - Hemoglobin A1c not at Goal
  - Education
  - Med Refills
  - Referral Pattern
  - Polices
  - Pharmacy
  - Diet
  - Supply Orders
  - Exercise
  - Parking

**TIMELINE**

- **September 2016**
  - EMR initiative: identify active DM patients with hgba1c > 8
- **October 2016**
  - Physician education: guidelines for DM care
  - Meeting with clinical pharmacist: discuss barriers, work flow
- **November 2016**
  - Clinical pharmacist pre-visit checklist
  - Design checklist
  - Review with physicians
  - Review of PCP quality report
  - Active referral to clinical pharmacist by physicians
  - Individualized PCP chart audits
  - Patient appointment reminders: physician initiated phone calls
  - Review of PCP quality report
  - Patients contacted through phone call and letters for new hemoglobin a1c bloodwork
  - Patient appointment and lab reminders by staff and physicians
  - Periodic statistics reviewed
- **April 2017**
  - Results reviewed
  - Review of PCP quality report

**RESULTS**

- Of the diabetic cohort with initial A1c > 8, 3 of 22 patients (13%) met goal by the end of the intervention period.
- 12/22 Patients had a repeat A1c
- 9/12 Patients with a repeat A1c had an improvement in A1c
- 5/9 Patients with an improved A1c saw a Clinical Pharmacist

**DISCUSSION**

Referral to a Clinical Pharmacist may be a potential supplementary option to provider care in improving glycemic control.

**LIMITATIONS:**

- Small sample size
- Intervention time too short for measured outcome
- Residents with extended time out of the ambulatory clinic
- Lack of consistent follow up visits or repeat A1c
- Patients lost to follow up due to insurance or migration
- Multiple barriers to getting patient to see a Pharmacist

**FUTURE DIRECTION:**

- Extend to other JHAP clinics by holding resident training sessions.
- Expand Clinical Pharmacy’s availability and outreach
- Improve Patient Tracking and increase BS surveillance
- Implement Telehealth Clinical Pharmacy visits

**REFERENCES**