

Clinical Pharmacists Impact on the Management of Uncontrolled Diabetes in a Primary Care Setting



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Disclosures

- Co-investigators:
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- IRB Status: exempt
- Conflicts of Interest: None
- Project Sponsorship: None

Learning Objectives

At the end of this presentation, participants will be able to:

- Define CPC+ and explain how a pharmacist can assist in meeting clinical quality measures, set by CPC+, to improve patient care
- Identify areas where a pharmacist can provide medication management and education to improve patient outcomes in patients with uncontrolled diabetes



- Non-profit health care organization that serves a five county region in western Montana
- St. Peter's Health Medical Group is the associated outpatient clinic
 - Two outpatient clinic locations
 - One clinical pharmacist at each clinic
 - 28 total PCP's



Background

- The Centers for Medicare and Medicaid Services (CMS) developed a team-based care model, Comprehensive Primary Care Plus (CPC+), to incentivize organizations to improve patient care based on quality outcomes
- Montana was a region chosen by CMS to participate in the CPC+ initiative
- St. Peter's was awarded CPC+ track 1 designation starting January 2017

CPC + Quality Measures

- Requirement to report and meet specified clinical quality measures in order to receive reimbursement for services
- One key clinical quality measure reported is the percentage of patients with uncontrolled diabetes
 - Defined as HbA1c >9%
 - SPHMG must meet 50th percentile for HbA1c control

CPC + Clinical Quality Measures
Performance Rate Goals: HbA1c

50th percentile <19.33 %
80th percentile < 3.33 %

Objectives

- Evaluate the impact a clinical pharmacist has on managing uncontrolled diabetes to improve patient outcomes and meet CPC+ clinical quality measures
- Primary Objective:**
 - Identify the percent of patients with a decrease in HbA1c, to a goal of <9%, who received pharmacist intervention
- Secondary Objectives:**
 - Evaluate the mean change in baseline HbA1c
 - Assess pharmacist impact on diabetes management by recording any intervention that improved patient care

Methods

Inclusion Criteria:	Exclusion Criteria:
<ul style="list-style-type: none"> ≥ 18 years old Primary diagnosis of type II diabetes AND Most recent HbA1c ≥9% OR >8% and had increased in the last 6 months 	<ul style="list-style-type: none"> Diagnosis of type 1 diabetes Diabetes management by an endocrinologist Patients on an insulin pumps

Methods

- Implementation:**
 - Pharmacist led appointments focusing on:
 - Providing education
 - Assessing adherence
 - Providing comprehensive medication management through collaborative practice agreements
- Data Collection:**
 - Pre and post-implementation HbA1c
 - Any significant intervention made by a clinical pharmacist that improved patient care

Results

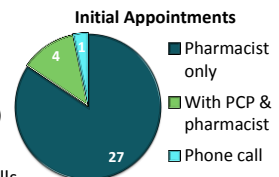
32 total patients

- Initial appointments:**

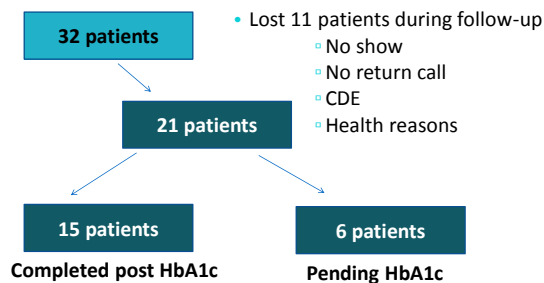
- Average time: 45 minutes (15-60 min.)

- Follow-up appointments**

- 140 follow-up phone calls
 - Average 4 follow-up phone calls per person
- 8 patients utilized additional in-person appointments
 - 2-3 additional appointments



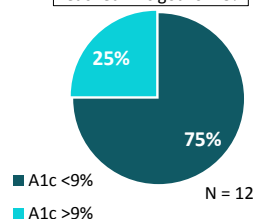
Results



Results

Primary Objective:

Reached A1c goal of <9%

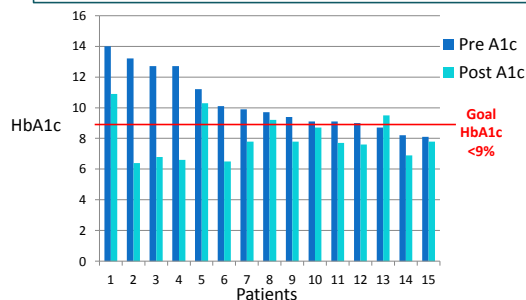


Secondary Objectives:

- Mean change in baseline HbA1c: = -2.3 %
- Range: +0.8%* to -6.8% [in 15 completed patients]

* 1 patient with an increased HbA1c

Results



Results

• Secondary Objectives:

- Significant interventions made by the pharmacist:
 - Patient not taking dose as prescribed
 - Identified meter issues
 - Referral to diabetes educator for nutrition
 - Closer follow-up of insulin titration and lab monitoring
 - Education and management of hypoglycemia
 - Recognition of need for PCP visit

Results

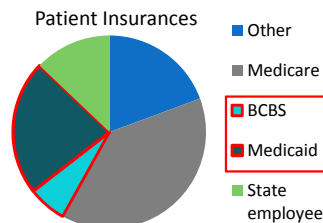
• Medication Management

- Insulin titration
- Insulin dosing optimization
- Dose changes for SU and metformin
- Discontinuation of SU due to hypoglycemia
- Medication formulation changes
- Recommendation of statin
- Optimization of statin dose based on guidelines

Results

Billing and Clinical Pharmacist Practitioner (CPP):

- 9 patients with insurances that recognize CPP in Montana
- Of all the billable appointments :
 - 30% recognize CPP
 - (12 appointments)



Hurdles

- Patient identification
- Data mining
- Front desk education and scheduling
- Pharmacist A1c point of care training
- Referral process
- Understanding role of pharmacist
- Patient follow-up
- Patient specific factors
- Billing, CPP designation and reimbursement

Future

- Increased medication management for co-morbidities such as: hypertension, hyperlipidemia, smoking cessation
- Clinical pharmacist involvement in primary care "Clinical Pathways"
- Collaboration with Certified Diabetes Educators for automatic referrals in patients with HbA1c >9%
- Continue to educate primary care providers on the pharmacists role in chronic disease state management and collaborative practice agreements

Conclusions

- Pharmacist involvement in patient care can positively impact patient outcomes in uncontrolled diabetes
- Pharmacist intervention is valuable to help decrease hbA1c levels in patients with uncontrolled diabetes
- Pharmacists play a vital role in team-based health care and can contribute to improving patient outcomes and meeting CPC+ quality clinical measures

Questions?



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Resources

- Comprehensive primary care plus: a new model for primary care in America. The centers for medicare and medicaid services Web site. Available at: <https://innovation.cms.gov/Files/x/cpcplus-qualrptpy2017.pdf>. Accessed Nov 8, 2017.
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