

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



Kaity Harrington, PharmD
PGY1 Pharmacy Resident
St. Peter's Health, Helena, MT
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Disclosures

- Co-investigators:
 - Taylor Sandvick, PharmD, BCPS
 - Jessica Pipinich, PharmD, BCPS, CPP
 - Thomas Richardson, PharmD, BCPS AQ-ID
 - Starla Blank, PharmD, BCPS
 - Amy Emmert, RN
 - Andrew Gilbert, MD
 - William Batey, MD
- 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

St. Peter's Health

- 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 | 50 th percentile <19.33 % |
| Performance Rate Goals: HbA1c | 80 th 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 has 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:

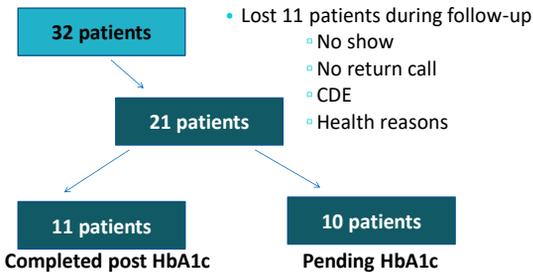
- Average time: 45 minutes (15-60 min.)

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



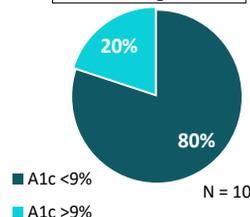
Results



Results

Primary Objective:

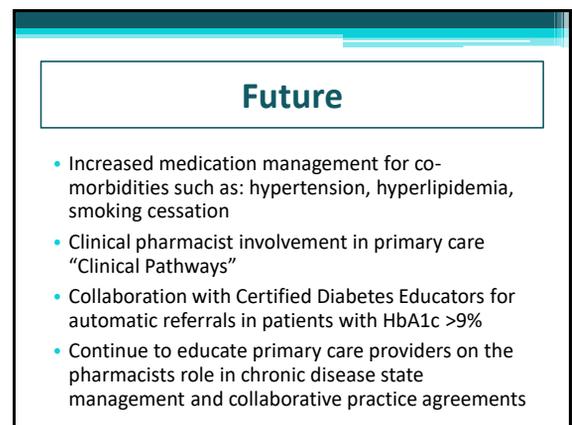
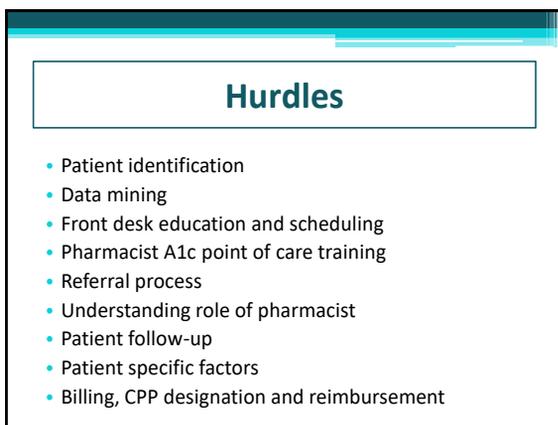
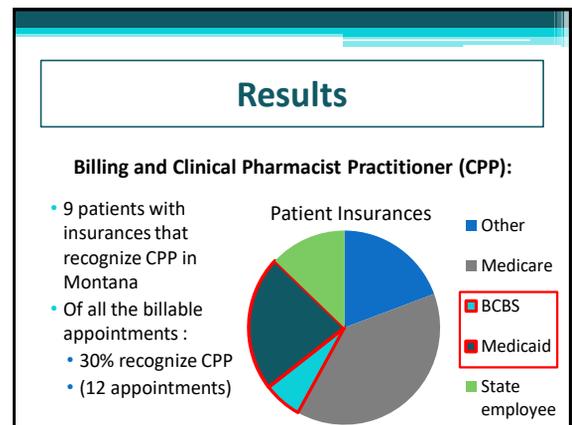
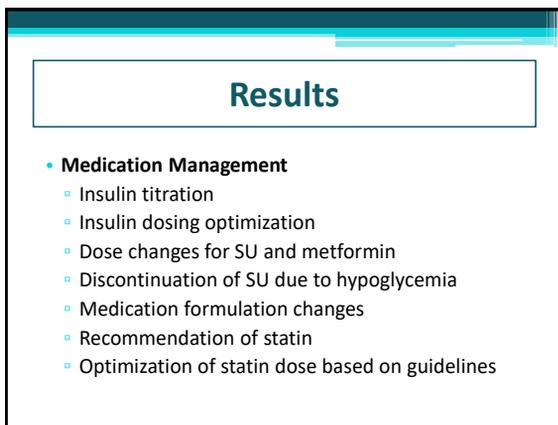
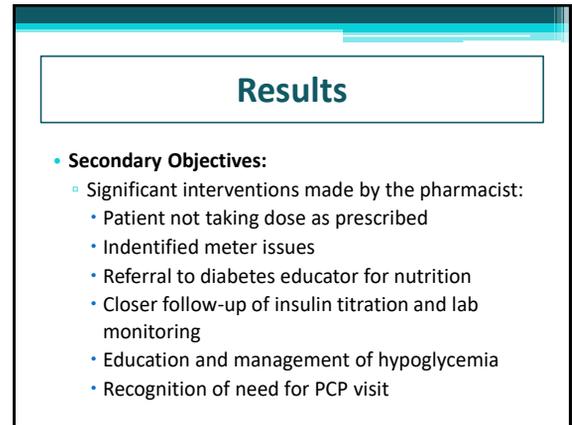
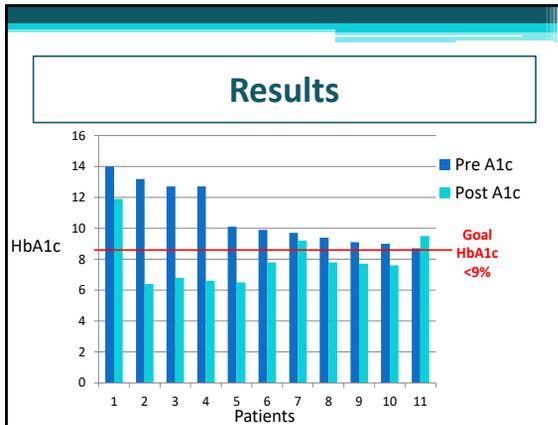
Reached A1c goal of <9%



Secondary Objectives:

- Mean change in baseline HbA1c: = -2.8 %
- Range: +0.8%* to -6.8% [in 11 completed patients]

* 1 patient with an increased HbA1c



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?



- Contact information:
Kaity Harrington
kharrington@sphealth.org

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-qualrtpy2017.pdf>. Accessed Nov 8, 2017.
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- Alhabib S, Aldraimly M, Alfarhan A. An evolving role of clinical pharmacists in managing diabetes: evidence from literature. *Saudi Pharma* 2016; 24:441-446.
- Sullivan J, Jett BP, Cradick M, Zuber J. Effect of Clinical Pharmacist Intervention on A1C Reduction in Veteran Patients With Type 2 Diabetes in a Rural Setting. *Ann Pharmacother* 2016; 50(12): 1023-1027.