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Introduction

- Patients with diabetes mellitus are at increased risk of infection and are more likely to have negative outcomes associated with lower extremity wound infections.
- Complications of diabetes can impact quality of life and risk of mortality, and diabetic control can have a positive impact on overall patient health.
- Optimal background therapies for diabetes and other comorbidities may be associated with improved outcomes of osteomyelitis.
- Evaluating medication therapy patterns for treatment of diabetes and associated comorbidities might be important to understanding outcomes in OPAT for osteomyelitis.

Objectives

- Our aim was to identify medication use patterns and diabetes care among patients enrolled in OPAT for osteomyelitis.

Methods

- Patients enrolled in the UNC Medical Center OPAT program during 2019 for the treatment of lower extremity osteomyelitis and with a diagnosis of diabetes identified with ICD code were selected for further analysis.
- Electronic medical records (EMR) were reviewed at the time of OPAT enrollment for collection of:
 - Demographic information
 - Smoking history (defined as smoking tobacco)
 - Most recent A1c
 - Chronic medications including oral anti-hyperglycemic agents, insulin, angiotensin-converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB), statins, and aspirin
 - Surgical intervention for the OPAT-related osteomyelitis case within six months following OPAT enrollment.
- Descriptive statistics were used to compare medication use patterns between patient groups with goal A1c as defined by the American Diabetes Association ($\leq 7\%$) or exceeding that goal.

Results

- Thirty-one patients met inclusion criteria.
- Group with A1c $\leq 7\%$ was older (median age 63, range 46-76 years) compared to group with A1c $> 7\%$ (median age 53, range 29-77 years)

Figure 1: Proportion of Patients at A1c Goal (n = 31)

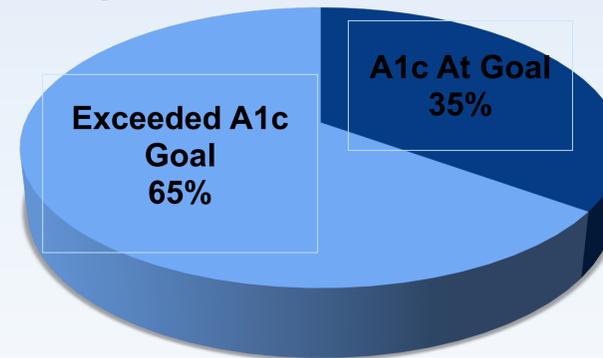
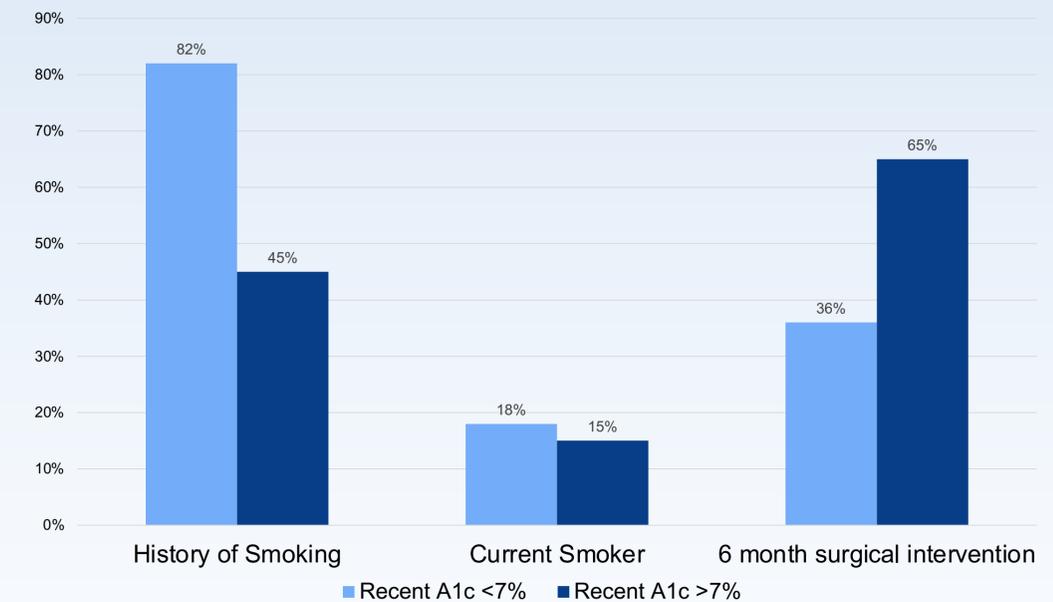


Table 1: Chronic Medications Among OPAT-Treated Diabetic Patients with Osteomyelitis

	Recent A1c $\leq 7\%$	Recent A1c $> 7\%$
Metformin	7 (64%)	9 (45%)
Insulin	3 (27%)	19 (95%)
Statin	11 (100%)	12 (60%)
Aspirin	9 (82%)	9 (45%)

Figure 2: Smoking Status and Surgical Intervention Within Six Months after OPAT Enrollment



Conclusions

- Patients with A1c above goal more frequently required surgical re-intervention for osteomyelitis within six months of initial OPAT enrollment.
- Smoking cessation interventions may benefit overall patient health outcomes.
- Opportunities to improve patient outcomes could include improved diabetic care for blood sugar control and linkage to primary care in this high-risk cohort.

Disclosures: No author has conflicts.