**Utilization of a Quality Based Metric Tool in Patients with Uncontrolled Diabetes**

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**Practice Site:** Atrium Health Cabarrus PGY1 Pharmacy Residency in the Ambulatory Care Setting

**Background and Purpose:**

Quality metrics are tied directly to healthcare reimbursement that Atrium Health receives from various health care payers. One of those quality metrics is the percentage of patients with diabetes reaching target hemoglobin A1c (HbA1c) set by different payers (<8% or <9%). Increasing the number of patients that meet these quality metrics improves patient care at Atrium Health and can reduce this patient population's overall morbidity, mortality, and healthcare expenditure. Studies have shown uncontrolled diabetes leads to many negative health consequences such as neuropathy, nephropathy, and increased cardiovascular disease risk, to name a few. The average patient diagnosed with diabetes has medical expenditures approximately 2.3 times higher than they would without diabetes.1 The cost of diabetes in the U.S. keeps rising, and the estimated total economic cost of diagnosed diabetes was $327 million in 2017.1 The use of clinically trained ambulatory care pharmacists to help manage patients with uncontrolled diabetes has been shown to improve patient outcomes and reduce the burden on physicians in numerous studies.2-3

**Objective:**

The primary objective of this study is to evaluate the impact of pharmacist-led medication management using a quality-based metric tool compared to usual care by a physician in patients with diabetes at a family medicine clinic.

**Methods:**

This was a prospective, investigator-initiated pilot study conducted at one large Atrium Health Cabarrus Family Medicine clinic. Eligible patients were gathered from the Care Enablement Tool with an A1c > 8% or > 9%, depending on their insurance specific goal. Participants were excluded if they were under management by endocrinology for diabetes care.

* Chart reviews were completed to assess patient eligibility, diabetes medication regimen, and baseline labs/screening tools.
* Initial telehealth visits were conducted by the pharmacist to establish baseline, assess medication adherence and tolerance, and determine areas for intervention.
* Recommendations were proposed to managing providers and implemented by the pharmacist if approved.
* Follow up visits were conducted by the pharmacist and medications were adjusted as needed.
* All interventions were documented in EMR and signed by a physician.

**Results:**

Sixteen patients were enrolled in the intervention group and thirty-two patients were enrolled in the control group from November 2021 through April 2022. The intervention group had a higher percentage of patients meeting their insurance specific A1c goal compared to the control group (50% vs 28%). Outcomes such as overall A1c reduction, weight reduction and medication changes were numerically higher in the pharmacist-led intervention group.

**Conclusion:**

Pharmacist-led diabetes interventions led to a higher percentage of patients meeting their insurance specific A1c goal. The use of a quality-based metric tool can be an effective way to identify diabetes patients in need of further care. Pharmacists can provide diabetes disease state education, assess diabetes control, and implement diabetes therapy changes for physicians leading to improved outcomes and quality metrics.