

## Evaluation of the Potential Impacts of an Employer-Sponsored Pharmacist-Led Disease State Management Program

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**Background:** The scope and economic burden of diabetes are well documented. In 2018, the American Diabetes Association estimated that 34.2 million Americans have diabetes. Recent reports have indicated that along with being associated with loss of productivity and lower quality of life, diabetes costs Americans more than \$300 billion annually. This economic burden affects patients as well as self-insured employers who assume the risk of medical and pharmacy costs for their employees. Employer sponsored disease state management programs are designed to improve outcomes in health plan beneficiaries and lower cost of care. While the efficacy of such programs has been reported, studies targeting programs at large academic medical centers are scarce.

**Objective:** The purpose of this study was to evaluate the potential impact of an employer-sponsored, pharmacist-led disease state management program targeting diabetic beneficiaries of The University of Kansas Health System (TUKHS)'s health plan.

**Design:** This was a retroactive chart review of 120 patients diagnosed with type 1 or type 2 diabetes mellitus. A literature review was conducted to determine which outcomes have been previously utilized to evaluate the impact of a potential disease state management program. Hemoglobin A1C has been used extensively in the literature to assess therapeutic benefit and proportion of days covered (PDC) has been used to evaluate medication adherence. These two values along with baseline characteristics were collected for all patients to evaluate the need for pharmacist support.

**Results:** The mean Hemoglobin A1C for 120 patients was  $7.9 \pm 2.2$ . The number of patients with A1C > 7 was 62 (52%). The mean PDC was  $0.689 \pm 0.281$ . The number of patients with PDC < 0.8 was 65 (54%). Seventy-nine percent of the patients had either an A1C > 7 or a PDC < 0.8.

**Conclusion:** Assuming that a pharmacist-led diabetes disease state management program can improve patients' A1C and adherence, implementation of such a program will impact a significant proportion of

TUKHS members diagnosed with diabetes. Further study is needed to assess the impact of such a program on overall cost of care.