

# Impact of an Integrated Health System Specialty Pharmacy Liaison-Managed Care Model within an Uncontrolled Diabetes Population

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1. CHRISTUS Health System  
2. Shields Health Solutions



## Background

- Patients with uncontrolled diabetes (A1C>9) are at risk of developing significant microvascular and macrovascular complications and increased total medical expenditures (TME).
- Global-view studies have demonstrated average adherence (measured as PDC) to target medication classes (GLP1s, SGLT2s, DPP4s) range from 61% to 76%.<sup>1</sup> Nationally, PDC rates to oral antidiabetic agents and insulin have been shown to range from 36% to 81%.<sup>2</sup>
- Social determinants of health (SDOH) factors such as income have a direct correlation with prevalence of diabetes: lower income brackets are typically associated with higher prevalence.<sup>3</sup>
- In June of 2021, CHRISTUS opened a new health system specialty pharmacy (HSSP) and implemented an integrated pharmacy liaison care model to support medication management of patients with diabetes within multiple endocrinology and primary care clinics.

**OBJECTIVE:** To describe the associated impact of the pharmacy liaison-managed care model at CHRISTUS Health System on HbA1c reduction and medication adherence for patients living with diabetes with baseline A1C>9.

## Methodology

### SDOH Income Analysis

Mean family income by zipcode was obtained from US Census Bureau for the analysis.<sup>4</sup>

### A1C Analysis

Changes in A1C for patients with baseline A1C>9 were measured within 60 days of the patient's onboarding date (on both sides), through at least 6 months after enrollment.

### Pharmacy Liaison Model



- ✓ Benefits investigation
- ✓ Prior authorization



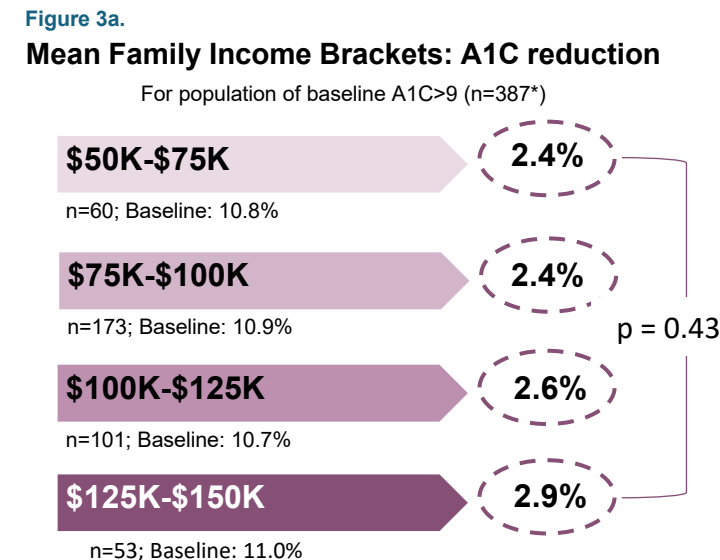
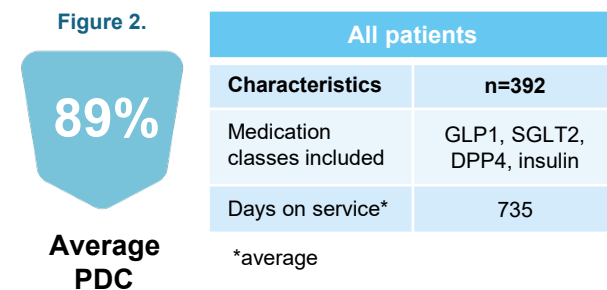
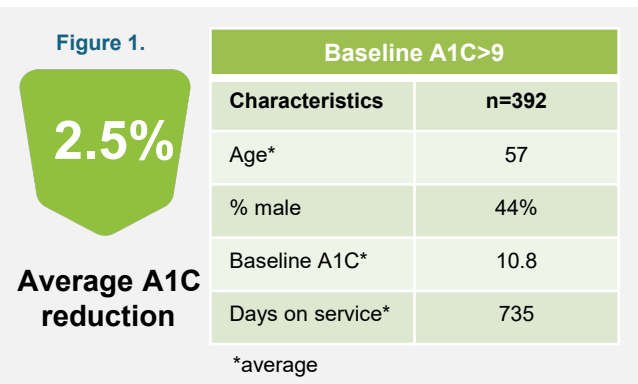
- ✓ financial assistance



- ✓ Refill and delivery coordination

## Results

**Figure 1.** Average A1C reduction for patients on GLP1, SGLT2, DPP4, and/or insulin therapy and baseline A1C>9 . **Figure 2.** Average PDC for all liaison-managed patients with baseline A1C>9. **Figure 3a.** A1C reduction across mean family income brackets. **Figure 3b.** FA activity across family income brackets.



**Figure 3b.**

	\$50K-\$75K	\$75K-\$100K	\$100K-\$125K	\$125K-\$150K
Avg FA secured (\$/# patients who got FA)	\$3,006	\$1,767	\$2,370	\$2,227
% FA secured (total FA secured/total FA needed)	95%	83%	84%	92%

\*income data unavailable for n=5 patients

## Conclusions

- Implementation of a pharmacy liaison-led diabetes care model was associated with **significant A1C reduction** (p< 2.2e-16).
- Studies demonstrate that every 1-point A1C reduction drives a \$736 reduction in annual diabetes-related expenses.<sup>5</sup> This would suggest that a liaison-managed model was associated with **\$721K reduction in total medical expenditures**.
- Liaison-managed care model resulted in **PDC rates significantly higher than national average**.
- No statistically significant difference (p=0.43) was observed in A1C reduction and financial assistance secured across the mean family income brackets. This demonstrates that **a liaison-based care model successfully eliminates income related SDOH barriers to care**.

### REFERENCES

1. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8761325/> 2. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10398093/> 3. [Social Determinants of Health and Diabetes: A Scientific Review - PMC \(nih.gov\)](#) 4. <https://www.census.gov/> 5. <https://pubmed.ncbi.nlm.nih.gov/32643451/>