

Cost-of-treatment conversations between primary care clinicians and patients living with diabetes

Dabzell, Marla, PA-S¹; Richards, Bradley, MD, MBA²; Gonzalez-Coloso, Rosanna Ph.D., MPH^{1,2}
¹Yale Physician Associate Program, ²Yale University School of Medicine Department of Internal Medicine

OBJECTIVE

Determine the frequency of cost-of-treatment discussions between patients living with diabetes and their clinicians.
 Describe patients' reported concerns about cost of diabetes treatment

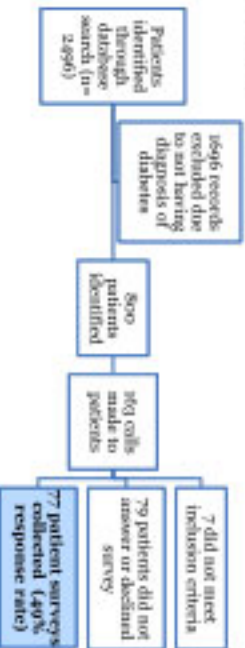
BACKGROUND

Diabetes is one of the most expensive chronic diseases in the US, accounting for 1 in 4 health care dollars in 2017.¹
 Out-of-pocket expenses are associated with inadequate medication use and delayed access to medical care.^{2,3}
 Prior studies showed that cost of care treatment is underdiscussed between patients and clinicians.⁴⁻⁷
 Little is known about these discussions in the diabetes care setting.

METHODS

- Study Design**
 - Cross Sectional Study
- Study Population**
 - Adults (18+ yr.) receiving prescription treatment for diagnosed diabetes seen Sep 2020– Dec 2020
 - English or Spanish Speaking
- Data Source**
 - A 10-item survey was delivered to 77 patients between Dec 2020 and Jan 2021
 - Key questions were adapted from prior instruments.
- Key Variables:**
 - Frequency of having cost-of-treatment conversations
 - Reported concerns over treatment affordability
- Statistical Analysis**
 - Descriptive statistics
 - Proportions, relative frequencies

Figure 1. Data Source



RESULTS

Figure 2. Frequency of Cost-of-Treatment Discussions N=77

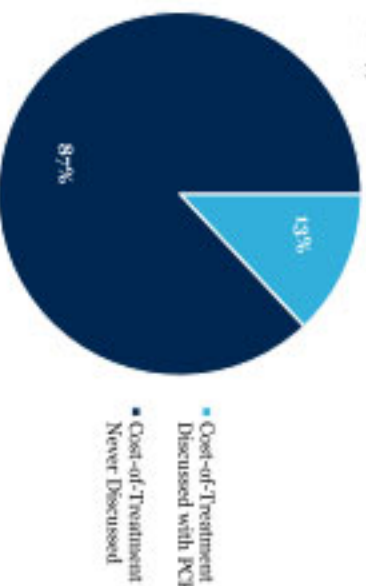


Table 1. Patient Characteristics N = 77

Characteristic	Patients, (N)
Age, mean (yr)	57.3
Gender	
Female	42 (55%)
Race and ethnicity	
Black or African American Non-Hispanic	37 (48%)
White Non-Hispanic	11 (14%)
Hispanic, All Races	25 (32%)
Multiracial, non-Hispanic	2 (3%)
Preferred not to answer or unknown	2 (3%)
Annual income (in thousands)	
\$0-15	45 (58%)
\$15-30	12 (16%)
\$30-45	5 (6%)
\$45+	1 (1%)
Preferred not to answer or unknown	12 (16%)
Primary Insurance	
Medicare	27 (35%)
Medicaid	39 (51%)
Private or employer based	6 (8%)
With secondary	24 (31%)
None	1 (1%)
Preferred not to answer or unknown	4 (5%)

CONCERNS

1. American Diabetes Association. Economic burden of diabetes in the U.S. in 2017. *diabetescare.org*. Accessed July 10, 2020. <https://doi.org/10.2337/190000>.
2. Korte TE, Pechin SV, Anderson RA, et al. Effect of use of patient cost copayments on medication adherence and persistence among patients with type 2 diabetes. *Pharmacotherapy*. 2010;30(10):1477-1482.
3. Vavak, Kijana M, Khayr, S, et al. Association between out-of-pocket costs and medication adherence in patients with type 2 diabetes. *Diabetes Care*. 2011;34(11):2411-2416.
4. Anderson RG, Fendley LF, Mahoney RD. Patient problematization about use of paid care. *AMA*. 2009;301(2):209-218.
5. Shand, R. A. *Cost of Care: A Guide to the Financial Burden of Diabetes and Implications for Research, Practice, and Policy*. American Diabetes Association; 2016. <https://doi.org/10.2337/13022>.

Table 2. Patient Concerns about Cost of Treatment N=77

Survey Question	Yes n n(%)	No n(%)
Are you worried, or have you ever been worried, about how you will pay for your diabetes treatment?	28 (36%)	49 (63%)
Has your diabetes been a financial hardship for you or your family?	24 (31%)	53 (68%)
Has paying for diabetes treatment been difficult for you?	21 (27%)	56 (73%)

CONCLUSIONS AND DISCUSSION

We found that patients living with diabetes reported having cost of treatment discussions with their primary care clinician at a lower rate than the patients' reported level of concern about treatment affordability.

Patients reported experiences regarding gaps in communication with clinicians suggest the need for future quality improvement efforts around patient-centered cost-of-treatment conversations, diabetes care.

LIMITATIONS AND NEXT STEPS

The cross-sectional nature of this study does not establish directionality between the level of patients' concerns and having cost of treatment conversations.

This study involved a small sample from a single primary care clinic; thus, the generalizability of our observations is uncertain.

Concurrent research is underway to describe clinicians' reported frequency and reported importance of having cost-of-treatment conversations.