

Diabetes Self-Assessment in Community Outpatient Primary Care: A Basis for Innovation of Patient Centered Care

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Introduction

Type 2 diabetes continues to increase as a public health challenge in the Philadelphia region. The city health commissioner report notes that the diagnosis has increased 50% in the last 15 years. As the health landscape changes and specialty care becomes more difficult to obtain, primary care has and will continue to play a pivotal role. Understanding patients' perceptions of their disease and its management is essential to improving the quality of care they are receiving.

Methods

We voluntarily surveyed patients seeking care in our hospital-based internal medicine residency primary care practice with a diagnosis of diabetes between October 10th, 2022 and March 29th, 2023. Each day, a review of scheduled appointments was done to identify patients with diabetes being seen for a routine follow-up or annual exam and offered the survey to complete before their visit. We utilized the Michigan Diabetes Care Profile for our assessment via tablet based Qualtrics survey platform.

Table 1

Attendance of Diabetes Class		
Yes	14	45.2%
No/Not Sure	17	54.8%
Overall Understanding of Diabetes Care		
Good	21	77.8%
Excellent	6	22.2%
Understanding of diet and blood sugar control		
Poor	1	3.4%
Good	21	72.4%
Excellent	7	24.1%
Understanding of preventing long-term complications from diabetes		
Poor	1	3.8%
Good	20	76.9%
Excellent	5	19.2%
Frequency of keeping blood sugar in control		
Sometimes	12	41.4%
Often	10	34.5%
Don't Know	7	24.1%
Frequency of symptomatic low blood sugar (sweating, weakness, anxiety, trembling, hunger, headache)		
0 times	11	50.0%
1-3 times	9	40.9%
4-6	2	9.1%
Frequency of symptomatic high blood sugar (thirst, dry mouth/skin, increased sugar in urine, less appetite, nausea, or fatigue)		
0 days	9	37.5%
1-3 days	4	16.7%
4-6 days	7	29.2%
More than 12 days	4	16.7%
Use of CGM		
Yes	9	33.3%
No	18	66.7%
Use of CGM affecting food decisions		
Yes	7	77.8%
No	2	22.2%

Results

40 patients elected to participate in the survey. Per survey protocol each question was not mandatory. Overall, 97.3% of patients were non-white, 72.9% were older than 50 years of age, 69.5% were of an education level below a college degree, and 79.8% were with Medicare or Medicaid insurance. Table 1 outlines their overall responses.

Conclusion

The results of the survey indicated a lack of knowledge of recommended lifestyle and screening interventions for people with diabetes. Despite expressing confidence in their understanding of treatments for high and low blood sugar 62% and 49% of patients experienced symptomatic hyper- and hypoglycemia respectively. Data suggests room for improvement in patient focused diabetes education in addition to an interest by patients in integrating Continuous Glucose Monitoring (CGM) use into their care plans. This data provides areas to focus further interventions on to improve patients' diabetes outcomes.