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Title: Comprehensive Diabetes Care and Adherence to ADA Guidelines in the Ambulatory Care Center of University Hospital

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Background:

The American Diabetes Association has proposed guidelines aimed at providing comprehensive care to patients with diabetes. These guidelines encompass screening for hyperlipidemia, renal disease, diabetic neuropathy, and cardiovascular risk, recommended statin therapy, hemoglobin A1c (A1c) monitoring, and vaccinations(1-5) . Studies have shown that non-adherence with these guidelines is related to increased risk for all-cause, cardiovascular, and cancer mortality, cardiovascular events, and renal disease(6-8). Despite these clear benefits, adherence to guidelines is variable, with studies revealing full adherence as low as 4.8% and variable adherence for individual metrics(7-10). This study aimed to evaluate the adherence to these guidelines in the Internal Medicine Ambulatory Care Clinic of University Hospital.

Methods:

This study reviewed 50 patients with Type I or Type II diabetes mellitus who were seen in the Ambulatory Care Clinic between August 1st and August 30th 2019.The quality metrics collected were frequency of A1c monitoring, yearly lipid profile measurements, yearly urine microalbumin measurements, yearly podiatry and ophthalmology evaluation/referral, nutrition referral, yearly ASCVD risk calculation, appropriate statin therapy, yearly influenza vaccination, hepatitis B vaccination, and pneumococcal vaccination status.

Results:

Of 50 patients, appropriate HbA1c monitoring occurred in 82% (41/50), lipid profile measurements in 100% (50/50), urine microalbumin screening in 88% (44/50), podiatry referrals in 80% (40/50) patients, ophthalmology referrals in 42/50 (84%), nutrition referrals in 26% (13/50), ASCVD calculation in 31.8% (14/44), appropriate statin therapy in 72.3% (34/47), influenza vaccination in 44% (22/50), hepatitis B vaccination in 18% (9/50), and pneumococcal vaccination in 60% (30/50) of patients.

Conclusions:

Based on this study, A1c monitoring, lipid profile, nephropathy screening, podiatry and ophthalmology referrals have the highest level of adherence while vaccination and nutrition guidelines have the lowest levels of adherence. However, evaluation over multiple visits may be necessary to better establish true levels of adherence and the potential barriers to full adherence.

Bibliography

1. Association AD. 6. Glycemic Targets: Standards of Medical Care in Diabetes-2019. Diabetes Care 2019;42:S61-S70.
2. Association AD. 10. Cardiovascular Disease and Risk Management: Standards of Medical Care in Diabetes-2021. Diabetes Care 2021;44:S125-S150.
3. Association AD. 4. Comprehensive Medical Evaluation and Assessment of Comorbidities: Standards of Medical Care in Diabetes—2021. Diabetes Care 2021;44:S40-S52.
4. Association AD. 8. Obesity Management for the Treatment of Type 2 Diabetes: Standards of Medical Care in Diabetes—2021. Diabetes Care 2021;44:S100-S110.
5. Association AD. 11. Microvascular Complications and Foot Care: Standards of Medical Care in Diabetes—2021. Diabetes Care 2021;44:S151-S167.
6. Giorda C, Picariello R, Nada E et al. The impact of adherence to screening guidelines and of diabetes clinics referral on morbidity and mortality in diabetes. PLoS One 2012;7:e33839.
7. Oh SW, Lee HJ, Chin HJ, Hwang JI. Adherence to clinical practice guidelines and outcomes in diabetic patients. Int J Qual Health Care 2011;23:413-9.
8. Huber CA, Brandle M, Rapold R, Reich O, Rosemann T. A set of four simple performance measures reflecting adherence to guidelines predicts hospitalization: a claims-based cohort study of patients with diabetes. Patient Prefer Adherence 2016;10:223-31.
9. Sidorenkov G, Haaijer-Ruskamp FM, de Zeeuw D, Denig P. A longitudinal study examining adherence to guidelines in diabetes care according to different definitions of adequacy and timeliness. PLoS One 2011;6:e24278.
10. Maclennan PA, McGwin G, Jr., Heckemeyer C et al. Eye care use among a high-risk diabetic population seen in a public hospital's clinics. JAMA Ophthalmol 2014;132:162-7.