



Improving Compliance of ADA Diabetic Goals

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Background

- Diabetes is a chronic illness that affects an increasing number of people each year. A quick glance at the “American Diabetes Association’s Standard of Medical Care in Diabetes – 2019 Abridged for PCP’s” is anything but abridged.
- There’s a plethora of recommendations for those with diabetes that includes lifestyle modifications, pharmacologic therapies with specific treatment goals, and screening/management of microvascular complications.
- Suffice it to say, these interventions may be difficult to tackle in the 5-10 minutes that PCP’s have with patients, especially during a visit that’s addressing multiple complaints. However, these issues must be addressed and readdressed frequently, not only to improve quality of life for the patient; but to prevent cardiovascular disease, kidney disease, peripheral nerve damage, and retinopathy.
- As it is stated in the Hippocratic oath, “I will prevent disease whenever I can, as prevention is preferable to cure.” With the increasing burden on primary care physicians, it can be very easy for a number of these recommendations to fall through the cracks.

Goals & Aims Statement

- Address 9 diabetic specific goals including BP at goal of <130/80, patient on ACE/ARB, LDL <130, patient on statin therapy, microalbumin within past year, diabetic foot exam within past year, diabetic eye exam within past year, weekly amount of exercise, and smoking status.
- By March 30, 2020 we will address all 9 of these goals with each diabetic patient (100%) at each visit.

Plan and Action

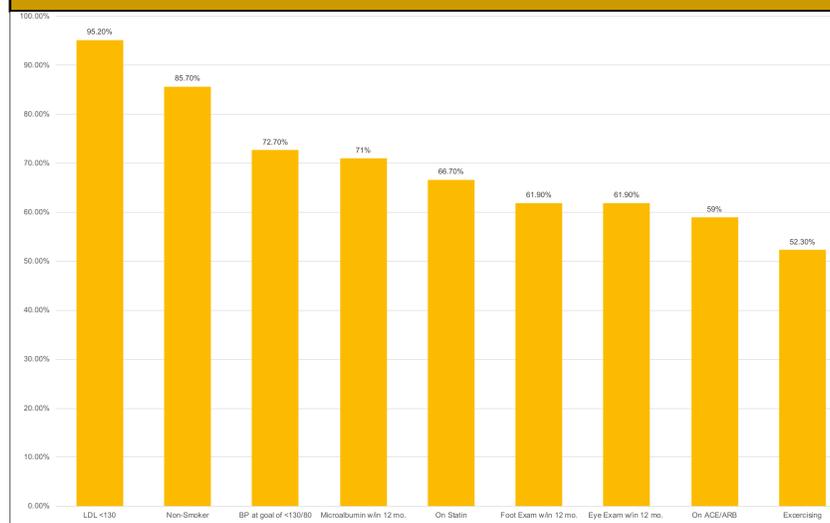
- Speak with the medical assistants and remind them to ask about the patient’s most recent foot exam, most recent eye exam, exercise history, smoking history and document results.
- Reviewed ADA Diabetic Goals with the physician of the clinic.
- Measure the percentage of diabetic patients that meet individual goals at follow-up visit (*ex. percentage of diabetic patients on an ACE/ARB*). In addition, measure how many goals each individual patient is meeting at follow-up visit. (*Ex. patient 1 is meeting 5/9 goals*)

Plan and Action (cont.)

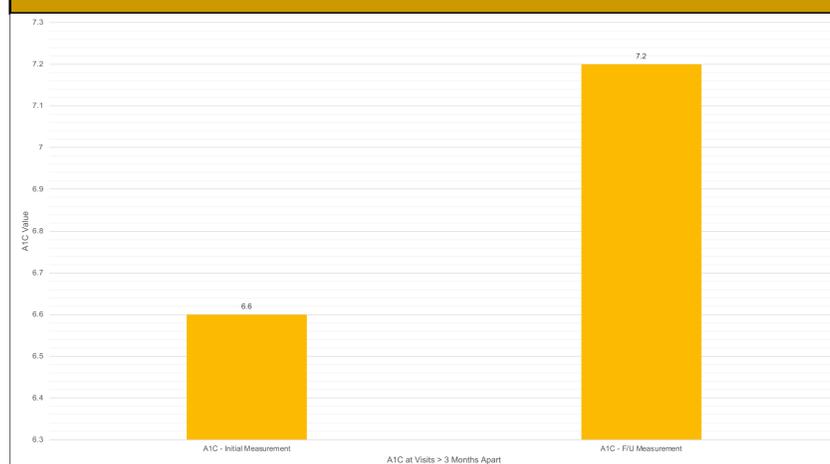
- Create a “Type II Diabetes Facts Sheet” to be placed on the walls of the exam rooms that detailed the risks of cardiovascular disease, renal disease, eye disease, and neuropathy due to diabetes. This sheet also encourages patients to schedule yearly eye exams, foot exams, follow a diabetic diet, and discusses the importance of physical activity 3-5 times weekly.
- Track HGB A1C, weight, and BMI throughout project.

Data

Percentage of Patients Meeting Individual Diabetic Goals (n = 21)



A1C Value Between Visits



Data and Discussion

- Of 21 patients, the average age was 66 years old. The patient population was skewed heavily male, with 76% of the patients being male and 23% female.
- A1C values increased from 6.6 to 7.2 between visits spanning over 3 months or greater.
- Weight changed minimally, with average initial weight being 124.7 kg and weight at most recent visit being 125.1 kg. BMI between visits was 34.2 and 34.4 respectively.
- On average, patients were meeting 5.7 out of the 9 diabetic goals measured. Over 50% of the patients were meeting each of the 9 measured goals.
- The goals that the highest number of patients were meeting were LDL goal <130 and non-smoking status at 95.2% and 85.7% respectively.
- The goal that the lowest number of patients were meeting was exercising, with only 52.3% of patients reporting exercising 3-5 times weekly.
- Unexpectedly, there were many problems that lead to misleading results including patient non-compliance, allergies or intolerance of certain medications, patient refusal of medications, co-morbidities preventing inability to attain certain goals, inability to take certain medications due to concurrent pharmacotherapy, outliers, and small sample size.

Next Steps

- It is evident that exercising is the goal that needs the most attention, as only 52.3% of patients reported to be exercising regularly. Exercising 3-5 times weekly for at least 30 minutes would likely lead to weight loss, lower A1C values, improved blood pressure control, and improved lipid levels.
- To do this, I would employ the following:
 - Motivational interviewing to increase patient’s intrinsic motivation to exercise and resolve ambivalence.
 - Offer information on community health/fitness programs.
 - Provide more structured exercise instructions.
- Recollect data in 3-6 months and increase sample size to provide a more accurate assessment of the trends of the clinic’s diabetic population.

Reference

1. *Standards of Medical Care in Diabetes—2019 Abridged for Primary Care Providers* American Diabetes Association, Clinical Diabetes Jan 2019, 37 (1) 11-34; DOI: 10.2337/cd18-0105