

# Assessment of Appropriate Statin Use in Diabetic Patients at East Orange VA

Amrita Chawla, Mohamad Aghaie Meybodi, Timothy Choi, Jeremy Law Departments of Internal Medicine, Rutgers New Jersey Medical School

# Background

- Diabetes mellitus remains an important risk factor for vascular events.
- Cardiovascular disease remains the leading cause of death worldwide.
- High intensity statin therapy is recommended by the American Diabetes Association for diabetics with ASCVD, or those with an estimated 10 year ASCVD risk >20%.
- For diabetic patients without ASCVD and a 10 year risk <20%, moderate intensity statin is recommended for those ≥40 years old, or those <40 years old with an ASCVD risk factor.

## **AIM**

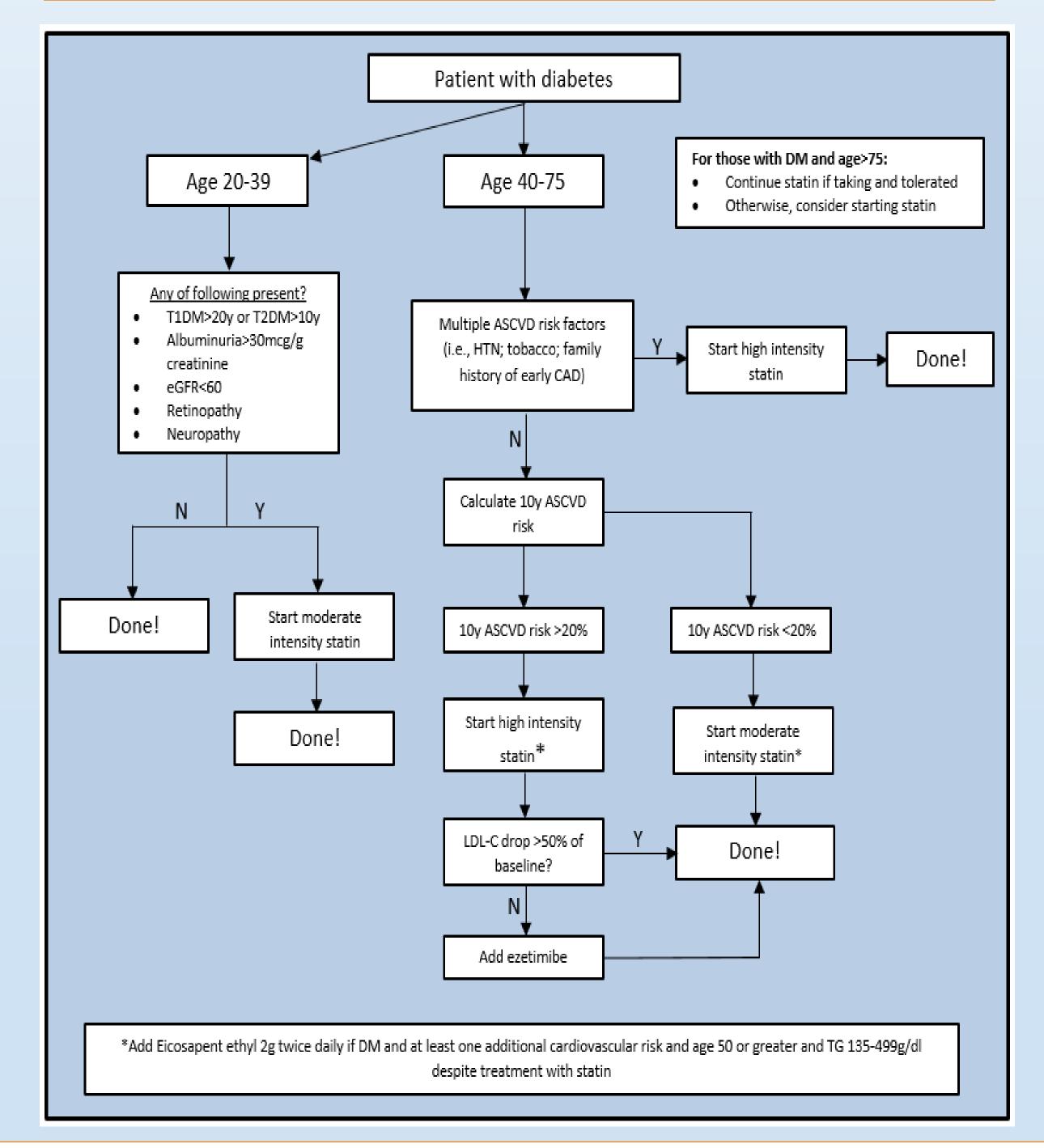
Our primary objective was to assess compliance with ADA guidelines for statin therapy in diabetic patients over the last three years.

Secondary goal was to identify factors cause not starting Statin for patient.

# References

### Methods

- Retrospective chart review was conducted for 150
  randomized patients ≥19 years-old with DM in primary
  care clinics at East Orange VA.
- Age, ASCVD risk factors, use of statin therapy, and intensity of statin therapy were reviewed for adherence to ADA guidelines.
- The proportion of patients who were not on appropriate statin therapy was calculated.



#### Results

- 150 patients were included in our study.
- Most of the patients were male (91.9%).
- The mean age of the patients was 67.14±15.29.
- 42 (28%) of 150 patients who should have been on statin per ADA guidelines were not receiving statin.
- Of the 108 patients that were receiving statin therapy, 15 patients (13.8%) were not on the correct intensity.
- Patient denial (3 cases) and muscle pain (3 cases) were the most common reason for not receiving appropriate intensity of statin.
- Statin was discontinued due to transaminitis in one patient.

Statin Intensity	High-Intensity Statin Therapy	Moderate-Intensity Statin Therapy	Low-Intensity Statin Therapy
Daily dose lowers LDL-C on average by:	≥ 50%	30% to 49%	< 30%
Drugs	Atorvastatin 80 mg     Rosuvastatin 20 mg	<ul> <li>Atorvastatin 10 mg</li> <li>Rosuvastatin 10 mg</li> <li>Simvastatin 20-40 mg</li> <li>Pravastatin 40 mg</li> <li>Lovastatin 40 mg</li> <li>Fluvastatin XL 80 mg</li> <li>Pitavastatin 2-4 mg</li> </ul>	<ul> <li>Simvastatin 10 mg</li> <li>Pravastatin 10-20 mg</li> <li>Lovastatin 20 mg</li> <li>Fluvastatin 20-40 mg</li> <li>Pitavastatin 1 mg</li> </ul>

### Conclusions

There are a significant portion of patients not on appropriate statin therapy based on ADA guidelines in primary care clinics in East Orange VA. These findings will allow for development of methods on quality improvement to aid in adherence of providers to current guidelines in use of statin therapy in patients with DM.

1. Reilly ML, Schillie SF, Smith E, et al. Increased risk of acute hepatitis B among adults with diagnosed diabetes mellitus. J Diabetes Sci Technol 2012;6:858–66.

2. Taylor F, Ward K, Moore TH, Burke M, Smith GD, Casas JP, Ebrahim S. Statins for the primary prevention of cardiovascular disease. Cochrane database of systematic reviews 2011(1)