

Analyzing and improving the utilization of statin drugs in family medicine patients with T2DM

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Study Question and Background

Cardiovascular disease is the leading cause of death in both males and females in the United States despite it also being one of the most preventable causes. Statins are a lipid-lowering drug used to reduce mortality and cardiovascular risk. The ACC recommends that any patients with type 2 diabetes mellitus (T2DM) between the ages of 40-75 be placed on a moderate-intensity statin for prevention, but there are still cases where there are T2DM patients not taking a statin. There are likely many factors contributing to a patient not being on a statin for prevention, so our question was to find out the percentage of patients that are on a statin compared to those recommended to be on one. We also wanted to find out what some of the barriers might be for a patient's decisions to be placed on a statin.

Study Population

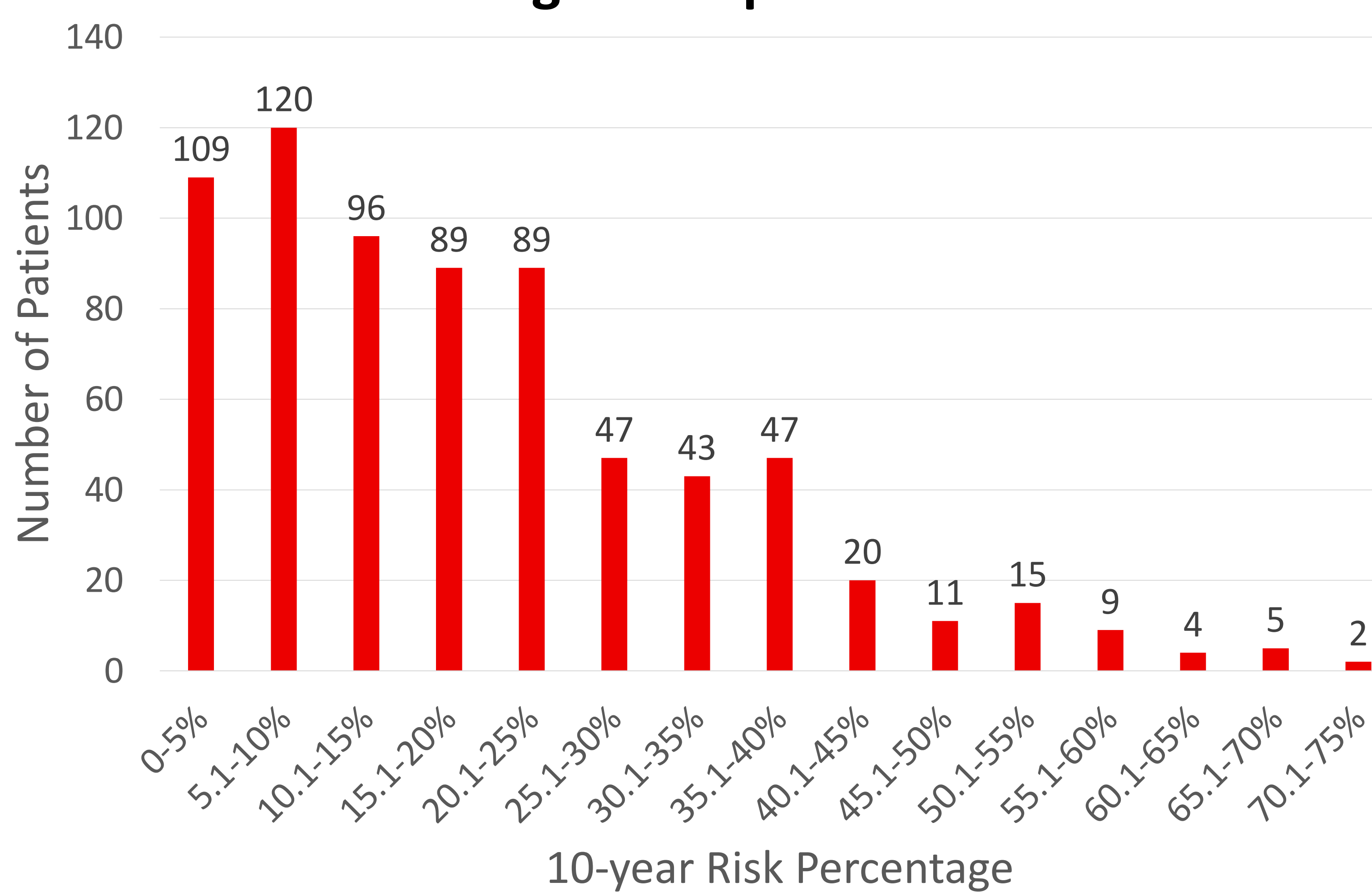
The study population used for this study consisted of T2DM patients between the ages of 40-79 seen in the family medicine clinic within the last year. To answer our question about the barriers for a patient not taking a statin, we also surveyed family medicine faculty and residents about their perceived barriers.

Data Collection Methods

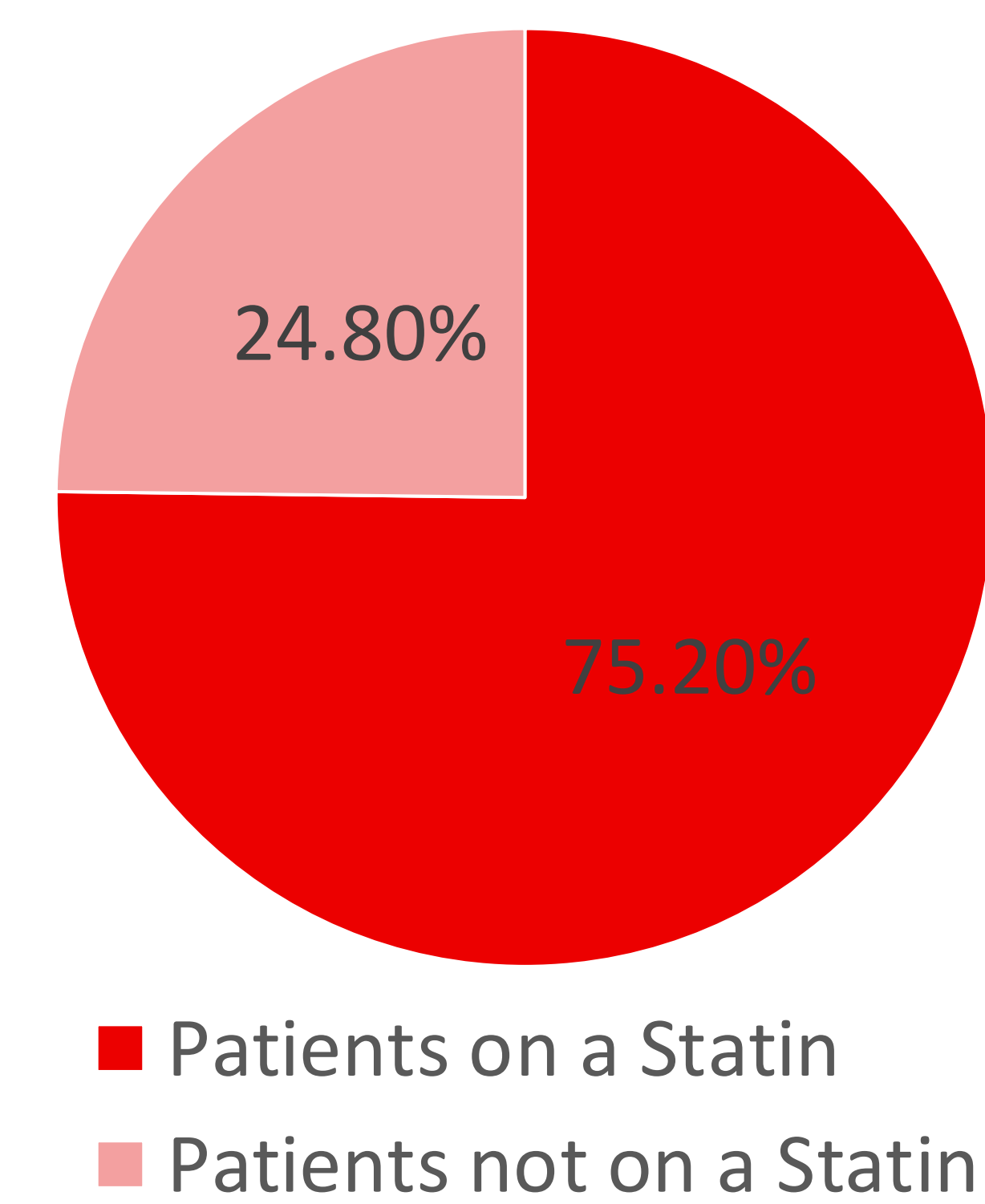
A retrospective chart study was performed to collect data from the patient population group. Data collected from the chart included age, race, cholesterol readings, blood pressure, and whether the patient was on blood pressure medications, aspirin, and/or a statin. The information gathered was entered into the ACC/AHA risk calculator to determine the patients' 10-year risk of cardiovascular disease, if their blood pressure is well-controlled, and if they are recommended to be on aspirin and/or a statin. The survey given to residents and faculty used a Likert scale to determine the effect that cost, side effects, and not wanting to take another medication had on a patients' choice to be on a statin. We also surveyed the percentage of their patients they thought should be on a statin compared to the percentage they believed are on a statin.

Results

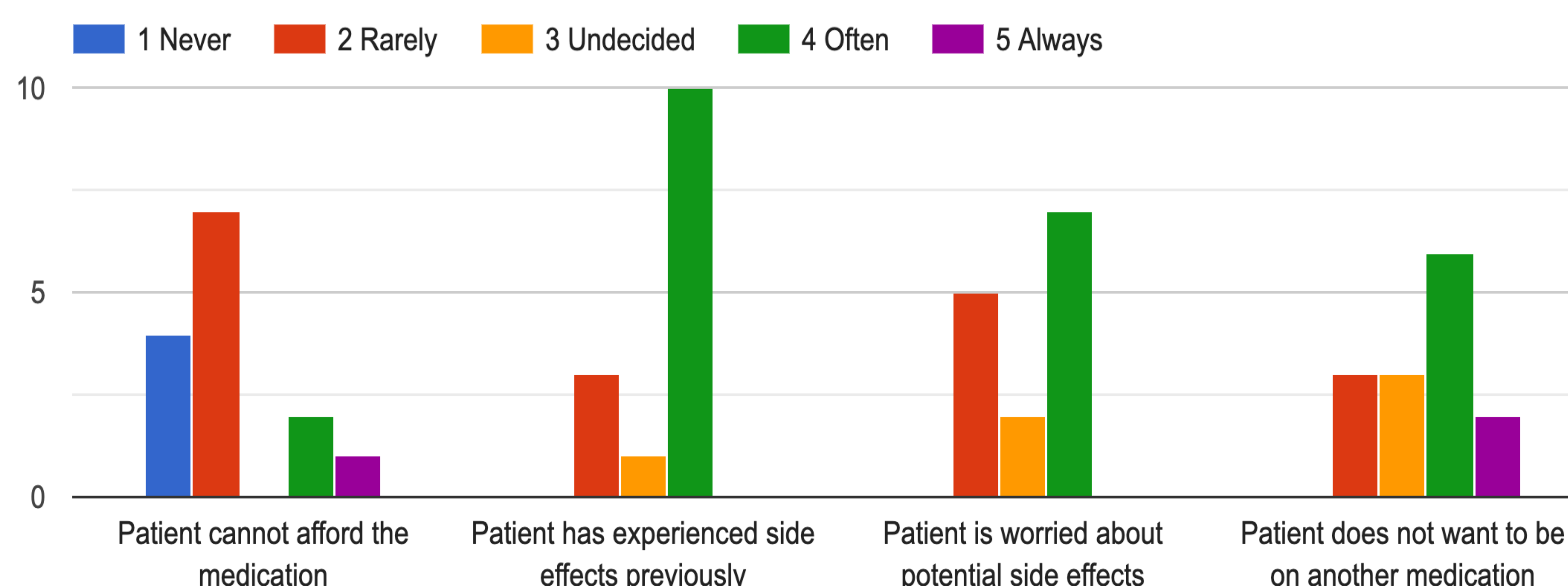
10-year risk of heart disease or stroke among T2DM patients



Statin Usage Among T2DM Patients



Physician Survey of Perceived Barriers to Patients Taking a Statin



Conclusions

Overall, the family medicine clinic has done fairly well getting T2DM patients on statins, with 75.2% of the patients recommended to be on a statin actually taking one. According to the survey, physicians believe that the greatest barrier for a patient starting on a statin is the fear of or history of side effects.

Some limitations that affected data collection included some of the patients not having their cholesterol tested in the past year or having no history of their cholesterol being tested. Some patients also had a cholesterol reading either too high or too low to be input into the CV risk calculator.

Next Steps

- Distribute a QR code linked to an educational flyer for the patients explaining the benefits of being on a statin and the risks of not being on one.
- Distribute information to the physicians about counseling patients concerning the importance of being on a statin.
- Reevaluation of statin use in the family medicine clinic in six months to determine if the intervention was effective.

Educational Flyer

