Diabetes Care Gap Initiative: Improving Standard Medical Therapy Utilization in the Diabetic Population

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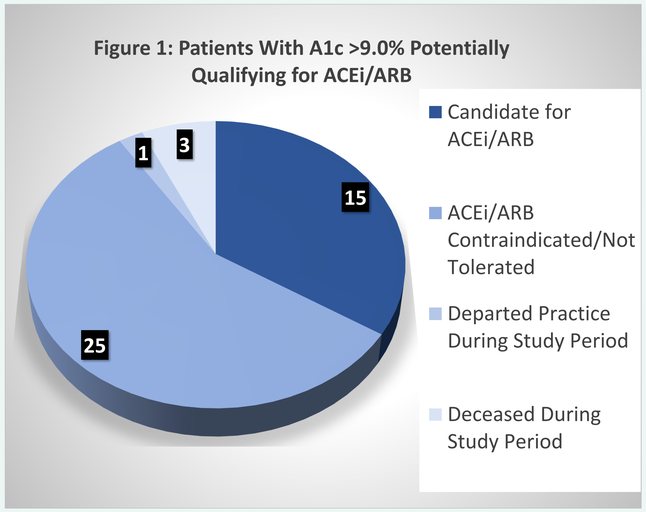
INTRODUCTION

- Diabetes Mellitus (DM) affects 37.3-million U.S. citizens and often presents with hypertension (HTN) and chronic kidney disease (CKD)
- ACE inhibitor (ACEi)'s or angiotensin II receptor blocker (ARB)'s reduce the progression of cardiovascular/renal disease in this population
- In July 2023, 537 diabetic patients with comorbid HTN or CKD were identified in our practice, with 84% being prescribed ACEi/ARB therapy
- The goal was to achieve an ACEi/ARB treatment rate ≥ 87% in hypertensive and ≥ 88% of nephropathic patients over the next year

METHODS

- Patients were filtered for poorly controlled DM (Hemoglobin A1c >9.0%), excluding those of reproductive age
- Individual chart reviews verified a diagnosis of HTN or CKD, or the presence of urinary microalbuminuria
- Charts were screened for additional contraindications to ACEi/ARB therapy (hyperkalemia, angioedema, etc.)
- Qualifying patients were offered a telemedicine or in-person visit to discuss and start an ACEi/ARB with appropriate lab-work and follow-up

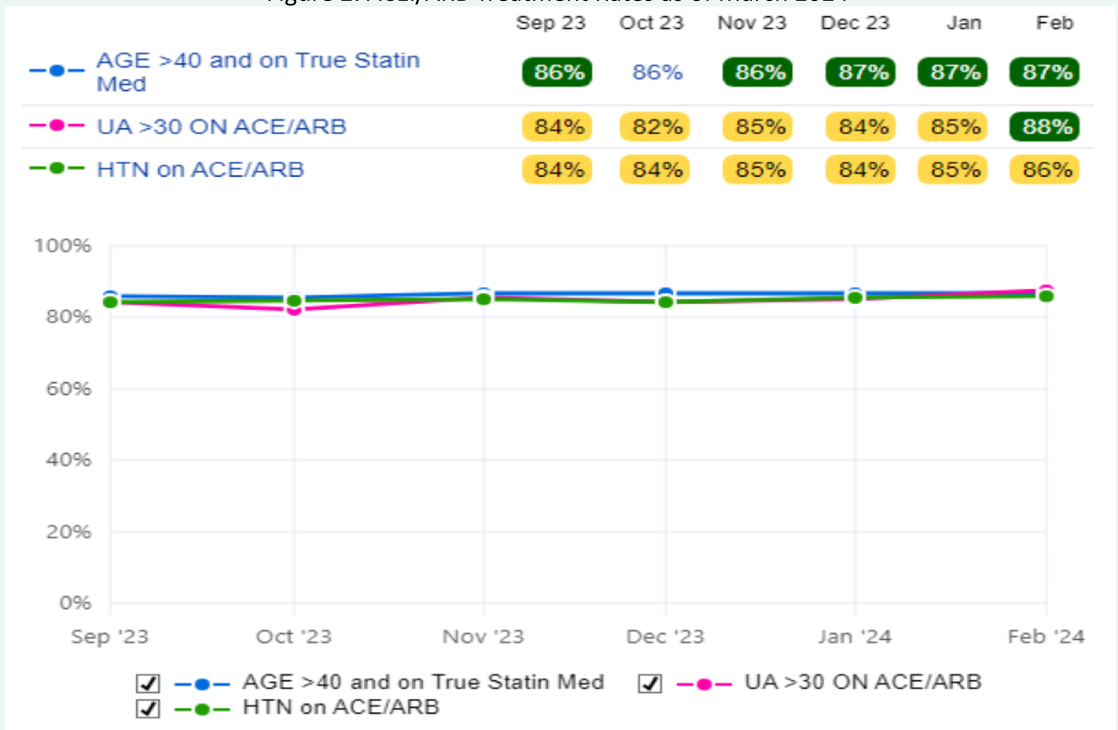
Figure 1: Patients With A1c >9.0% Potentially Qualifying for ACEi/ARB



RESULTS

- Of those patients filtered by A1c and reproductive capability, 44 were identified as qualifying for but not prescribed an ACEi/ARB. 3 patients passed away and 1 left the practice during the project
- Individual chart review yielded 15 patients qualifying for ACEi/ARB in the absence of contraindications or medication intolerance. All 15 were contacted by telephone or mail to offer appointments (Figure 1)
- 6 patients scheduled and attended an appointment with either the care gaps team or primary care provider (PCP). Of these, 4 were started on ACEi/ARB and 2 were not despite qualifying
- 1 patient who did not have an appointment was started on medication while hospitalized
- ACEi/ARB treatment rate in our entire practice increased from 84% to 86% in hypertensive patients and 84% to 88% in nephropathic patients (Figure 2)
- Of the 9 patients who did not attend an appointment, 6 were unable to be contacted by scheduling and 3 were scheduled but either cancelled or did not present to their appointment
- Of patients with no appointment, 3 had documented financial constraints and 1 moved out of state. 5 had no documented travel/financial constraints (Figure 3)

Figure 2: ACEi/ARB Treatment Rates as of March 2024



DISCUSSION

- We initiated ACEi/ARB therapy in 5 of 15 qualified patients with poorly controlled DM, contributing to improved treatment rates in the practice
- 10 of 15 qualified patients were either not started on medication at their visit due to other issues being addressed or did not present to an appointment
- Several patients who did not schedule/present to appointments had documented financial/travel constraints, potentially precluding them from presenting
- 25 patients did not qualify for medication based on contraindications or medication intolerances

CONCLUSION

- Through both our teams' own patient encounters, as well as coordination with PCP's within our practice, we were able to increase medication utilization for qualifying DM patients with comorbidities
- There were many barriers to starting patients on ACEi/ARB medication including contraindications, prior medication intolerance, patient financial constraints, addressing other issues at visits, patients relocating to a new area, and an inability to contact patients
- Future efforts could focus on medication utilization inpatients with A1c <9.0% and addressing patient social constraints to assist with appointment attendance

Figure 3: Potential Contributing Factors to Not Scheduling an Appointment