Initiation of SGLT-2 Inhibitors in Eligible Diabetic Patients: A Quality Improvement Project

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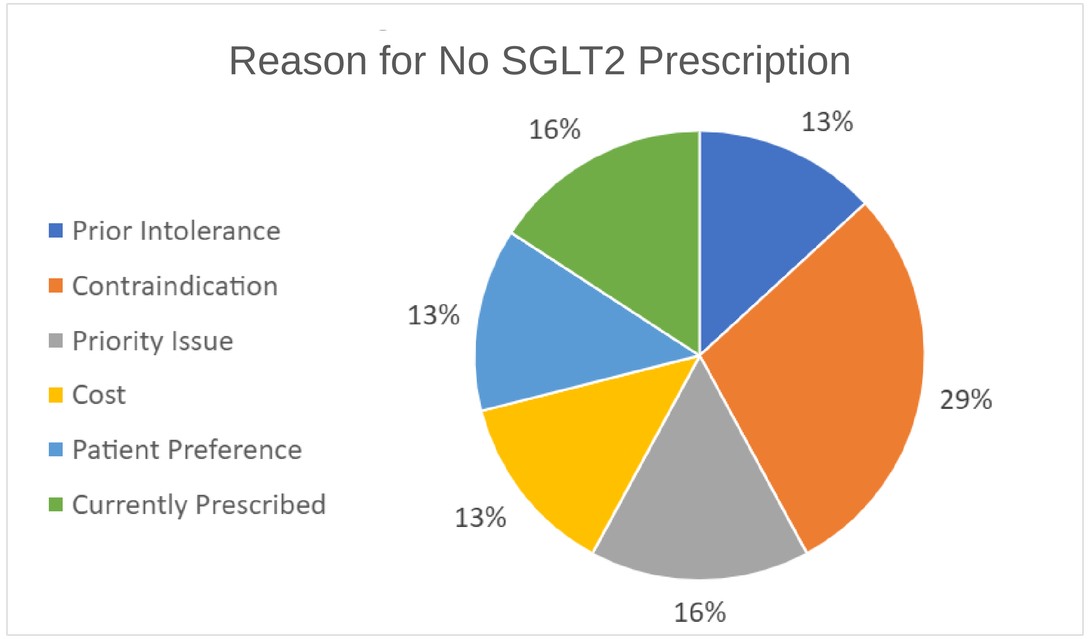
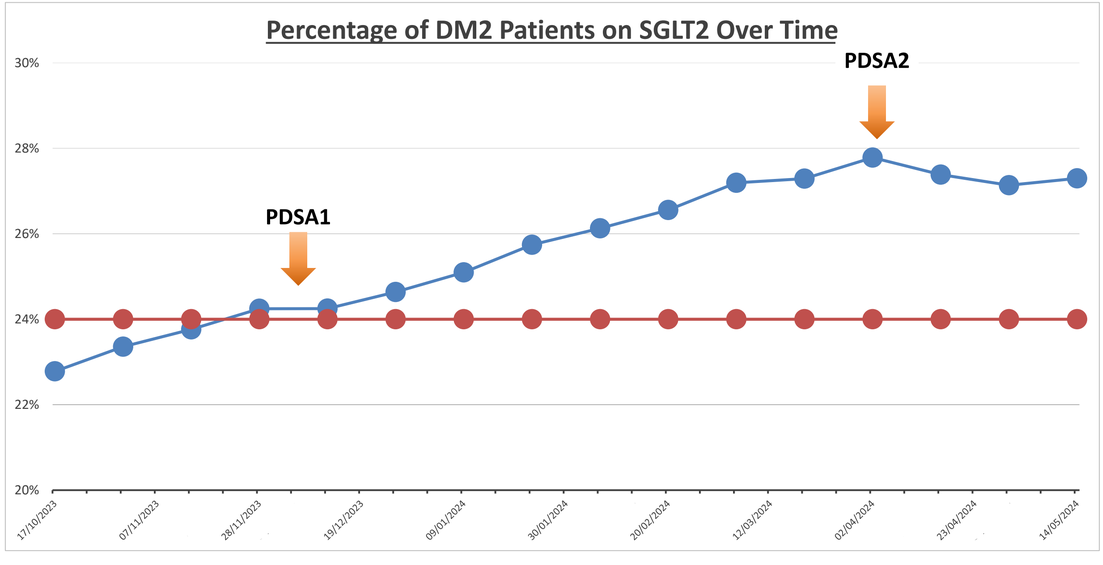
Introduction

Sodium-glucose cotransporter-2 (SGLT-2) inhibitors are anti-diabetes medications which benefit patients with heart failure, chronic kidney disease and proteinuria due to cardiorenal benefits. We aimed to increase SGLT-2 inhibitor prescriptions in our clinic patients with Type 2 Diabetes Mellitus (DM) and one other compelling indication (HF, CKD, Proteinuria) by 25 % in 6 months.

Methods

The project was deemed a Quality Improvement Initiative and exempted from IRB approval. The initial target population was identified using Slicer Dicer, a population health data tool in the Epic™ electronic health record, to identify patients with DM but not on SGLT-2 inhibitors. Chart analysis was performed to describe the population. Scheduled appointments of eligible patients were captured. For PDSA 1, a collaborative Clinical Pharmacist pended orders in a forthcoming office visit for the insurance-preferred SGLT-2 medication with a price estimate. For PDSA 2, patients were contacted and offered appointments. Physicians prescribed SGLT-2 inhibitors after shared decision making.





Results

- 801 of 1037 total adult patients with Type 2 DM were not on SGLT-2 inhibitors. Of those, 470 had HbA1c levels done in the last 6 months. 125 patients were found to have an additional compelling indication.
- PDSA 1 – 72 out of 125 patients had scheduled clinic visits. Clinical pharmacists pended orders for each of those visits.
- PDSA 2 – 53 patients were called by office staff, 7 patients scheduled.
- Of the planned visits, 65 were completed (process measure) and SGLT-2 inhibitors were prescribed to 30 patients (outcome measure).
- Pharmacist time spent was 14 minutes per visit which equated to 36 minutes per completed prescription (balancing measure).
- Contraindications and higher priority health issues were major reasons to not prescribe SGLT2 medication. Cost was not a major barrier to prescription.
- Run chart revealed a positive shift and trend in prescriptions in the first 3 months of the project.

Conclusion

- Iterative QI interventions resulted in increased prescriptions for SGLT-2 inhibitors in our target population.
- Pharmacy collaboration successfully prompted increase in prescriptions.
- Cost was not a significant barrier.
- Appointment-based interventions have a time limited benefit using non-contemporaneous appointment data.