

# A Multidisciplinary Approach to Deprescribing Potentially Inappropriate Prescriptions

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## BACKGROUND

- Polypharmacy is a prevalent concern amongst seniors and may lead to poor health outcomes, reduced quality of life, and high care costs (1).
- Structured Process Informed by Data, Evidence, and Research (SPIDER) is a collaboration between clinicians, patients, quality improvement (QI) and research programs to improve care (2).
- This project, within the SPIDER study, focusses on “potentially inappropriate prescriptions” (PIPs), medications where risks may outweigh benefits.
- By deprescribing PIPs, potential drug therapy problems such as drug interactions, adverse drug reactions, prescribing cascades, and increased drug utilization cost are mitigated, leading to enhanced patient care.

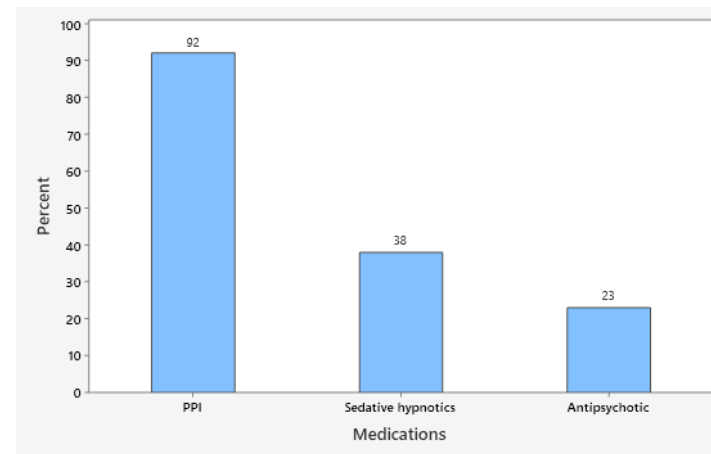
## OBJECTIVE

- To review and potentially deprescribe PIPs in eligible patients within our Family Health Team using a multidisciplinary approach.

## METHOD

- We identified eligible patients using an EMR:
  - ≥ 65 years old
  - Have 10 or more active medications in their charts prescribed within the past year prior to starting this project
  - At least one of the medications is a PIP
- One PIP was targeted each month, starting with proton pump inhibitors (PPIs), followed by sulfonylureas, sedative hypnotics, and antipsychotics.
- The clinicians on the team divided the patient list, performed chart reviews and patient interviews to assess the appropriateness of PIP deprescribing.
- Based on eligibility, patients were initiated on a deprescribing protocol.
- Patient follow-ups were scheduled per clinician discretion. We held team meetings monthly to discuss findings and next steps.

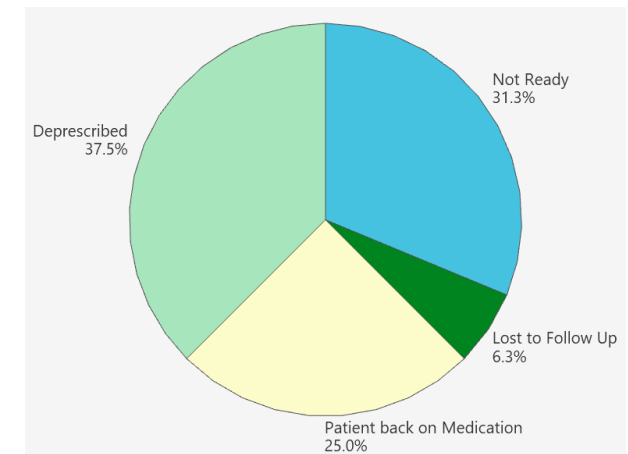
## RESULTS



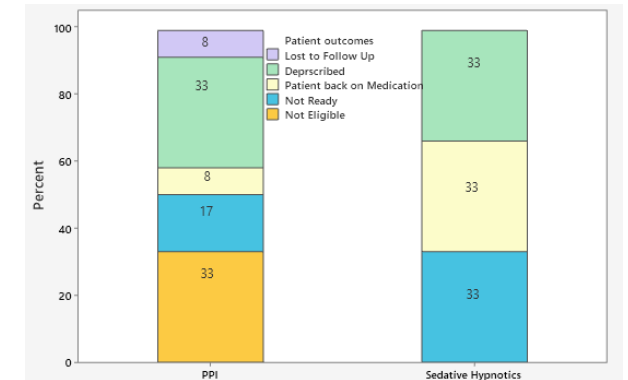
**Figure 1** – Percentage of patients age 65+, with 10+ medications who was prescribed at least one PIP eligible for deprescribing. There were no patients on sulfonylureas.

## DISCUSSION

- We successfully deprescribed PIPs in vulnerable patients.
- About one third of PIPs could be deprescribed, with most being PPIs.
- An accurate medication list was essential before initiating the deprescribing protocol.
- A thorough chart review and patient interview was needed to assess the suitability of deprescribing, in particular for antipsychotics.
- This project enhanced awareness of the importance of opportunistically identifying PIPs during refill requests in practice.
- Using a multidisciplinary team and a systematic approach increased efficiency. We hope this will spread to other practices and encourage other practitioners to implement a similar process when managing complex patients.
- Some limitations include:
  - Participation of only one physician's practice
  - Insufficient resources to offer multidisciplinary support to all physicians within Summerville Family Health Team



**Figure 2** – PIP deprescribing outcomes.



**Figure 3** – Deprescribing outcomes for patients on PPIs and sedative hypnotics.

## REFERENCES

1. Masnoon, N., Shakib, S., Kalisch-Ellett, L. et al. What is polypharmacy? A systematic review of definitions. *BMC Geriatr* 17, 230 (2017). <https://doi.org/10.1186/s12877-017-0621-2>
2. Greiver, M., Dahrouge, S., O'Brien, P. et al. Improving care for elderly patients living with polypharmacy: protocol for a pragmatic cluster randomized trial in community-based primary care practices in Canada. *Implementation Sci* 14, 55 (2019). <https://doi.org/10.1186/s13012-019-0904-4>