Exploring the Deprescribing Needs of Hospitalized Medicine Patients
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Introduction

**Problem:** Polypharmacy is an increasingly prevalent problem; approximately 66% of Canadian seniors have been prescribed five or more drug classes. Inappropriate prescription of medication can lead to adverse outcomes involving patient nonadherence, drug interactions, drug reactions and prescribing cascades. Further, adverse drug reactions contribute to approximately 1% to 25% of all hospitalizations and ER department visits. The Institute for Safe Medication Practices Canada (iSMPC) refers to deprescribing as a method to address polypharmacy.

**Methods:** Aligning with deprescribing.org and Alberta Health Services (AHS) Deprescribing Resource guide, we completed a prospective chart review of 60 patients to identify the need for deprescribing medications. In addition, a voluntary online survey was sent to 100 interdisciplinary health care providers (i.e., physicians, pharmacists, nurses) from general internal medicine units at the Royal Alexandra Hospital in Edmonton, Alberta, to gather their perspectives about deprescribing medications in the hospital, upon discharge, the barriers, and suggestions for improvement interventions. We also completed QI tools- process mapping and a fishbone analysis, to understand the process, to identify root causes and potential barriers to in-hospital deprescribing.

**Results:** From the chart review, we identified that 30% of hospitalized medical patients could benefit from deprescribing. From the online survey sent to 100 healthcare providers, 34% responded. The majority, 85%, indicated that their patients did have some medications that could be deprescribed before discharge. The barrier identified and perceived by health providers with deprescribing in the hospital was a general lack of awareness among healthcare providers and patients about the risks associated with over-medication, resistance from patients who may be hesitant to discontinue medications, limited resources and time for healthcare providers to engage in deprescribing discussions and monitor patients during the process, lack of effective communication and coordination between primary care providers, specialists, and pharmacists, all of which make it challenging to implement deprescribing while ensuring patient safety.

**Intervention:**

- **Interventions identified included:**
  - 1. Electronic medical record ‘smart phrases’ to standardize and simplify describing discharge documentation,
  - 2. Pharmacist role to include deprescribing assistance,
  - 3. Deprescribing clinic (see the proposed process below),
  - 4. Physician educational session (Medical Grand Rounds-May 2023) on the topic of deprescribing.

**Conclusions/Next Steps:**

Deprescribing medications in a hospital setting is challenging and will require a multifaceted effort. The next step is to trial and evaluate a GIM deprescribing clinic in June 2023. We will use a mixed methods approach to examine provider and patient experience, clinical outcomes, and process measures (i.e., how many patients were seen, etc.)

The deprescribing clinic will follow guidelines from Alberta Health Services and other national deprescribing initiatives to support reducing polypharmacy and patient medication burden. The deprescribing clinic will be a hybrid model with in-person and virtual options and will occur in the Outpatient Department at Royal Alexandra Hospital. Pharmacists and physicians will make referrals through the hospital’s electronic health record-Connecting Care.

An internal medicine physician will staff the clinic and be responsible for triaging and determining the appropriateness of these referrals weekly. The deprescribing clinic will see a patient a maximum of three (3) times and then discharge to the family physician.

Initially, the clinical focus will be deprescribing proton pump inhibitors. In the future, we hope to expand to other medications (i.e., bisphosphonates and oral hypoglycemics, antipsychotics, benzodiazepines, anticholinergics, and opiates).

Based on the findings from the initial trial of the deprescribing clinic, the intervention will be modified as required.

**References**