

Project Summary

Title: Drug Reduction in Older Patients: The DROP Trial

Anticipated Impact on Veterans Healthcare: Polypharmacy, defined in published studies as more than five medications, and hyperpolypharmacy, defined as more than 10 medications, are both common in older patients discharged to skilled nursing facilities (SNFs). Several recent studies demonstrate the prevalence and potential inappropriateness of polypharmacy among older patients in both VA and non-VA healthcare settings. Other studies have shown that polypharmacy can lead to multiple harmful outcomes among older community-dwelling and hospitalized populations including decreased medication adherence, increased adverse drug events and increased health care utilization and costs. Polypharmacy and a variety of drug indices that quantify drug burden have additionally been found to be associated with the development of the following geriatric syndromes: cognitive impairment, delirium, falls, urinary incontinence and unintentional weight loss. Our innovative, patient-centered **Drug Reduction in Older Patients (DROP)** intervention has significant potential to impact the health of a large population of older Veterans who are vulnerable to poor health outcomes. It is during hospitalization and SNF care that older patients often acquire new geriatric syndromes and medications and, thus, when deprescribing actions should be initiated by VA care providers. In addition, the clinical oversight provided during the hospital and SNF stays allows the effects of medication changes to be more closely monitored for safety relative to when the Veteran is at home.

Project Objectives: The randomized, controlled trial will evaluate the effects of an intervention to reduce exposure to medications (DROP) among hospitalized older Veterans discharged to skilled nursing facilities (SNFs) using an effectiveness-implementation hybrid design to inform future dissemination efforts.

Project Background/Rationale: Patients discharged to SNF represent the largest segment of Medicare beneficiaries discharged to post-acute care services and are a particularly high risk group for loss of independence and other poor clinical outcomes. This investigative team recently completed a VA-funded Quality Improvement Award and a Centers for Medicare and Medicaid Services (CMS) Innovation Award, both of which provide strong preliminary data related to the prevalence of polypharmacy and the relationship between polypharmacy and geriatric syndromes (e.g., medications associated with falls) in this patient population. Based on these data, we developed and pilot-tested a patient-centered deprescribing intervention combined with standardized screening assessments for eight geriatric syndromes to be implemented in the hospital and monitored during the SNF stay.

Project Methods: Our innovative effectiveness-implementation hybrid design study will be conducted in one VA hospital. The goal of the DROP intervention is to safely deprescribe medications, as defined by dose reductions and stopped medications, based on a combination of clinical criteria and Veteran preferences. This randomized, controlled trial conducted over three years will evaluate the effects of this hospital-based intervention on medication exposure, medication adherence, geriatric syndromes, and health status across Veterans' care transitions from the hospital to SNF to home to include a 90-day follow-up period after SNF discharge. Our overarching hypothesis is that reducing medications for older Veterans will favorably impact geriatric syndromes. Additionally, we aim to understand Veteran, both VA and non-VA provider and system-level factors that facilitate or impede intervention effectiveness to inform future clinical uptake and dissemination throughout the VA.