

# Rural Promising Practice: IMPROVE: Integrated Management and Polypharmacy Review of Vulnerable Elders

*This model of care shows promise to increase rural Veterans' access to care and services, and is recommended for replication at other facilities.*

## Medical Issue

An estimated 80 percent of older Americans live with at least one chronic condition, and more than 50 percent have been diagnosed with five or more such conditions.<sup>1</sup> As a result of comorbid conditions among older adults, providers often prescribe numerous medications to address chronic conditions, resulting in polypharmacy. Older adults, thus, have a higher risk for inappropriate drug use, ineffective dosage of medications, medication errors, poor adherence, and negative drug interactions.<sup>2</sup>

## Access Challenge

Veterans with complex, multiple chronic and mental health conditions are frequently prescribed numerous medications. A study evaluating Veterans found that patients who took five or more medications are four times more likely to be hospitalized from adverse drug event.<sup>3</sup>

## Solution

To address polypharmacy, the Geriatric Clinic at the Atlanta VA Medical Center, in collaboration with the Birmingham/Atlanta Geriatric Research Education and Clinical Center, established the IMPROVE program. This program is a successful pharmacist-led, patient-centered clinical program that improves medication management in high-risk older Veterans.

Under the IMPROVE program, clinical pharmacists perform face-to-face consults with enrolled

Veterans and their caregivers. During these appointments, the pharmacists conduct collaborative reviews of each Veteran's medication protocols with the Veteran and his or her caregiver. The pharmacists also provide recommendations, education, and strategies and tools to improve the Veterans' adherence to their medication protocols.

The IMPROVE program was expanded to local and rural Community-Based Outpatient Clinics (CBOCs) using academic detailing (face-to-face education from an expert in the field of geriatric prescribing), audit and feedback on individual prescribing practices, and support tools.

Preliminary results demonstrated that of Veterans who participated in the IMPROVE program with a face-to-face pharmacist visit, 79 percent had at least one medication discontinued and 75 percent had one or more dosing or timing adjustments; Potentially Inappropriate Medications were reduced by 14 percent.

## To Learn More

The U.S. Department of Veterans Affairs' (VA) Office of Rural Health (ORH) implements a targeted, solution-driven approach to increase access to care for the 3 million Veterans living in rural communities who rely on VA for health care. As VA's lead advocate for rural Veterans, ORH works to see that America's Veterans thrive in rural communities. To accomplish this, ORH leverages its resources to study, innovate and spread enterprise-wide initiatives through partnerships.

To discuss implementing a Rural Promising Practice at your facility or to learn more, visit [www.ruralhealth.va.gov](http://www.ruralhealth.va.gov) or email [rural.health.inquiry@va.gov](mailto:rural.health.inquiry@va.gov).

<sup>1</sup> AARP. Chronic Conditions Among Americans. Retrieved from [https://assets.aarp.org/rgcenter/health/beyond\\_50\\_hcr\\_conditions.pdf](https://assets.aarp.org/rgcenter/health/beyond_50_hcr_conditions.pdf) on November 7, 2016

<sup>2</sup> Nobili, A., Garattini, S., and Mannucci, P. (2011). Multiple diseases and polypharmacy in the elderly: challenges for the internist of the third millennium. *Journal of Comorbidity*, 1(1), 28–44.

<sup>3</sup> Maher, RL., Hanlon, JT., and Hajjar, ER. (2014). Clinical Consequences of Polypharmacy in Elderly. *Expert Opinion on Drug Safety*, 13(1), 10.1517/14740338.2013.827660. <http://doi.org/10.1517/14740338.2013.827660>

