U.S. Department of Veterans Affairs
Veterans Health Administration
Office of Rural Health
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ORH PROJECT OVERVIEW

Identifying Needs of Rural Veterans with Complex Nociplastic Pain and Chronic Overlapping Pain Conditions

Background

Rural Veterans with chronic pain are at increased risk for potentially risky prescribing and may face barriers to accessing multidisciplinary pain.[1-3] Rural patients with nociplastic pain who are diagnosed with chronic overlapping pain conditions (COPCs) are highly complex,[4-5] so may have unique challenges in accessing appropriate and optimal pain care. These challenges, in turn, can increase risk for serious adverse outcomes such as opiod use disorder and suicidality.[6-7] As such, rural Veterans with the most debilitating and poorly understood chronic pain conditions, in other words, COPCs, have the greatest need for multidisciplinary care and may face the greatest barriers in engaging with such care.

The *Identifying Needs of Rural Veterans with Complex Nociplastic Pain and Chronic Overlapping Pain Conditions* study was initially funded by the Department of Veterans Affairs (VA) Veterans Health Administration (VHA) Office of Rural Health (ORH) Veterans Rural Health Resource Center-Iowa City in fiscal year (FY) 2025. The study examines differences in pain care among rural, relative to urban, Veterans with chronic overlapping pain conditions (COPCs). This analysis of national corporate data warehouse administrative data from 2022-2023 focused on patients with fibromyalgia, irritable bowel syndrome (IBS), or migraine, as these are among the most common COPCs in Veterans.

Goals and Objectives

Year 1 of this study (FY 2025) characterized rural patients with nociplastic pain and chronic overlapping pain conditions (COPCs) and identified differences in care, relative to their urban counterparts. These findings outlined a potential need among rural VHA Community-based Outpatient Clinic (CBOC) providers, which will be further delineated qualitatively in FY 2026, so that clinical guides can be developed and disseminated in FY 2027, for rural CBOC providers that both facilitate ease of access to extant resources, as well as provide readily usable resources in clinic, such as education on COPCs, which may facilitate rural Veterans' willingness to utilize other multidisciplinary care resources.

Methodology

A cohort of Veterans receiving care in VHA for fibromyalgia, IBS, or migraine during calendar year (CY) 2022 was constructed. Primary utilization metrics were the frequencies of any outpatient encounter, of specified types, coded for a target COPC diagnosis (fibromyalgia, migraine, or IBS) during the year following (and including) the first observed COPC-coded encounter during CY 2022.

Encounter types of interest were primary care encounters, and specialty care encounters for pain clinic, rheumatology, neurology, gastrointestinal, or mental health. These specialty areas were selected based on the types of specialty care typically used by patients with fibromyalgia, migraine, or IBS.

The frequency of outpatient primary care and specialty care encounters were contrasted by residence (urban vs. rural) and primary care site (medical center, urban clinic, or rural clinic) using multivariate log-binomial regression. Models were adjusted for demographics and comorbidities.

Impact on Rural Veteran Health

- A total of 250,533 Veterans were treated in the VA for the COPCs fibromyalgia, migraine, and/or IBS in 2022: 30.5% were rural (n = 76,454)
- Relative to urban Veterans, rural Veterans were significantly more likely to have a COPC-related primary care visit (79.5% vs. 74.8%; p<0.001).
- Relative to urban Veterans, rural Veterans were significantly less likely to have a COPC-related specialty care visit (31.8% vs. 37.8%; p<0.001).
- After adjustment, rural residents were somewhat less likely to receive specialty care for their COPC, relative to urban Veterans (aRR = 0.91, 95% CI: 0.90-0.92).
- After adjustment, Veterans receiving care at urban clinics (aRR = 0.81, 95% CI: 0.80-0.81) and rural clinics (aRR = 0.66, 95% CI: 0.64-0.67) were substantially less likely to have a COPC-related specialty care visit, relative to larger VA medical centers.

Table 1. *Frequency of receiving an encounter coded for a chronic overlapping pain condition (fibromyalgia, migraine, or irritable bowel syndrome), contrasted by a Veteran's primary care site.*

	Primary care site			Statistics	
Encounter type	Medical center N = 80,988	Urban clinic N = 143,172	Rural clinic N = 26,373	Urban clinic vs. medical center	Rural clinic vs. medical center
Any encounter	n (%)	n (%)	n (%)	χ^2; p-value	χ^2; p-value
Primary care	52,512 (64.8)	115,556 (80.7)	22,886 (86.8)	6950; <0.001	4580; <0.001
Specialty care	35,078 (43.3)	48,345 (33.8)	6,736 (25.5)	2020; <0.001	2640; <0.001

Key Takeaways

- Rural Veterans with COPCs were more likely to receive primary care for their COPC, and less likely to receive specialty pain care for their COPC, relative to their urban counterparts.
- Rural primary care providers are managing the majority of pain care for rural Veterans with COPCs. Rural Veterans with COPCs may benefit from innovative models of remotely delivered pain care, as well as increased access to specialty pain care. In addition, rural providers may benefit from additional training and resources for COPC pain management.

References

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