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Older Adults are at Greater Risk of Opioid Use Disorder in Communities with High Social Vulnerability

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KEY FINDINGS

- Higher place-level social vulnerability (e.g., socioeconomic disadvantage, high housing cost burden) is associated with higher prevalence of opioid use disorder (OUD) among older Medicare beneficiaries (ages 65+) in U.S. counties.
- At the county level, the characteristics of older populations (e.g., average age, racial/ethnic minority composition, poor mental health) cannot explain the positive relationship between social vulnerability and OUD prevalence.
- Considering social vulnerability may be effective in identifying factors related to OUD prevalence and reducing OUD among older Medicare beneficiaries in U.S. counties.

Opioid use disorder (OUD) is a strong predictor of fatal drug overdose and other health problems.¹ Further, the prevalence of OUD among older adults (ages 65+) has increased and imposes a heavy burden on the health care system in the United States.²⁻³ Certain place-level health characteristics (e.g., average numbers of mental and physical health conditions among older adults) and social conditions (e.g., residential stability) shape the prevalence of OUD among older adults across U.S. counties.⁴⁻⁵ Place-level social vulnerability (e.g., high housing burden and low socioeconomic status among residents) is also related to risk of developing OUD.

This brief summarizes findings from our recent [study](#)⁶ that examined whether place-level social vulnerability contributed to the prevalence of OUD among older Medicare beneficiaries (age 65+) in U.S. counties in 2021.

Counties with Higher Social Vulnerability Have Higher Prevalence of OUD among Older Medicare Beneficiaries

Our study categorized U.S. counties into four quartiles based on their social vulnerability (e.g., high housing burden and low socioeconomic status among residents), with higher quartiles indicating higher levels of social vulnerability. Figure 1, which shows the county-level OUD prevalence ratios between the lowest social vulnerability quartile and other quartiles, demonstrates that OUD prevalence is higher in counties with more social vulnerability. Specifically, the prevalence of OUD among older Medicare beneficiaries is 1.16 times higher in the second quartile than in the first quartile. The ratio increases to 1.33 when comparing counties in the third quartile with their counterparts in the first quartile. The most vulnerable counties (Q4) have an average OUD prevalence that is 1.42 times higher than the least vulnerable counties (Q1). The positive relationship between social vulnerability and prevalence of OUD cannot be explained by the differences in the characteristics of older population across counties, such as the average age of older adults, average number of mental health conditions, and proportions of racial/ethnic minority residents.

How Can Counties Reduce the Prevalence of OUD among Older Medicare Beneficiaries?

Researchers and policymakers should move beyond a one-size-fits-all approach by identifying risk factors that are specific to counties with comparable social vulnerability. Regardless of the demographic composition (e.g., average age) and general health status (e.g., average number of mental health conditions) of older adults in a community, reducing social vulnerability (e.g., reducing housing burden and improving access to vehicles) may prevent older adults from developing OUD.

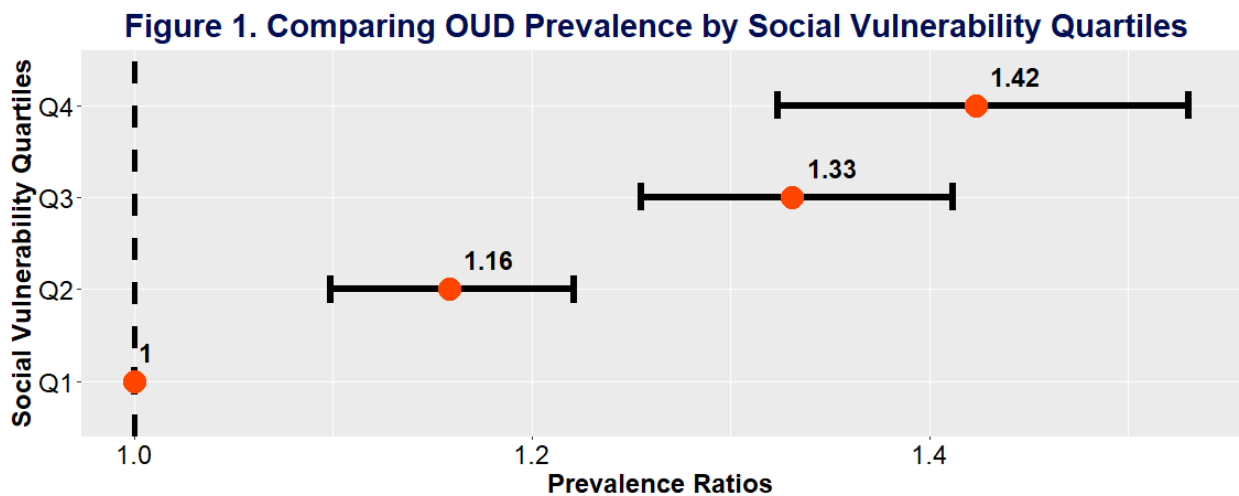


Figure 1: Estimated 95% Confidence Intervals of Prevalence Ratios for 2021 OUD Prevalence among Older Medicare Beneficiaries (ages 65+) in U.S. Counties.

Data Source: Estimates are from [“Social Vulnerability and the Prevalence of Opioid Use Disorder Among Older Medicare Beneficiaries in U.S. Counties.”](#)

Data and Methods

The following 2021 beneficiary-level datasets maintained by the Centers for Medicare & Medicaid Services are used to create the dependent variable, counts of older Medicare beneficiaries with OUD, and other county-level features of beneficiaries (e.g., average age and average number of mental health disorder): (1) the Medicare Beneficiary Summary File (MBSF) Base segment, (2) MBSF Chronic Conditions segment, and (3) MBSF Other Chronic and Potentially Disabling Conditions Segment.

The Social Vulnerability Index is a composite score based on the following four themes:⁷ “Socioeconomic Status theme”, “Household Composition and Disability theme”, “Minority Status and Language theme”, and “Housing Type and Transportation theme”. Higher scores indicate higher levels of social vulnerability in a county. For more details about the data and methods, refer to the published study.⁷

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