

# High on SMI: Quality Concerns about Nursing Homes Serving High Proportions of Seriously Mentally Ill Residents

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## Introduction

Rationale: Nursing homes with large proportions of residents with serious mental illness (SMI) have higher Medicaid census, which may result in fewer resources for staffing and affect quality.

Goal: Explore the relationships among SMI status, staffing levels, and quality of care.

Hypothesis: High-SMI nursing homes ( $\geq 44.62\%$  SMI; fourth quartile) will be associated with worse staffing levels and quality stars in comparison to Low-SMI ( $\leq 19.28\%$  SMI; first quartile) nursing homes.

## Methods

Sample: 14,460 nursing homes in the continental United States in the year of 2016

Study Design: Cross-sectional

Data: Certification and Survey Provider Enhanced Reports (CASPER) data from 2016 and Nursing Home Compare data from 2017

Measurement:

- Staffing in Hours Per Resident Per Day (HPRD)
- Quality Stars from Nursing Home Compare
- Facility-level covariates and payer-mix

Statistical Analysis: Logistic regression with Average Marginal Effects

## Results

Associations of High-SMI vs. Low-SMI Nursing Homes  
 Variables Average Marginal Effect (Standard Error)

## Conclusion

High-SMI nursing homes are more reliant on Medicaid, have lower staffing levels, and have worse quality. In order to ensure that residents with SMI receive high quality care, nursing homes must have an adequate number of specially trained staff in appropriate quantities. Low Medicaid reimbursement rates paid by some states may make it difficult for nursing homes to have the financial resources to make these investments.