HCBS Service Intensity and Nursing Home Placement for Patients with Alzheimer's Disease and Related Dementias: Does Race Matter?

D. Yan; S. Wang; H. Temkin-Greener; S. Cai
University of Rochester School of Medicine and Dentistry, Rochester, NY, United States

Research Objective: To explore racial differences in the nursing home (NH) placement among Medicare-Medicaid dual-eligible home and community-based service (HCBS) users with Alzheimer's disease and related dementias (ADRD), and determine the extent to which HCBS generosity may be influential.

Study Design: The following 2010-2013 national data were linked at the individual level: Medicaid Analytic eXtract (MAX) Personal Summary (PS) file and Other Therapy (OT) file, the Minimum Data Set (MDS) 2.0/3.0 and Medicare Beneficiary Summary File and MedPAR.

Dually eligible fee-for-service Medicare and Medicaid beneficiaries were identified using MBSF. Diagnosis of ADRD was based on the MBSF chronic condition file. New users were defined as those who did not have HCBS episodes in a prior 30-day look-back period, based on the OT records.

The outcome variable was any NH admission within one year after the HBCS use, defined based on the MDS data. The main variables of interest were race (ie, white, black, other), the intensity of HCBS among ADRD population at the county level (the average monthly spending per HCBS user with ADRD in a county, based on MAX PS file), and the interaction terms between the intensity of ADRD and race. A linear probability model with county fixed-effect and robust standard errors were estimated, accounting for individual covariates (eg, demographic characteristics, chronic conditions, prior use of institutional care).

Population Studied: 1 527 974 new users of HCBS with ADRD during CY2010 to 2013.

Principal Findings: The intensity of HCBS among individuals with ADRD varies widely across counties, the 25th percentile, median, and the 75th percentile was $654, $827, and $1099, respectively. The overall NH admission rate among HCBS users with ADRD was 67%, 55%, and 36% for whites, blacks, and others, respectively. After accounting for individual covariates, whites continued to exhibit a higher NH admission rate, as compared with two other race groups. However, while a higher intensity of HCBS reduced the likelihood of NH placement for whites, it increased the risk among blacks. NH admission rate for blacks was 7.2 percentage points ($P < 0.01$) lower than for whites in a county with a median HCBS monthly spending. A one hundred dollars increase in monthly HCBS spending was associated with a 0.3 percentage points ($P < 0.01$) decrease in admission rate among whites, but a 0.3 percentage points ($P < 0.01$) increase among blacks.

Conclusions: Our findings suggest that among dual-eligible HCBS users with ADRD, whites were more likely to have NH admission within 1 year than non-whites. Moreover, higher intensity of HCBS in a county was associated with lower a NH admission rate among whites, but a higher rate among blacks.

Implications for Policy or Practice: States have been promoting the use of HCBS as the means of rebalancing the cost of traditional institutional care while allowing more people to remain living in the community. However, the expansion of HCBS may have differential impact on NH admission risk for whites and blacks. Better understanding of racial differences in care needs is critical to inform the State Medicaid program design.

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Is Being Home Good for Your Health? Outcomes of Medicaid Home- and Community-Based Long-Term Care Relative to Nursing Home Care

R. Tamara Konetzka[1]; D. Jung[2]; R. Gorges[2]; P. Sanghavi[2]
[1]University of Chicago, Chicago, IL, United States; [2]The University of Chicago, Chicago, IL, United States

Research Objective: Expanding home- and community-based services (HCBS) as an alternative to nursing home care has become a priority for many state Medicaid programs. Whereas low-income people with long-term care needs used to have little choice but to move to a nursing home if they needed extensive assistance funded by Medicaid, now more than half of all Medicaid long-term care funding goes to HCBS, with substantial variation by state and county. This shift in policy was motivated by widespread consumer preferences to avoid institutionalization and the hope that HCBS would save Medicaid money relative to nursing home care.

However, these dramatic policy changes are being made on the basis of surprisingly little evidence about the outcomes of HCBS. HCBS inevitably involves a lower intensity of care than nursing home care and shifts some of the burden of care to untrained caregivers. Recent descriptive evidence shows higher hospitalization rates among HCBS users than nursing home residents, but descriptive correlations may suffer from selection bias. Our study provides the first plausibly causal national estimates of health outcomes for recipients of Medicaid HCBS relative to nursing home care and explores possible mechanisms for the effect.

Study Design: We use 2005 and 2012 Medicaid Analytic Extract (MAX) data set, a national compilation of Medicaid claims, in a longitudinal instrumental variables framework. We combine the MAX data with Medicare claims to identify hospital admissions, our main outcome variable, and with state and county data on the percent of individuals receiving HCBS versus nursing home care. To address the endogeneity of HCBS receipt, we instrument for it using the county percentage of nonelderly long-term care users who receive HCBS. The percentage of nonelderly users is highly predictive of HCBS use for an elderly beneficiary, but because the instrument was derived from a separate population, the exclusion restriction is unlikely to be violated.