their community living. As the disease progresses, the physical and emotional toll it exacts on caregivers may become unsustainable, and nursing home (NH) placement may become necessary. Medicaid Home and Community-Based Services (HCBS) programs provide various types of services to support community living for Medicaid enrollees, which may reduce or delay NH placement for ADRD patients. This study aimed to examine the relationship between Medicaid HCBS generosity and the likelihood of NH placement for duals with ADRD, and their level of functional impairment at NH admission.

Study Design: National Medicare data, Medicaid Analytic eXtract (MAX), and MDS 3.0 for CY2010-2013 were linked. Eligible Medicare-Medicaid dual beneficiaries with ADRD were identified and followed for up to a year. Based on MAX data, two measures of HCBS generosity were constructed at the county level for older duals with ADRD: (a) breadth (ie, proportion of duals who used HCBS services); and (b) intensity (ie, average HCBS spending per user). Outcomes included NH placement during the follow-up year (dichotomous) and the level of physical impairment (ie, activities of daily living [ADL, 0-28 point scale], categorized into low, moderate, and severe impairment) at the time of NH admission. A linear probability model with county random-effects and robust standard errors was estimated to examine the relationship between the likelihood of NH placement and HCBS generosity, accounting for individual (eg, sociodemographic characteristic, prior hospitalizations, and comorbidities) and county-level covariates (eg, median household income, female labor participation). A multinomial logistic model was estimated to examine the relationship between HCBS generosity and ADL impairment among those who were admitted to NHs.

Population Studied: Community-dwelling older dual beneficiaries with ADRD who were enrolled in fee-for-service Medicaid between October 1, 2010, and December 31, 2012 (N = 365 310).

Principal Findings: Considerable variation in county-level HCBS breadth and intensity was observed. 17.1% of duals with ADRD had NH placement within one year. After accounting for individual and county level covariates, we found that a 10 percentage-point increase in HCBS breadth among individuals with ADRD was associated with 1.1 percentage point reduction ($P < 0.01$) in the likelihood of NH placement. Among individuals with NH placement, greater HCBS intensity was related to a higher level of impairment at NH admission ($100 increase in HCBS intensity led to 1.03 and 1.04 times the likelihood of having moderate or severe physical impairment [$P < 0.01$]). Greater HCBS breadth was associated with less physical impairment (10 percentage-point increase led to 0.93 and 0.91 times the likelihood of having moderate or severe physical impairment [$P < 0.01$]).

Conclusions: Among community-dwelling duals with ADRD, Medicaid HCBS breadth was associated with a lower likelihood of NH placement, and HCBS intensity was associated with greater physical impairment at NH admission.

Implications for Policy or Practice: Investment in Medicaid HCBS may prevent or delay NH placement among community-dwelling older adults with ADRD. More research is needed to identify how the utilization of different HCBS services may affect NH placement.

Primary Funding Source: National Institutes of Health.

Is the Generosity of Medicaid Home and Community-Based Services Associated with Community Discharge from Skilled Nursing Facilities?

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Research Objective: While most older adults receiving post-acute care in skilled nursing facilities (SNFs) prefer to return home, many remain as nursing home (NH) long-stayers due to lack of sufficient supports in the community. Discharge from SNF to the community may be particular challenging for Medicare-Medicaid dually enrolled SNF users. Medicaid home and community-based services (HCBS) have been expanding in the last few decades and could be an important source of community support for duals. The objective of this study was to examine whether the generosity of Medicaid HCBS is related to community discharge for dual SNF users.

Study Design: National Medicare enrollment and claims data, Medicaid Analytic eXtract (MAX), Minimum Data Set, and facility/county-level public available data between 2010 and 2013 were linked. Eligible Medicare-Medicaid dual beneficiaries and their SNF post-acute admissions were identified. Generosity of Medicaid HCBS was measured at the county level based on MAX data and included metrics for breadth (ie, proportion of duals using HCBS services) and intensity (ie, average HCBS spending per user). Outcome was community discharge within 100 days of SNF admission (dichotomous). A linear probability model with SNF fixed-effects and robust standard errors was estimated to examine the relationship between the likelihood of community discharge and HCBS generosity, accounting for individual-level covariates (eg, sociodemographic characteristic, characteristics of index hospital stay, history of hospitalization, functioning status, and comorbidities). We further stratified the analysis by age, type of index hospitalization, and presence of Medicaid lesser-of policy, a cost-sharing policy that limits the reimbursement received by SNFs for taking care of duals.

Population Studied: Community-dwelling older duals with fee-for-service (FFS) Medicare and Medicaid benefits who were newly admitted to SNFs for post-acute care between October 1, 2010, and September 30, 2013 (N = 224 236).

Principal Findings: HCBS breadth and intensity varied substantially across counties and over time. Overall, 49.4% of the identified dual SNF residents were discharged to community within 100 days of SNF admission. After accounting for covariates and SNF fixed-effects, we

found that a 10 percentage-point increase in HCBS breadth led to a 0.66 percentage-point increase ($P < 0.01$) in the likelihood of discharge among older dual SNF users, but we did not detect a significant relationship between HCBS intensity and community discharge. Stratified analyses suggested a positive relationship between community discharge and HCBS breadth only among duals over 85 years old (1.49 percentage-point, $P < 0.01$), and among those who had medical (vs surgical) index hospitalization (0.70 percentage-point, $P < 0.05$). A stronger effect was found for states without Medicaid lesser-of policy (2.26 percentage-point, $P < 0.05$), compared to states with such a policy (0.53 percentage-point, $P < 0.05$).
Conclusions: We found that higher HCBS breadth but not intensity was related to a higher likelihood of community discharge with a relatively small effect size. The potentially meaningful effect was found among subgroups including the oldest old, people had medical index hospitalization, and states without Medicaid lesser-off policy.
Implications for Policy or Practice: While the effect of HCBS breadth on facilitating community discharge is modest in general, tailored HCBS policies to increase the coverage for targeted populations or in certain regions may be more effective in promoting community discharge.
Primary Funding Source: National Institutes of Health.

CHILD AND FAMILY HEALTH

Adolescents and Young Adults Diagnosed with Opioid-Related Problems: Treatment of Pre-Existing Mental Health Conditions

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Research Objective: Opioid misuse, which frequently begins in adolescence, is a leading cause of unintentional injury and death among adolescents and young adults. While high rates of comorbid mood and anxiety disorders have been associated with opioid-related problems (ORPs), studies have not examined treatments for these comorbid conditions, especially those that occur before the ORP diagnosis.
Study Design: Using a large national claims database, we identified individuals with an ORP in 2013 using International Classification of Diseases, Ninth Revision (ICD-9) diagnosis codes. To adequately assess pre-existing mental health diagnoses and treatments, we limited our sample to those continuously enrolled in the database for at least 24 months prior to their index ORP diagnosis date with no diagnoses for an ORP (N = 9055). Using ICD-9 codes, we identified mental health conditions present in the pre-diagnosis period (attention-deficit/hyperactivity disorder (ADD/ADHD), anxiety, conduct disorder, depression, personality disorder, other substance use disorder, and other mental health conditions). Procedure codes and pharmacy claims were used to identify receipt of mental health treatment. In addition, we calculated medication possession ratios (MPRs), defined as the total days a medication was dispensed to patients divided by the study period, for antidepressants, antipsychotics, and ADD/ADHD medications. We considered an MPR value greater than or equal to 0.80 adherent.
Population Studied: Patients 12-25 years old enrolled in a private insurance plan and diagnosed with an opioid-related problem in 2013.
Principal Findings: Overall, 55.2% (4998) of the cohort had a pre-existing mental health condition. Diagnoses of depression (25.6%), anxiety (21.1%), and other substance use disorders (20.3%) were common. More than half of those diagnosed with a mental health condition (63.8% or 3186) received any outpatient behavioral therapy. Among those who did, the average number of therapy visits was 14.06 (±21.25) out of the overall 31.49 (±33.06) outpatient visits in the two-year period. Over half (2933 or 58.68%) received any pharmacotherapy for their mental health conditions, with compliant patients ranging from 13.8-32.9% in the year preceding the ORP diagnosis, to 7.0-19.2% in the two years preceding the ORP diagnosis for the medication classes.
Conclusions: In a cohort of privately insured adolescents and young adults with ORP, pre-existing mental health conditions were quite common (55.2%), with a high proportion (82.3%) receiving any treatment for their mental health conditions (behavioral therapy or pharmacotherapy). However, the frequency and duration of these treatments were low—less than 50% were considered adherent for any of the studied medication classes and behavioral treatment visits averaged 1 visit every other month for the two years preceding the ORP diagnosis.
Implications for Policy or Practice: The results of this study may inform clinicians, public health professionals, and policymakers about possible treatment gaps and opportunities that would be helpful in addressing the opioid crisis.
Primary Funding Source: National Institutes of Health.

Improving Family Stability and Substance Use Recovery for Families in the Child Welfare System: Impact of Ohio's Statewide System Improvement Program

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Research Objective: Family drug courts (FDCs) and other multi-system strategies are increasingly used to address the needs of