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POLICY BRIEF

Traumatic Brain Injury: A Case Study in Failed Incentives to Address the Needs of Medicaid Patients in California

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Medicaid's inadequate ability to provide access to post-hospitalization care is contributing to overcrowded hospitals and is depriving patients of what they need.

Medicaid is a joint federal and state program that provides health insurance to low-income Americans. Although Medicaid covers a wide range of services, including primary and preventive care, it often falls short in providing services patients need after treatment in acute care hospitals. Changing the incentives for Medicaid in post-hospitalization care would allow more patients to access needed care and reduce acute care hospitalization stays.

After an acute care hospital stay, patients may need additional support for recovery. That process often is difficult to navigate for providers, patients, and families. One primary area of confusion is the use of terminology. For patients who have Medicaid coverage, post-hospitalization services are referred to as *long-term services and supports* (LTSS). For patients who have Medicare coverage, post-hospitalization services are referred to as *post-acute care* (PAC). But the differences do not stop with the labels. The LTSS benefit in Medicaid was originally envisioned as custodial care, with the intent to provide long-term care with limited nursing or therapy services or both. The PAC benefit in Medicare has always been intended to be short-term in nature, with a high emphasis on skilled nursing and therapy services.

In 2020, LTSS were used by 5.4 percent of Medicaid beneficiaries but accounted for 32.8 percent of total national Medicaid spending.[1] About 9.5 percent of total Medicaid spending goes to beneficiaries who are using institutional care only, whereas 20.2 percent goes to noninstitutional care, with or without waivers for home- and community-based services. Contrast those Medicaid trends with what is occurring in the Medicare program, in which 39 percent (2020) of beneficia-

ries used PAC services but accounted for 7.7 percent of total national Medicare spending.[2] Some of that difference in use between the two entitlement programs relates to patient acuity and benefit structure. However, we have observed differences in specific patient populations—those with traumatic brain injuries (TBI). In TBI cases, the acuity and benefit structure is similar across the entitlement programs, and patients most often need institutionalized post-acute care. Therefore, we are using our experience with the TBI population as a case study to examine how Medicaid beneficiaries access institutionalized post-hospitalization care.

TRAUMATIC BRAIN INJURY

TBI affects both younger, low-income patients and older patients, often leaving them with cognitive deficits necessitating post-acute care needs. Those needs often transition into a lifetime need for support because a substantial number of patients who experience TBI do not regain functional independence. That fact makes the disease an ideal area to contrast Medicaid and Medicare trends in LTSS use, as patients who are discharged to post-acute care often require long-term support. In 2021, the Medicare program reimbursed eight acute care diagnosis-related groups (DRGs) pertaining to TBI. TBI patients have been found to have more delayed discharges than brain-injured patients from nontraumatic causes.[3] The Agency for Healthcare Research and Quality used the National Inpatient Sample to study hospitalizations after TBI, selected by diagnosis codes involving cerebral hemorrhage. The agency found that the average length of stay (ALOS) after TBI varies significantly by primary payer. Medicaid patients stay the longest, with an ALOS of 9.7 days, whereas patients younger than age 65 who are covered by Medicare have an ALOS of 6.9 days, and privately insured patients have an ALOS of 6.9 days.[4]

Consistent with the national trends in ALOS for TBI patients, we found that the median ALOS for TBI patients was three days at Zuckerberg San Francisco General Hospital and Trauma Center.[5] However, an examination of TBI discharges that are classified as outliers (99th-percentile length of stay) found that patients stayed an average of 56 days after medical stability.[6] The outlier patients in our study were significantly more likely to have Medicaid as their insurance compared with patients in the nonoutlier group. The association between Medicaid and delayed discharge of TBI patients has been shown in other studies as well.[7] Furthermore, we have national data (results pending publication) that show that patients with an extended length of stay after TBI are typically still in the hospital because they are awaiting LTSS and have Medicaid insurance. Those medically stable patients are unnecessarily taking up acute care beds.

Those outlier discharges have led many acute care hospitals to classify such patients as "lower level of care (LLOC)" while still occupying an acute care bed.[8] Those patients no longer receive daily physician rounding but still have substantial costs related to their hospitalization. Internal estimates from San Francisco General Hospital (publication pending) suggest that the cost of LLOC for TBI patients is between $3,000 and $10,000 per day.

OUTLIER STATUS: AN UNINTENDED ADVERSE EVENT

This problem is not unique to the American system; more socialized systems suffer from the same problems. In Canada, delayed discharges account for approximately one-third of total inpatient days.[9] The National Health Service in the United Kingdom was recently found to have patients waiting up to nine months for discharge after medical stability.[10]

An increasing number of patients who become length-of-stay outliers are awaiting LTSS. Once admitted to the hospital, those patients are unable to be safely discharged home even once they are medically stable. The reasons for patients' being unable to return home are numerous and range from the need for continued intravenous medications to comprehensive wound care. Those patients must wait in the hospital until LTSS can be arranged.

Numerous studies have investigated outlier ALOSs after medical stability. One of the earliest studies (1991) to examine the problem found that the average delay for patients awaiting LTSS was 16 days.[11] The delay to discharge has increased over the years. A recent study from the Veterans Administration showed that patients with extended hospitalizations stayed from 20 to 225 additional days.[12] Those extra hospital days accounted for one-third of all inpatient days.[13] Furthermore, a Johns Hopkins study examined outlier cases, defined as those patients in the top 1 percent of ALOS. The researchers found that, over time, the outlier ALOS has been steadily increasing, up to an average of 45.1 days in 2019.[14]

CAUSES OF INCREASED OUTLIER CASES

PAC and LTSS options for hospitalized patients who require continued comprehensive medical services include inpatient rehabilitation facilities (IRFs), skilled nursing facilities (SNFs), long-term care hospitals, inpatient psychiatric facilities, and, for homeless individuals, medical respite centers. Many of the delays that cause outlier status for TBI patients manifest from delays in placement into those facilities. A 2022 national survey of hospitals found that SNFs had an 88 percent rejection rate for new patients.[15] Most policy experts agree that the main reason for reduced capacity stems from poor reimbursement rates, particularly from state Medicaid agencies.

The 2019 average SNF Medicare margin was 20 percent, but the overall margin was just 0.6 percent, primarily because of poor Medicaid reimbursement: the average daily rate for Medicare patients was $523, compared with $214 for Medicaid patients.[16] Perpetually low Medicaid reimbursement makes competing for labor difficult for nursing homes; 95 percent of surveyed nursing homes report significant or severe worker shortages.[17]

Although a significant contributor to the backlog problems, SNF rejections are not the only culprit. Lack of access to IRFs is also a significant problem for Medicaid patients. Our data (publication pending) show that TBI patients with Medicaid are more likely to receive care at an SNF than an

IRF compared with privately insured patients. The reasons for that difference are not immediately clear. One possible reason for the discrepancy is the use of prior authorization by healthcare plans. The Office of Inspector General, within the US Department of Health and Human Services, found that the top three services targeted by prior authorization denials by Medicare Advantage plans were advanced imaging services, injections, and post-acute care in SNFs and IRFs.[18]

Another possible reason for the discrepancy is the way state Medicaid agencies reimburse IRF hospitalizations. For example, California reimburses IRFs using a per diem rate, which is in significant contrast to how the Medicare program reimburses IRF services, in which a bundle, similar to a DRG, is used. For 2023, the base payment rate for a Medicare IRF hospitalization is $17,878.[19] Compare that amount to the average discharge payment of $8,053 (5.6-day average length of stay multiplied by the average $1,438 per diem rate) paid by California Medicaid for an IRF hospitalization in 2023—that payment is nearly $10,000 less per IRF stay.[20]

Although low Medicaid reimbursement for SNF and IRF services creates a demand-side shortage, various supply-side factors are at play as well. SNFs and IRFs are required to report numerous quality metrics. Although Congress mandated the burden reduction of SNF and IRF quality reporting requirements through the Improving Medicare Post-acute Care Transformation Act of 2014, during its implementation, the Centers for Medicare and Medicaid Services (CMS) increased the Standardized Patient Assessment Data Elements (SPADES) requirements from 412 data elements to 510 for SNFs and from 76 to 296 for IRFs.[21]

Those metrics, well-intentioned tools meant to reward facilities with high quality, have increased the cost of providing care. The American Hospital Association estimated that, in 2019, the average-sized community hospital dedicated 4.6 full-time employees and $709,000 annually to support the administrative aspects of reporting more than 80 quality measures to CMS.[22] The increased cost associated with performance metric reporting has also been demonstrated in physician practices.[23]

Few indications demonstrate that those metrics reflect actual quality of care.[24] In a 2019 report, the Government Accountability Office noted that CMS has no procedure for assessing whether a measure works.[25] Ample evidence from physician practices and acute care hospitals indicates that performance metrics do not improve care. Some metrics lead to unintended consequences and worse outcomes,[26] especially among facilities that care for lower-income patients.[27] A specific study reviewing SNF quality found that SNF metrics may result in driving poor-performing nursing homes out of business and will disproportionately affect non-White residents living in poor communities.[28] That outcome occurs because those metrics more accurately reflect a facility's ability to game the metrics rather than actual improvements in patient care,[29] thus favoring facilities with more resources to spend on metric collection and administration.

Despite evidence that quality metrics increase the cost of providing care without significantly improving the level of care, the Biden administration expanded the SNF value-based purchasing

(VBP) program by two additional quality measures last year, an increase of 200 percent since the inception of the program in 2018.[30]

The combined demand-side and supply-side restrictions on SNF and IRF availability directly contribute to delayed discharges for patients. The barriers to discharge of those ALOS outliers are not medical; they often involve simply locating and agreeing with an LTSS facility for placement. Because many patients with cognitive deficits will require long-term care, SNFs and IRFs typically are involved at some point. Improved access to SNF and IRF care for Medicaid patients will significantly reduce the outlier ALOS patient burden.

SOLUTIONS

Policies are needed that empower patient choice and autonomy while preserving a basic safety net. That outcome can be achieved in several ways. First, the safety net should consist of Medicaid managed care organizations (MCOs) instead of Medicaid fee-for-service (FFS). Under an MCO, the MCO and hospital can work out a variety of risk-sharing agreements, most of which would provide incentives for patient discharge into a more medically appropriate LTSS setting.

Many states, recognizing that fact, are incorporating LTSS (including post-hospitalization care) into their managed care models. As of 2019, 23 states have integrated managed care LTSS programs. California, the largest Medicaid program in the nation, is moving to an MCO LTSS model in 2023. MCO LTSS have shown promising results thus far. Managed care LTSS open the possibility of more options for patients, increased access to services, and better budgetary predictability.[31] Compared with FFS LTSS, managed care shows more spending on home- and community-based services and more satisfaction among enrollees.[32] An important point is that the MCO model provides patient choice. Competition between MCOs will ensure quality while controlling costs.

Policy changes should also encourage private payment for post-acute and long-term care. Medicaid should be reserved for those individuals who truly need a safety net. Many patients retain large pools of protected private assets (property, retirement funds, and life insurance) while Medicaid pays for their LTSS.[33] If Medicaid were to be more aggressive in pursuing assets, it would encourage beneficiaries to use assets and pay for LTSS up front and thereby improve Medicaid's financial flexibility, allowing for closer payment parity for Medicaid to other options, such as Medicare. In addition, it would encourage the uptake of private long-term care insurance, tax-advantaged savings plans, and life insurance riders.[34] The upstream effects of this outcome will be substantial reductions in ALOS for patients who require post-acute and long-term care, such as those suffering from TBI.

With broad uptake of private LTSS funding, LTSS facilities will compete for those patients. That practice will universally increase quality and lower costs for both privately funded patients and

those who still rely on Medicaid. Because many of the outlier ALOS patients suffer cognitive deficits, they will still require a robust safety net.

CONCLUSION

Moving toward an MCO LTSS model shows great promise for California, but the state also must supplement the transition in a way that does not repeat the mistakes of the past. As noted, California must do more to ensure that SNFs and IRFs are reimbursed at levels that are more reflective of what the Medicare program offers. Although quality measures are important, they should be used in a way that recognizes market forces, in which patients may freely choose among competing MCOs. Many MCO markets lack competition, often as a policy choice.[35] Whether California, by merging LTSS into the Medicaid MCO model, will improve its outlier ALOS problem remains to be seen.

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