



Changes in Health Care Financing & Organization (HCFO)

findings brief

key findings

- Policies requiring prior authorization for prescription medicines are associated with discontinuation of those medicines in bipolar patients.
- After medication discontinuation, patients with more severe bipolar disorder reduced their outpatient mental health visits, where patients with a less severe condition increased emergency room visits.

Impact of Prior Authorization on Medication Adherence and Health Service Use by Patients with Bipolar Illness in Medicaid

Overview

Pharmaceuticals represent one of the fastest growing areas of health care expenditures. As such, payers, particularly public payers like Medicare and Medicaid, have initiated cost-control measures to address these escalating costs. Prior authorization (PA) is one such cost-control measure that requires physicians to obtain preapproval for a medication in order for a patient to receive insurance coverage for the drug. PA often necessitates documentation of medical necessity if a nonpreferred or more costly medication is requested. PA can sometimes be an effective means for cost-control in that it encourages physicians to prescribe less expensive but efficacious medications in place of nonpreferred, more costly drugs. Consequently, PA works best among drugs that are readily substitutable. However, there are certain health conditions, including mental health disorders, for which drugs lack seamless substitutability.

Chronic mental health conditions can be debilitating. Patients with bipolar disorder require an ongoing drug treatment to successfully manage their disease and prevent relapse, hospitalization, and suicide. Medications for such conditions are often less interchangeable than drugs for other conditions given an individual's tolerance for drug side effects as well as genetic differences in their response to the drug.

In a HCFO-funded study,¹ Christine Y. Lu, Ph.D., Stephen B. Soumerai, Sc.D., and colleagues examined the impact of Maine Medicaid's prior authorization policy on patients who suffer from bipolar disorder. In their previous work,^{2,3} the researchers demonstrated that PA polices do not promote switching from non-preferred/higher-cost drugs to preferred/lower-cost drug therapies in bipolar patients. They also found that although PA yielded some pharmacy cost-savings, this apparent savings is likely due to medication discontinuation rather than sub-



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stitution of comparable therapies. These findings generate concern about the impact of PA on the quality of care and disease management in bipolar patients. In the present longitudinal study, the researchers explored the impact of the Maine Medicaid prior authorization policy on the medication adherence and health services use of bipolar patients with varying degrees of bipolar disorder severity.

Methods

The researchers utilized Maine Medicaid enrollment and claims data for January 2001–February 2004 as the primary data source. The claims data was analyzed for pharmacy, health services, and community mental health center (CMHC) services use. Equivalent claims data for Medicare/Medicaid dual eligible patients was also obtained from Medicare. Patients were included if they: were at least 18 years old in 2001, had a diagnosis of bipolar disorder, were newly treated with any bipolar medication, and were continuously enrolled in Medicaid throughout the study period (including eight months before receiving a bipolar medication through eight months after the initial dispensing).

The researchers used a strong pre-post design with comparison group and repeated measures. The patients were separated into cohorts representing exposure to the PA policy, and stratified by the severity of their bipolar disorder. The policy cohort included patients who initiated a bipolar medication while the policy was in effect (July 2003–February 2004). The prepolicy cohort served as the historical control group to demonstrate what might have happened in the absence of the PA policy, and included patients who initiated a bipolar medication one year prior to the introduction of the PA policy (July 2002–February 2003). Claims data regarding CMHC visits were used to stratify the patients by disease severity. Patients with at least two visits to a CMHC during the eight month baseline period were

considered attenders (indicating greater disease severity). Patients with one or no CMHC visits during the baseline period were considered non-attenders (indicating less severe bipolar disorder). The outcome measures included medication discontinuation, defined as a gap of more than 30 days in the availability of any bipolar medication, and frequency of health services use, including: mental health visits, emergency room visits, non-mental health outpatient visits, and hospital inpatient stays.

Results

The researchers observed 1,960 newly treated patients over the study period, with 1,014 patients in the prepolicy cohort (275 CMHC attenders and 739 nonattenders) and 946 patients in the policy cohort (275 CMHC attenders and 671 nonattenders). In terms of disease severity, patients who received care at the CMHC were more likely than those with one or no visits to have a comorbid psychiatric condition with bipolar disorder and higher baseline use of psychiatric medications and health services.

Medication Discontinuation

The researchers found that rates of medication discontinuation were higher in the policy cohort than in the prepolicy cohort, regardless of disease severity. This suggests that the PA policy interfered with medication adherence whether the patient had more or less severe bipolar disorder. Thirty-eight percent of attenders in the policy cohort discontinued their medication compared with only 31 percent in the prepolicy cohort. Among nonattenders, the respective rates were 41 percent and 33 percent. Attenders in the policy cohort experienced a higher risk for discontinuation after the first month of drug initiation, whereas nonattenders in the policy cohort experienced a more immediate effect, discontinuing medications within the first month of drug initiation at higher rates compared to the prepolicy cohort.

Health Services Use

Among CMHC attenders, the policy cohort experienced a significant reduction in outpatient mental health visits after discontinuing their bipolar medications. In addition, nonattenders in the policy cohort experienced a significant increase in emergency room visits following medication discontinuation. No differences were found between the policy and prepolicy cohorts relating to non-mental health outpatient visits or hospitalizations among CMHC attenders or non-attenders.

Limitations

The researchers cited several limitations to this particular study. First, continuously enrolled Medicaid patients represent a specific subgroup, so results may not be fully generalizable to patients not continuously enrolled in Medicaid. Second, CMHC use may not be as accurate in classifying disease severity compared with medical records or state psychiatric hospital data, which were not available for this study. As such, some individuals may have been misclassified regarding their disease severity. Third, given the available data, the researchers could not measure changes in health services use from facilities that do not bill Medicaid. Finally, it is not possible to definitively rule out rival hypotheses that changes in health care use could be due to changes in individual care-seeking preferences or care management programs; however, the use of a pre/post with comparison group difference-in-differences design greatly helps to minimize this potential bias.

Discussion and Policy Implications

In their earlier work, Lu, Soumerai, and colleagues demonstrated the potential unintended consequences of prior authorization for bipolar disorder medications, particularly given its interference with medication adherence. These findings also suggested that although PA accrued small savings to pharmacies, these savings likely resulted from medication discontinuation,

which can yield higher medical care costs due to subsequent complications and/or the need for more complex care. The most recent study expands upon these results and considers the differential effect of PA on newly treated bipolar patients with varying degrees of disease severity. CMHC nonattenders, or those with less severe bipolar disorder, experienced an immediate disruption in their medication adherence as well as elevated emergency room visits as a result of the PA policy. This suggests that PA and its associated medication discontinuation may have exacerbated nonattenders' bipolar symptoms or steered patients to these care settings to manage medication access issues. Attenders, or those with more severe bipolar disorder, remained adherent during the first month after drug initiation, though ultimately ended the study period with higher levels of discontinuation in the policy cohort compared to the prepolicy cohort. Attenders' medication discontinuation was also associated with reduced outpatient mental health visits, possibly reflecting overall lower compliance with care due to additional administrative barriers introduced by the PA policy.

These findings suggest that the PA policy in the Maine Medicaid program introduced a barrier to medication availability that ultimately led to greater discontinuation and a potentially harmful change to health care seeking behavior in all bipolar patients (i.e.,

greater emergency care use and a decline in routine outpatient mental health visits).

As such, it appears that PA policies may not be an appropriate cost-control measure in vulnerable populations like low-income individuals with serious mental illness. Ongoing drug therapy is critical in the management of bipolar disorder and in symptom control. The researchers' findings suggest that PA can exacerbate bipolar disorder, leading to medication discontinuation, interruptions in care quality, reductions in necessary outpatient mental health visits in patients with more severe bipolar disorder, and increased care-seeking behaviors at urgent care settings among those patients with less severe bipolar disorder. Given the evidence that PA does not lead to increased switching to lower cost substitutes for mental health disorders, these results suggest that PA as a cost-control strategy is unlikely to reduce health care costs when used in a vulnerable population. It may, in fact, contribute to increases in costs associated with more complex health care use that results from medication discontinuation.

Conclusion

Prior authorization policies may threaten the quality of care received by bipolar patients by introducing additional barriers to medication access and care consistency. The work by Lu, Soumerai, and colleagues

demonstrates that such policies lead to medication discontinuation and medical care disruption, potentially nullifying any cost-savings from PA when used for Medicaid patients with bipolar disorder.

For More Information

For more information, contact Christine Y. Lu, Ph.D., at christine_lu@harvardpilgrim.org, or Stephen B. Soumerai, Sc.D., at stephen_soumerai@hms.harvard.edu (principal investigator).

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Endnotes

- 1 Lu, C.Y. and Soumerai, S.B. et al. "Association between Prior Authorization for Medications and Health Service Use by Medicaid Patients with Bipolar Disorder," *Psychiatric Services*, Vol. 62, No. 2, 2011, pp. 186-193.
- 2 Lu, C.Y. and Soumerai, S.B. et al. "Unintended Impacts of a Medicaid Prior Authorization Policy on Access to Medications for Bipolar Illness," *Medical Care*, Vol. 48, No. 1, 2010, pp. 4-9.
- 3 Zhang, Y. and Soumerai, S.B. et al. "Effects of Prior Authorization on Medication Discontinuation among Medicaid Beneficiaries with Bipolar Disorder," *Psychiatric Services*, Vol. 60, No. 4, 2009, pp. 520- 527.