Socioeconomic Disparities in Access to Treatment for Major Depressive Disorder: The Role of Accumulator and Maximizer Insurance Plans

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BACKGROUND

Starting in the mid-2010s, insurers and pharmacy benefit managers implemented copay adjustment programs, such as copay accumulator (CA) and co-pay maximizer (CM) programs, which redirect manufacturer assistance funds from patients to insurers or third-party administrators.[1] In 2023 alone, such programs accounted for $4.8 billion in redirected copay assistance.[2]

CA programs operate by excluding manufacturer assistance from counting toward a patient's deductible or OOP maximum; once the assistance is exhausted, patients remain responsible for their full deductible and cost-sharing requirements, thereby transferring the financial benefit to the insurance plan.[3] In contrast, CM programs require patients to enroll with a third-party administrator, which determines the maximum available manufacturer assistance and advises insurance plans to adjust monthly copays accordingly, ensuring the plan captures the full value of the assistance.[3] While CMs may minimize OOP costs for patients on specified drugs, this assistance does not contribute toward deductibles or OOP maximums.

The approaches are described as "cost-shifting programs," as they enable payers to capture a substantial portion of the financial support originally intended for patients.[3] These payer strategies have significant implications for patient access and affordability, raising ongoing concerns regarding the extent to which copay assistance programs can effectively reduce financial barriers to care. CA and CM programs prevent patient assistance programs from counting toward deductibles or OOP maximums, inflating cost-sharing obligations for prescribed treatments.

OBJECTIVES

This study examined how health insurance benefit designs (accumulator and maximizer [CA and CM plans) may exacerbate treatment abandonment among patients diagnosed with major depressive disorder (MDD) with lower vs higher socioeconomic status (SES), and evaluate implications for health equity.

METHODS

This retrospective claims study used Kythera Labs commercial data (2020–2024) to examine adults diagnosed with MDD and treated with branded atypical antipsychotics (AAPs) from 01 January 2021 – 31 December 2023.

Cohort Assignment

Copay Accumulator / Maximizer Cohort:

- Patients enrolled in Accumulator health plans (≥3 prescriptions with >20% of a drug's wholesale acquisition cost or surpassing Affordable Care Act–mandated annual maximum, or decreasing copay card 'pay-as-little-as' amounts, or ≥2 prescriptions with equal and high copay card buydown amounts with minimal decreases in inpatient costs over time (unsuccessful manufacturer mitigation); AND

- Patients enrolled in Maximizer health plans (≥3 prescriptions that maintained the same initial OOP cost for a product within a therapeutic area)
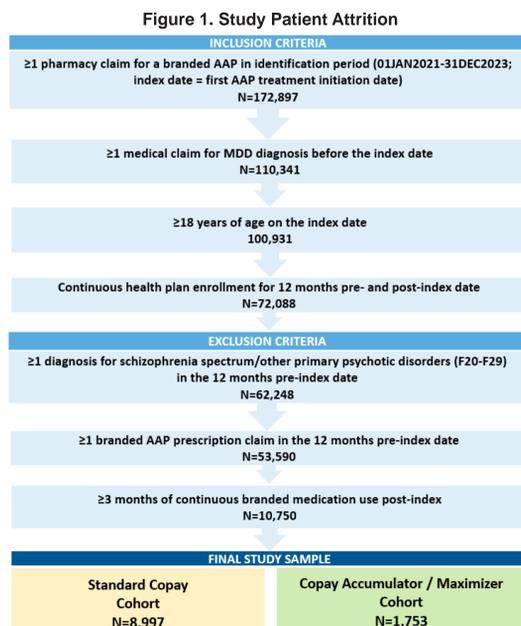
SCP Cohort:

- Patients enrolled in a traditional coinsurance or standard copay health plan, or all other non-accumulator or maximizer patients

Treatment abandonment rates for patients enrolled in CA/CM health plans vs SCPs were compared and stratified by SES by tercile (high, medium, low). Multinomial logistic regression models controlled for demographics and proxy measures for clinical severity.

RESULTS

Of the study population,1,753 patients were enrolled in CA/CM health plans, and 8,997 patients participated in SCPs (**Figure 1**).

Figure 1. Study Patient Attrition

INCLUSION CRITERIA

≥1 pharmacy claim for a branded AAP in identification period (01JAN2021-31DEC2023; index date = first AAP treatment initiation date)
N=172,897

≥1 medical claim for MDD diagnosis before the index date
N=110,341

≥18 years of age on the index date
100,931

Continuous health plan enrollment for 12 months pre- and post-index date
N=72,088

EXCLUSION CRITERIA

≥1 diagnosis for schizophrenia spectrum/other primary psychotic disorders (F20-F29) in the 12 months pre-index date
N=62,248

≥1 branded AAP prescription claim in the 12 months pre-index date
N=53,590

≥3 months of continuous branded medication use post-index
N=10,750

FINAL STUDY SAMPLE

Standard Copay Cohort
N=8,997

Copay Accumulator / Maximizer Cohort
N=1,753

AAP: atypical antipsychotic; MDD: major depressive disorder

RESULTS

Baseline Patient Characteristics

Patients in the CA/CM cohort were generally younger, more likely to be female, and more likely to reside in higher SES areas. They had lower overall comorbidity scores, a higher prevalence of anxiety, and a lower prevalence of substance use disorder, post-traumatic stress disorder, and systemic comorbidities (**Table 1**).

Table 1. Baseline Characteristics of Patients Diagnosed with MDD and Treated with Branded AAPs by Copay Health Plan Type

Characteristics	Accumulators/ Maximizers (N = 1,753)		Standard Copay Plans (N = 8,997)		P-value	Std. Diff.
	N/Mean	%/SD	N/Mean	%/SD		
Mean Age	40.35	13.46	43.2	15.41	<0.0001	0.0676
Age Groups						
Age group: 18-34 years	663	37.82%	2,964	32.94%	0.0001	0.0658
Age group: 35-44 years	400	22.82%	1,813	20.15%	0.0115	0.0781
Age group: ≥45	690	39.36%	4,220	46.90%	<0.0001	0.1316
Sex						
Female	1312	74.84%	6,563	72.95%	0.1014	0.0259
Male	441	25.16%	2,433	27.04%	0.1031	0.0259
US Geographic Region						
Northeast	218	12.44%	1,475	16.39%	<0.0001	0.1781
Midwest	584	33.31%	1,906	21.18%	<0.0001	0.2208
South	661	37.71%	3,906	43.41%	<0.0001	0.0669
West	201	11.47%	1,358	15.09%	<0.0001	0.0227
Socioeconomic Status						
Low tercile	463	26.41%	3,009	33.44%	<0.0001	0.0439
Middle tercile	603	34.40%	2,892	32.14%	0.0648	0.0240
High tercile	661	37.71%	2,919	32.44%	<0.0001	0.0207
Comorbidity Scores						
Charlson Comorbidity Index score	0.32	0.76	0.59	1.1	<0.0001	0.0264
Elixhauser Index score	2.15	1.64	2.72	2.18	<0.0001	0.0122
Chronic Disease score	4.22	2.94	4.55	3.32	<0.0001	0.0170
Mental Health Comorbidities						
Generalized anxiety disorder	841	47.97%	3,742	41.59%	<0.0001	0.0627
Panic disorder	144	8.21%	676	7.51%	0.3093	0.0109
Substance use disorders	286	16.31%	2,148	23.87%	<0.0001	0.0484
Post-traumatic stress disorder	237	13.52%	1,382	15.36%	0.0487	0.0972
Systemic Health Comorbidities						
Obesity	314	17.91%	1,745	19.40%	0.1476	0.0729
Diabetes	44	2.51%	547	6.08%	<0.0001	0.0543
Constipation	94	5.36%	538	5.98%	0.3145	0.0354
Chronic obstructive pulmonary disease	22	1.25%	485	5.39%	<0.0001	0.0406
Chronic pain	111	6.33%	880	9.78%	<0.0001	0.0432

AAP: atypical antipsychotic; MDD: major depressive disorder; SD: standard deviation; Std diff: standardized difference

After controlling for demographics, clinical characteristics, and health plan type, patients in the lowest SES tercile had ~10% higher odds of abandoning treatment than those in the highest tercile; not statistically significant (p=0.062; **Table 2**).

Table 2. Adjusted Odds of Treatment Abandonment for Patients in Lowest vs Highest SES Terciles

Lowest Tercile vs Highest Tercile	Adjusted for Sociodemographic and Clinical Characteristics and Copay Plan Type			
	OR	P value	95% CI	
			LCB	UCB
	1.108	0.062	0.995	1.234

CI: confidence interval; LCB: lower class boundary; OR: odds ratio; SES: socioeconomic status; UCB: upper class boundary

After controlling for demographic, clinical, and socioeconomic characteristics, patients enrolled in SCPs were ~14% less likely to abandon treatment than those covered by CA/CM programs (OR=0.86; p=0.007; **Table 3**).

Table 3. Adjusted Odds of Treatment Abandonment Among Patients with Standard Copay Plans vs Copay Accumulator/Maximizer Plans

Standard Copay Plans vs CM/CA Health Plans	Adjusted for Demographic and Clinical Characteristics and Socioeconomic Status			
	OR	P value	95% CI	
			LCB	UCB
	0.86	0.007	0.763	0.959

CA: copay accumulator; CI: confidence interval; CM: copay maximizer; LCB: lower class boundary; OR: odds ratio; UCB: upper class boundary

CONCLUSION

Copay accumulator and maximizer plans intensify health inequities by inflating OOP costs for vulnerable patients diagnosed with MDD, forcing treatment abandonment. Reforming benefit designs such as value-based insurance models that reduce cost-sharing for high-value mental health services, is critical to advance health equity and ensuring access for marginalized populations.

REFERENCES

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