

EXECUTIVE SUMMARY

Characteristics of Psychotropic Drug Use among Dual Eligible Medicaid/Medicare Members in an Oregon Community

It is frequently stated that the atypical psychotics, or second generation antipsychotics (SGAs), constitute more than 90% of antipsychotic prescriptions in the U.S. Food and Drug Administration approved indications include schizophrenia, bipolar disorders and more recently autism. However, off-label usage is common. In Oregon, SGAs accounted for approximately 30% of total Medicaid drug spending in 2005-2006, as calculated from CMS Medicaid data, placing Oregon highest amongst 49 states in this analysis (Polinski, 07).

The purpose of this study was to examine the characteristics of antipsychotic use in a dual eligible Medicaid/Medicare population including: demographics, disease frequency, mental health and non-mental health co-morbidities, as well as highlight potential polypharmacy issues for antipsychotic use and across various mental health drug classes.

RESULTS

Demographics. There were 2289 dual eligible members enrolled in the health plan between January 1, 2007 and July 31, 2007.

Mental Health Disease Prevalence. Disease prevalence was captured from medical claims. ICD-9 codes were used to identify mental health conditions and non-mental health conditions of interest.

Mental Health Diagnoses, dual eligible members, enrollment period January 1, 2007 through July 31, 2007.*

Mental Health Condition	Frequency	Percent Population with Condition
No mental health diagnosis	1379	60.2
Alcohol-related diagnosis	582	25.4
Depression	322	14.1
Other mental health disorder	272	11.9
Schizophrenia or schizoaffective disorders	223	9.7
Other psychotic disorder [‡]	167	7.3
Bipolar Disorder	148	6.5
Dementia	122	5.3
Pervasive developmental disorders	59	2.6
Mood disorder, excluding depression	25	1.1
Drug-related diagnosis	22	1
Disruptive behavioral disorder	15	0.7
Tic Disorders	2	<0.1

*Members may have diagnoses in more than one category. ‡ Includes some pervasive developmental disorders.

Antipsychotic Prescribing. In the sample population, 565 members were prescribed either a first generation antipsychotic (FGA), also referred to as a typical antipsychotic, or an atypical antipsychotic, also referred to as a second generation antipsychotic (SGA). The majority (90%) of antipsychotics prescribed were atypical antipsychotics (SGA) (n=508). **Costs for atypical medications total 8.4% of the total \$15.2 million of the total cost of care during the study period. The costs in the pharmaceutical budget for atypical antipsychotics were 27.1% of the overall \$4.7 million pharmacy costs.**

Among members prescribed an antipsychotic medication:

- ❑ **Nearly one out of every five members** that received an atypical prescription **had no mental health diagnosis** captured in the claims data (103 members).
- ❑ Members with **dementia** were 2.0 times more likely to be prescribed an antipsychotic medication than members without dementia (95% Confidence Interval = 1.4-2.9, $p < 0.05$).
- ❑ Members with an **alcohol-related diagnosis** were 12.9 times more likely to be prescribed an atypical antipsychotic medication compared to members without an alcohol-related diagnosis (95% Confidence Interval = 10.2 – 16.2, $p < 0.05$).
- ❑ The odds of an **obesity diagnosis** are 2.2 times greater among members receiving antipsychotics compared to members not receiving antipsychotics (95% Confidence Interval = 1.3-3.8, $p = 0.002$).

Among members prescribed an atypical or typical antipsychotic medication who **did not** have a diagnosis of schizophrenia, bipolar disorder or other psychotic disorder, the following was observed:

- ❑ 46 members with a **depression diagnosis** received atypical prescriptions and 4 members with a depression diagnosis received typical prescriptions;
- ❑ 17 members with **dementia** received an atypical prescription and 1 member with dementia received a typical prescription.

Based on an estimate of acceptable prescribing frequency versus antipsychotic polypharmacy (as determined by total days filled for prescriptions) ($n = 565$ members prescribed atypical or typical antipsychotics):

- ❑ **More than one out of five members (23%) received more supply of antipsychotic medication** than would be expected during the seven month study period.
- ❑ 36% of schizophrenics received more supply of antipsychotic medication than would be expected during the study period.
- ❑ The total cost of antipsychotic medications for members within *acceptable* prescribing frequency totals \$706,864 (atypical plus typical) while cost for members with *antipsychotic polypharmacy* was \$596,043.
- ❑ **The total pharmacy cost per member in the acceptable prescribing frequency was \$1618 per member versus \$7347 per member in the antipsychotic polypharmacy group.**

Polypharmacy: Prescribing patterns for all mental health prescriptions.

Among members prescribed an atypical medication, 85% were prescribed a drug in at least one other mental health prescription category. Almost half of all members (49%) were prescribed mental health drugs in three to seven additional categories.

Frequency of dual eligible members with mental health medications prescribed by medication class, total population versus members also receiving typical or atypical medications, enrollment period January 1, 2007 – July 31, 2007.

Type of Medication Prescribed	Total Frequency of Members with Prescription Filled for Mental Health Drugs (n=1458)	Frequency of Members with Atypical Prescribed (n=508)	Frequency of Members with Typical Prescribed (n=110)
Antidepressant	1114	342	71
Mania or Bipolar	321	166	29
Benzodiazepine	269	122	30
Anxiolytic/Hypnotic, non-benzodiazepine	202	70	22
Smoking Cessation	76	23	4
Alcohol or Drug Cessation	60	19	2
ADHD	34	12	2
Anorexiant/Stimulant	7	4	0
Anxiolytic/Hypnotic,	7	4	0
Other psychiatric	1	0	1

**Members receiving antipsychotic medication may receive drugs in more than one Rx category.*

It is important to note the discrepancy in mental health prescriptions versus captured diagnoses. For example, 1114 members (49% of dual eligible members) were prescribed an antidepressant during the study period, yet there were only 322 members with a depression diagnosis (14%).

Conclusion.

- Atypical antipsychotic prescriptions are a significant proportion of total medical costs among dual eligible members.
- Polypharmacy prescribing patterns are very common in the dual eligible membership, yet have weak supportive evidence in published literature. Consideration of management protocols is suggested.
- No mental health diagnosis was reported for one fifth of patients receiving antipsychotics. Clarification of diagnoses in these patients might have significant medical and administrative implications.
- Dementia related behavioral problems are characterized by modest clinical effectiveness relative to risk of adverse reactions from antipsychotic therapy. It is reasonable to suggest that management options for this member group be investigated.
- Metabolic syndrome is difficult to capture from ICD-9 codes in the dual-eligible database. However the two-fold risk of obesity among members receiving antipsychotics suggests this may be a significant problem.
- Substance abuse, particularly alcohol-related diagnoses, was extremely prevalent in the dual-eligible population (25%) and was present in 100% of schizophrenics. Investigation into intervention options seems prudent.
- In addition to the current analysis, use of antipsychotics in the pediatric Medicaid population should be investigated.