Reducing psychiatric care intensity: Choice of antipsychotic matters

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Background

- Management of schizophrenia (SCZ) cost $156 billion in 2013 ($37.7 billion in direct costs)
- Medication choice affects costs2, and while the APA recommends oral atypical antipsychotics (OAAs) in the treatment of SCZ, it does not provide guidance on which to use
- The intensity of service use, as reflected in psychiatric costs, may be an indication of OAA effectiveness

The OAA brexpiprazole, approved in 2015 for SCZ, was associated with lower cost and less healthcare utilization than other OAAs in an economic model3; however, real-world data are lacking

Objective

To examine psychiatric care intensity by comparing psychiatric costs in adult patients with SCZ newly treated with brexpiprazole vs other OAAs

Methods

- Retrospective cohort study using: 1. Truven Health MarketScan® Commercial (C), Medicare Supplemental (MS), and Multi-State Medicaid (M) Databases; and 2. De-identified Optum™ Commercial Databases
- Patient identification (Figure 1):

![Patient identification](Figure 1)

- Data transformations and analyses performed using SAS© version 9.4

Results

- The final study sample consisted of 6,254 patients with SCZ (Table 1)

<table>
<thead>
<tr>
<th>Medication</th>
<th>N (%)</th>
<th>Mean (SD) psychiatric care costs ($)[p=0.009]</th>
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<tbody>
<tr>
<td>Paliperidone</td>
<td>311 (50.4%)</td>
<td>391 (42.7)</td>
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<td>Olanzapine</td>
<td>406 (65.1%)</td>
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![Adjusted mean (SD) psychiatric care costs](Figure 2)

- Cost differed significantly across the comparison groups (p=0.001)

- Brexpiprazole users had lowest mean (SD) annual psychiatric care costs ($13,888 ($29,998), including lowest unadjusted mean (SD) psychiatric inpatient costs ($2,216 ($26,551))

- Controlling for baseline differences, brexpiprazole users had lowest annual mean psychiatric care costs (Table 2)

- Annual psychiatric care costs

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- Brexpiprazole initiators had lower annual psychiatric care costs than paliperidone and olanzapine initiators: this may indicate lower intensity of psychiatric care

- Choice of OAA may affect healthcare costs in schizophrenia

- Costs for branded drugs are substantially higher than costs for generics; this may impact overall costs

- Patients may want to assess differences in their own data when making formulary decisions, as medication costs can differ across plans

Conclusion

- Brexpiprazole initiators had lower annual psychiatric care costs than paliperidone and olanzapine initiators; this may indicate lower intensity of psychiatric care
- Choice of OAA may affect healthcare costs in schizophrenia
- Costs for branded drugs are substantially higher than costs for generics; this may impact overall costs
- Patients may want to assess differences in their own data when making formulary decisions, as medication costs can differ across plans

- Limitations
- Claims are for reimbursement, not research, so misclassification is possible. Additionally, claims indicate a prescription was filled, not necessarily that the medication was taken (or taken as prescribed)
- We controlled for observable demographic and clinical differences, but due to data limitations were unable to control for the unobservable clinical factors that may account for group differences
- Future studies with a larger sample size of brexpiprazole users are warranted

References


Free full-text available for brexpiprazole, age, Olanzapine, Comorbidity Index, psychiatric medications, and psychiatric claims data.

Datamart: MarketScan Commercial (C), Medicare Supplemental (MS), et al. (2016). Truven Health Analytic Research, LLC. 10.2139/ss-2016-1808.522

Results from brexpiprazole to paliperidone and olanzapine were not statistically significant and excluded from analysis.

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