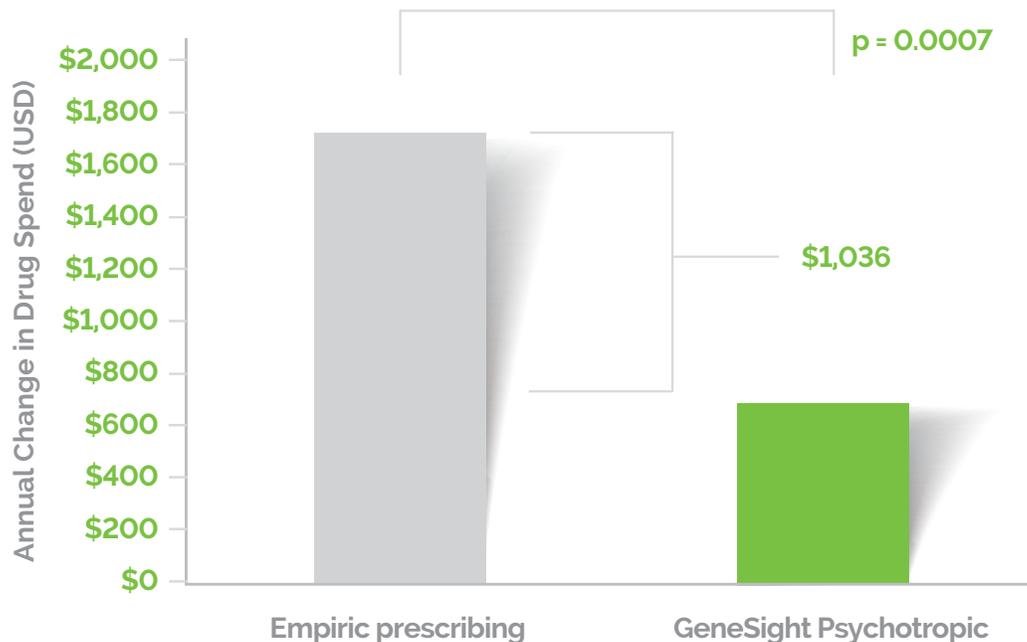


The largest neuropsychiatric pharmacogenomic economic outcome study shows **GeneSight® testing significantly improves medication utilization**¹

A Medco analysis of data from more than 13,000 patients being treated for behavioral health issues found that significant improvements in medication utilization were realized when healthcare providers used GeneSight Psychotropic test results to guide treatment decisions.

- After GeneSight Psychotropic testing, patients stayed on the new medication 46% longer vs. the medication they took prior to GeneSight testing. This suggests the prescribed medications are working better, demonstrating the benefit of using GeneSight Psychotropic results in treatment selection.
- **Less Medication Discontinuation:** The discontinuation rates from medications in the GeneSight Psychotropic tested group was 7.9% less than in the empiric prescribing group ($p < 0.0001$).
- **Reduced Polypharmacy:** One in five patients in the GeneSight Psychotropic tested group were on less medications by the end of the study (significantly greater than the empiric prescribing cohort, $p < 0.0001$).

As a result of improved medication utilization, GeneSight testing saved an average of \$1,036 per patient in annual medication costs versus TAU.



The largest neuropsychiatric pharmacogenomic economic outcome study shows

GeneSight[®] testing improved adherence and reduced polypharmacy

Conclusion

This is the largest prospective psychiatric pharmacogenomic economic outcome study to date. It is also the only economic outcome study of psychiatric pharmacogenomics to show decreased direct pharmacy costs in conjunction with improved adherence and a reduction in polypharmacy. These economic data make a compelling argument for the use of GeneSight Psychotropic testing for patients with depression and anxiety.

Design

- Pharmacy claims were compared over one year between a cohort of GeneSight Psychotropic tested subjects (n = 2,168) and a control group (n = 10,880).
- Patients were eligible if they (1) were newly starting an antidepressant or antipsychotic medication, (2) were augmented or switched to a different antidepressant or antipsychotic medication, and (3) maintained continual pharmacy benefits eligibility from 180 days prior to the initial prescription to the date of the first prescription for the index medication.
- An empiric prescribing control group was selected from a pool of approximately 65 million eligible plan members. Patients were propensity-matched on gender, age, index central nervous system (CNS) medication, primary CNS diagnosis, and date of project enrollment.
- Both groups were followed for 365 days after the date of project enrollment; and prescription medication claims data was analyzed for differences between the two groups and within the GeneSight Psychotropic tested group based on medication changes that were congruent or non-congruent with each individual's GeneSight test results.
- Relative breakdown of each of the main diagnoses within mental health was 68.9% depression, 48.1% anxiety, 14.1% bipolar disorder, and 1.6% schizophrenia.



¹ Winner JG, et al. Combinatorial pharmacogenomic guidance for psychiatric medications reduces overall pharmacy costs in a 1 year prospective evaluation. *Curr Med Res Opin.* 2015 Jul 23;1-11. [PMID: 26086890].