

## APA Annual Meeting

**Date/Place:** May 14-18, 2016 / Atlanta

**Abstract submission deadline:** December 9, 2015 (midnight EST)

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### **COST SAVINGS ASSOCIATED WITH IMPROVED ADHERENCE AMONG PATIENTS WITH SCHIZOPHRENIA USING LURASIDONE**

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**Background:** Schizophrenia, a chronic, severe, and disabling brain and behavior disorder, poses a significant economic burden on payers and society. Atypical antipsychotics are standard of care for schizophrenia; however, poor medication adherence may limit their effectiveness and adversely affect subsequent outcomes.

**Objective:** To estimate outcomes and cost offsets of lurasidone associated with improved adherence compared to other atypical antipsychotics among patients with schizophrenia from Medicaid and societal perspectives in the United States (US).

**Methods:** An analytic model was developed to estimate the 3-year healthcare resource utilization and outcomes (hospitalization, emergency psychiatric services use, arrests, violence, victim of crime, and substance use) and associated costs among adult patients with schizophrenia receiving lurasidone, aripiprazole, olanzapine, quetiapine, risperidone, and ziprasidone. Adherence data during the 6-month post treatment initiation period were obtained from a retrospective claims database study<sup>1</sup>; healthcare resource utilization and outcomes data were from a prospective US Schizophrenia Care and Assessment Program study<sup>2</sup>. Costs of outcomes were obtained from publicly available sources and adjusted to 2015 US dollars. Costs per atypical antipsychotic were calculated and then extrapolated across a Medicaid plan population of patients with schizophrenia prescribed atypical antipsychotics. The effect of parameter uncertainty on model outcomes was evaluated utilizing a probabilistic sensitivity analysis.

**Results:** Due to greater adherence with lurasidone, the model predicted the use of lurasidone resulted in better outcomes (hospitalizations 19.5% vs 21.0%-21.6%; emergency psychiatric services use 8.1% vs 8.6%-8.9%; arrests 5.2% vs 5.7%-5.9%; violence 7.4% vs 8.2%-8.5%; victim of crime 11.2% vs 12.2%-12.5%; substance use 24.5% vs 25.4%-25.7%) and resulted in per-patient savings of \$401, \$285, \$342, \$359, and \$396 over 3 years, respectively, compared to aripiprazole, olanzapine, quetiapine, risperidone, and ziprasidone. The primary driver of cost savings was the reduction in hospitalizations and victim of crime. In a Medicaid plan with 10,000 atypical antipsychotic users where the utilization of lurasidone increased from 10% to 20%, total predicted cost savings were \$343,365 over 3 years. In the probabilistic sensitivity analysis, similar cost savings were observed and lurasidone was the least costly treatment in 99.8% of the simulations.

**Conclusions:** In this assessment, lurasidone was associated with reduced healthcare resource utilization, improved outcomes, and cost savings compared to other atypical antipsychotics due to improved adherence.

#### **References:**

1. Hassan M et al. Comparison of treatment adherence among adults with schizophrenia on lurasidone vs other atypical antipsychotics in a Medicaid population. Poster presented at 2013 USPMHC.
2. Ascher-Svanum et al. *J Clin Psychiatry* 2006;67(3): 453-460.

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