Comparison of Healthcare Resource Usage and Costs Before and After Initiating Treatment with Long-Acting Injectable Antipsychotics Among Medicaid Insured Schizophrenia Patients

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BACKGROUND: Some studies on patients with schizophrenia have shown that schizophrenia relapses, hospitalizations and inpatient care costs decline after patients begin treatment with long-acting injectable (LAI) antipsychotics; however these results have contrasted with other studies. There is a need for further studies examining outcomes of patients with schizophrenia after beginning treatment with LAI antipsychotics to gain a more comprehensive understanding of their impact on disease management. In the US, Medicaid insures the greatest population of patients with severe mental illness; however, patients with schizophrenia insured by Medicaid are less well studied than those insured commercially or by Medicare.

OBJECTIVE: This study compared healthcare resource usage and costs before and after initiating LAI antipsychotics among Medicaid insured schizophrenia patients.

METHODS: Schizophrenia patients ≥13 years of age initiating LAI antipsychotics were identified from the Thomson Reuters MarketScan® Research Medicaid database between 7/1/2005 and 6/30/2010. Patients were required to have 6 months of continuous medical/prescription drug coverage prior to (baseline) LAI initiation and during a variable follow-up period. Annualized healthcare resource usage and costs for the baseline and follow-up periods were determined and compared.

RESULTS: Among 5,694 eligible patients, 55% were male and 45% were female with the majority of the population between the ages of 18 and 55 (86%). The study population had low general comorbidity as assessed by Charlson Comorbidity Index (CCI). In comparison to the baseline period, during the follow-up period (mean duration=25.7 months) the mean number of hospitalizations per year, all cause (1.52±2.41 vs. 0.70±1.61, p<0.001) and schizophrenia-related (1.21±2.04 vs. 0.57±1.41, p<0.001) were reduced, as well as hospital lengths of stay (all cause: 14.77±28.61 vs. 5.75±16.26 days, p<0.001; schizophrenia-related: 12.39±25.86 vs. 4.67±13.54 days, p<0.001). As a result, in comparison to before initiating LAI antipsychotics annualized hospital payments (any cause: $16,249±$36,404 vs. $7,380±$21,087, p<0.001; schizophrenia-related: $13,388±$31,614 vs. $5,645±$15,767, p<0.001) were much lower (Figure 1). Total outpatient medical service costs for any cause were not significantly different, but for schizophrenia were slightly greater during the follow-up period ($3,461 ± $6,239 vs. $3,869 ± $6,425, p<0.001). Total healthcare costs (any cause: $28,774±$39,868 vs. $21,873±$27,188, p<0.001; schizophrenia-related: $19,414±$32,526 vs. $13,838±$18,217, p<0.001), including outpatient pharmacy costs, were significantly reduced after the initiation of LAI antipsychotics as compared to before they were tried.

CONCLUSIONS: Based on the results of this study, Medicaid insured patients with schizophrenia who begin treatment with LAI antipsychotic therapy have better disease management afterward vs. before and as a consequence Medicaid incurs less cost for their care.

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Figure 1. Differences in Hospital and Outpatient Medical Service Payments, Any Cause and Schizophrenia-related for the Medicaid Study Population Before and After Initiation of LAI Antipsychotics