AUTISM-RELATED HOSPITALIZATIONS: ESTIMATES FROM 2006 HEALTH CARE COST AND UTILIZATION PROJECT KIDS' INPATIENT DATABASE

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OBJECTIVES: Over the past two decades, the prevalence of autism spectrum disorder (ASD) has increased significantly in the United States (US). This increase in prevalence has been accompanied by a corresponding increase in health care utilization and costs associated with the disorder. The purpose of this study is to describe hospitalization and associated costs among children with ASD in the US. METHODS: For the purpose of the study, the 2006 Healthcare Cost and Utilization Project (HCUP) KIDS' Inpatient Database (KID) was used. The 2006 KID contains outcome data for ~3.1 million discharged children from community, non-rehabilitation hospitals spread across states. All hospitalizations where the primary diagnosis (ICD-9-CM) code was listed as 299.XX were categorized as autism-related. Descriptive analyses were performed and results were reported by demographic categories. Costs associated with hospitalizations were based on total charges. RESULTS: Of the 3,131,324 pediatric discharges listed in 2006 HCUP KID, 1,456 were autism-related. The total charge for these hospitalizations was $56,936,591. The average charge per autism-related hospitalization was $24,042. The average age of children with autism-related hospitalization was 12 years (±4 years), and the average length of stay was 13 days. In terms of demographic distribution, a majority of the children were white (94%) and male (82.3%). Medicaid was listed as the primary payer for roughly half (49%) of the discharges, with private payer including HMO providing for 42.9%. For approximately 37% of the discharges, the DRG was listed as for psychoses, with another 42% for organic disturbance and schizoaffective disorder. CONCLUSIONS: Autism-related hospitalizations result in significant economic impact on the society. Consistent with the prevalence patterns of autism, a majority of hospitalizations occurred among males. Further research is needed to understand the factors associated with hospitalizations among children with ASD.

PREDICTORS OF HIGHER HEALTH CARE EXPENDITURES IN PATIENTS WITH ATTENTION-DEFICIT HYPERACTIVITY DISORDER

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OBJECTIVES: To identify risk factors associated with higher health care costs among US adult healthcare enrollees with attention-deficit hyperactivity disorder (ADHD). METHODS: This retrospective study used claims data from July 1, 2003, to December 30, 2007 to examine total health care costs for adults aged 18–64, diagnosed with ADHD, on their first prescription fill (index date) for an FDA-approved ADHD medication. Total cost (health plan plus patient paid amounts) included medical, pharmacy, outpatient, office visits, emergency and other medical costs. Subjects had an ADHD diagnosis between January 1, 2003 and September 30, 2006, and filled ≥1 prescription for an ADHD medication during the study period. Multivariate analysis was conducted for subjects with available race/ethnicity and household income data (N = 38,861). RESULTS: The highest household income group ($100,000 or more) was associated with significantly higher health care cost compared with the lowest income group ($<50,000) (p = 0.008). Follow-up costs were higher with increasing number of baseline medications (p < 0.0001), additional mental health diagnoses (p < 0.0001), and when the index prescriber was a neurologist, psychiatrist or internal medicine specialist, rather than a family physician (all p < 0.05). Greater medication compliance (MRP ≥ 0.80) was associated with greater total costs than lower compliance (MPR < 0.80) (p < 0.0001). Augmentation with a drug of another class (stimulant/stimulant) and use of a nonstimulant or extended release amphetamine (vs. long-acting methylphenidate) as index therapy were also associated with higher cost (all p < 0.03). Costs were not statistically different between males and females aged 6–12 but were higher for females and males aged 13–17 and 18+ than females aged 6–12 (all p < 0.0001). Race/ethnicity was not significantly related to cost when controlling for demographic, baseline medical and treatment characteristics. CONCLUSIONS: The main predictors of higher health care costs for patients with ADHD were higher income, older age and factors suggesting more complicated disease or more comorbid conditions.

IMPACT OF THE BRAZILIAN PUBLIC MENTAL HEALTH POLICY ON SCHIZOPHRENIA HOSPITALIZATION: A 10-YEAR ANALYSIS

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OBJECTIVES: Since the end of the 20th century, the Brazilian Health Ministry has been working on an effective mental health policy in order to keep patients out of the hospital setting as much as possible. In the last 10 years, two important programs for the treatment of schizophrenia patients were established: In 2002, Psychosocial Attention Center (CAPS) and in 2003, “Back to home” program, along with the adoption of new drugs. The purpose of this evaluation is to evaluate the impact of the Brazilian Public Mental Health Policy on schizophrenia hospitalization reduction. METHODS: A retrospective analysis was performed using DATASUS (Government Healthcare database) from Jan 1998 until Dec 2007 to investigate the number of hospitalizations and days of hospitalization associated with schizophrenia and the cost associated to these hospital stays. Costs are reported in Brazilian reais. RESULTS: In ten years, the amount of hospitalizations due to schizophrenia reduced in 55% and the total costs associated to hospitalization reduced in 68%. The cost of one day hospitalization was RS21.12 in 1998 and RS31.78 in 2007. The average length of stay increased 28% and the average total cost of hospitalization increased 93%. CONCLUSIONS: This analysis suggests that the mental health policy was effective in reducing schizophrenia hospitalization rates and total costs and that the patients that are hospitalized are probably those with more severe condition, requiring longer stay and more expensive health care resources.