

## Healthcare Resource Use and Quality of Life Associated with Cognitive Impairment Among Patients with Schizophrenia

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### Abstract

**Objectives.** To investigate the association between cognitive impairment and hospitalizations, quality of life and satisfaction with life among patients with schizophrenia.

**Methods.** A point-in-time survey was conducted between July and October 2019 via the Adelphi Schizophrenia Disease Specific Programme across the United States of America. Patients were stratified as mild or severe based on the level of cognitive impairment reported by their psychiatrist (normal, mild = mild; moderate, severe, very severe = severe). Multiple regression analysis was used to model the association between cognitive impairment and outcomes, adjusting for baseline characteristics.

**Results.** Data were provided by 124 psychiatrists for 651 mildly and 484 severely impaired patients with schizophrenia; PSCs were completed by 349 mildly and 206 severely impaired patients. Severe cognitive impairment was associated with increased odds of hospitalization due to schizophrenia relapse since diagnosis (2.10 odds ratio [OR],  $P = .004$ ) and within 12 months (1.95 OR,  $P < .001$ ) compared to mild impairment. Moreover, patients with severe cognitive impairment had poorer quality of life according to the EuroQoL 5-dimension (EQ-5D) Health Index ( $-0.085$  coefficient,  $P < .001$ ) and EQ-5D Visual Analogue Scale ( $-6.24$  coefficient,  $P = .041$ ) compared to patients with mild cognitive impairment. Severe cognitive impairment was also associated with lower overall life satisfaction according to the Quality-of-Life Enjoyment and Satisfaction Questionnaire ( $-8.13$  coefficient,  $P = .006$ ) compared to mild cognitive impairment.

**Conclusion.** Schizophrenia patients with severe cognitive impairment had more hospitalizations due to relapse than patients with mild cognitive impairment. Additionally, patients with severe cognitive impairment had significantly lower quality of life and overall satisfaction with life compared to patients with mild cognitive impairment.

**Funding.** Sunovion Pharmaceuticals

## The Economic Burden of Schizophrenia in the United States in 2019

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### Abstract

**Background.** Schizophrenia is associated with health, social, and financial burdens for patients, caregivers, and society. Major systemic changes, reforms, and technological advances have happened in the USA since the prior estimate of the societal cost of schizophrenia, \$155.7B in 2013. This study analyzes the most recent data and literature to update this estimate.

**Methods.** Direct and indirect costs associated with schizophrenia in the US in 2019 were estimated using a prevalence-based approach (ICD-10 codes: F20, F25). Direct healthcare costs were assessed retrospectively using a matched cohort design in the IBM Watson Health MarketScan Commercial, Medicare, and Medicaid databases from October 1, 2015, through December 31, 2019. Patients were matched to controls on demographics, insurance type, and index year. Direct nonhealthcare costs were estimated using published literature and government data. Indirect costs were estimated using a human capital approach and the value of quality-adjusted life years lost. Cost offsets were applied to account for basic living costs avoided. Excess costs, comparing costs for individuals with and without schizophrenia, were reported in 2019 USD.

**Results.** The estimated excess economic burden of schizophrenia in the US in 2019 was \$330.6B, including \$62.3B in direct healthcare costs (19%), \$19.7B in direct nonhealthcare costs (5%), and \$251.9B in excess indirect costs (76%). The largest drivers of indirect costs were caregiving (\$112.3B), premature mortality (\$77.9B), and unemployment (\$54.2B).

**Conclusions.** The estimated societal burden of schizophrenia in the USA in 2019 was \$330.6B, which represented a 93.5% increase from 2013 to 2019, after accounting for inflation. This study underscores the increasing and apparent burden of schizophrenia not only on the patient, but also on caregivers and society.

**Funding.** Sunovion Pharmaceuticals