

Table 1. Summary of Methods to Estimate Excess Cost Components

Item	Components	Calculations
Excess Direct Non-Health Care Costs		
Law enforcement		
Incarceration	Excess number of inmates with schizophrenia: 186,873 (calculated) ¹²⁻¹⁵ Excess cost of housing/caring for schizophrenia inmates (in millions): \$12,192 (calculated) ¹⁶ Excess rate of solitary confinement in mentally ill inmates: 10.80% ¹⁷ Excess cost of solitary confinement in schizophrenia inmates (in millions): \$1,095 (calculated) ¹⁸	Calculated by multiplying the schizophrenia population by the sum of (1) the excess rate of incarceration in schizophrenia patients multiplied by the total cost of incarceration in non-mentally ill inmates (excess cost from excess incarceration rate), (2) the rate of incarceration in the schizophrenia population multiplied by the excess cost of incarceration in the schizophrenia population (excess cost conditional on being in jail), and (3) the excess rate of solitary confinement in mentally ill inmates multiplied by the excess cost of solitary confinement (excess cost of solitary confinement)
Legal and judicial services	Judicial and legal expenditures, adjusted for inflation and population growth (in millions): \$70,001 (calculated) ^{19,20} Excess rate of arrests: 6.57% ^{21,22}	Calculated by multiplying the total annual judicial and legal costs by the excess rate of arrest in the schizophrenia population The estimated number of arrests in the schizophrenia population was calculated by multiplying the number of individuals with schizophrenia at risk of arrest by the rate of arrest in the schizophrenia population
Police protection	Average police costs per crime: \$8,275 (calculated) ^{23,24} Excess number of crimes against schizophrenia population: 989,215 (calculated) ²²	Calculated by multiplying the average police protection cost per crime by the estimated excess annual number of crimes against the schizophrenia population. Average police cost per crime was estimated as the total police costs, inflated to 2019 USD and adjusted for population growth, divided by the total number of crimes in the US in 2019. Excess number of crimes against the schizophrenia population was calculated by multiplying the excess rate of victimization in the schizophrenia population by the number of individuals with schizophrenia
Schizophrenia-related research and training	National Institutes of Health schizophrenia-related research and training costs in the US population, 2019 (in millions): \$263 ²⁵	Reported by the National Institutes of Mental Health
Homeless shelters	Excess number of schizophrenia patients in homeless shelters: 139,410 (calculated) ^{26,27} Daily cost of providing shelter to a homeless person: \$41.57 (calculated) ^{27,28}	Estimated by multiplying the excess number of schizophrenia patients in shelters by the annual cost of sheltering a homeless individual. Excess number of homeless individuals with schizophrenia was calculated by multiplying the schizophrenia population by the excess rate of homelessness in the schizophrenia population. Annual cost of sheltering a homeless individual was extracted from the literature and inflated to 2019 USD
SSI and SSDI	Excess number of schizophrenia patients receiving SSI: 353,580 (calculated) ²⁹ Average annual SSI payment/schizophrenia patient: \$7,317 (calculated) ²⁹ Excess number of schizophrenia patients receiving SSDI: 351,116 (calculated) ³⁰ Average annual SSDI payment/schizophrenia patient: \$11,234 (calculated) ³⁰	Calculated by multiplying the excess number of schizophrenia patients receiving SSI by the annual SSI payment per schizophrenia patient, added to the excess number of schizophrenia patients receiving SSDI multiplied by the annual SSDI payment per schizophrenia patient
Components		Methods
Excess Indirect Costs		
Unemployment	Schizophrenia employment rate: 30.10% ³¹ Rate of employment in the non-schizophrenia population: 72.40% (calculated) ³¹⁻³³ Excess number of unemployed in the schizophrenia population: 1,012,508 (calculated) ³¹⁻³³ Mean annual income in the US: \$53,490 ³¹	Estimated by multiplying the excess number of unemployed individuals in the schizophrenia population, derived from the rates of employment in the schizophrenia and schizophrenia-free populations, by the mean annual income in the United States
Productivity loss	Predicted income if patients did not have schizophrenia (in millions) ^{31,32,34-36} : Male: \$16,892 (calculated) Female: \$12,083 (calculated) Estimated income in the schizophrenia population (in millions) ^{35,36} : Male: \$10,629 (calculated) Female: \$10,927 (calculated)	Calculated as the difference between the median annual income of employees with and without schizophrenia in 2019, using published estimates of schizophrenia-specific productivity weights across genders and age categories. The average loss in annual income was calculated by multiplying the productivity loss (for each gender and age category) by the estimated number of employees with schizophrenia
Premature mortality	Estimated excess number of premature deaths in the schizophrenia population: 21,878 (calculated) ³⁷ Potential life lost per death: 28.5 years ⁵ ICER threshold: \$125,000 ³⁸	Estimated by multiplying the estimated excess number of premature deaths in the schizophrenia population in 2019, by the number of potential life years lost per death, and the value of 1 life year as determined by the ICER threshold
Caregiving	Average total annual hours lost through direct care: 2,393 (calculated) ^{39,40} US employment over population: 71.90% ^{32,33} Mean hourly income in US population: \$25.72 ³⁴ Percentage of the schizophrenia population in regular contact with family caregivers: 65% ⁴¹	Calculated by multiplying the population with schizophrenia in regular contact with family caregivers in 2019 by the prevalence of treatable and treatment resistant schizophrenia (respectively), the number of hours devoted to caregiving by family members for patients with treatment-resistant and treatable schizophrenia (respectively), the employment rate in the US population (to account for the fact that not all caregivers would be working otherwise), and the hourly income in the US population
Direct Cost Offset		
Cost offset	US poverty threshold for an individual in 2019: \$13,011 ⁴² Estimated excess number of individuals with schizophrenia not incurring basic living costs: 461,044 (calculated) ^{12-15,26,27,43-46} Psychiatric facilities: 26,018 (calculated) ^{45,46} Nursing homes: 98,743 (calculated) ^{43,44} Incarcerated: 186,873 (calculated) ¹²⁻¹⁵ Sheltered homeless: 139,410 (calculated) ^{26,27}	Calculated by multiplying the cost of living for a single person based on the US poverty threshold by the number of institutionalized individuals with schizophrenia who would otherwise resort to the social safety net (living in psychiatric facilities or nursing homes or are incarcerated or homeless)

Abbreviations: ICER = Institute for Clinical and Economic Review, PTSD = posttraumatic stress disorder, QALY = quality-adjusted life-year, SSDI = Social Security Disability Income, SSI = Supplemental Security Income.