

# **Supplementary Material**

Article Title: The Prevalence and National Burden of Treatment-Resistant Depression and Major

Depressive Disorder in the United States

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**DOI Number:** https://doi.org/10.4088/JCP.20m13699

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### **SUPPLEMENT**

## Supplementary Table 1. Mean Annual Healthcare Costs<sup>a,b</sup>

	Medicare	Medicaid	Commercial	US VHA
TRD	\$25,522	\$17,388	\$18,704	\$19,624
Non-TRD MDD	\$20,313	\$12,667	\$10,608	\$13,157
Without MDD	\$14,676	\$6,068	\$5,182	\$5,301

MDD = major depressive disorder; TRD = treatment-resistant depression; US VHA = United States Veterans Health Administration.

#### Notes:

- a Costs were standardized to 2018 USD using the US Medical Care Consumer Price Index
- Estimates for Medicare, Medicaid, commercial and US VHA payer types were from previously published work: Pilon, D., et al. (2019). PLoS One, Pilon, D., et al. (2019). J Comp Eff Res, Amos et al. 2018. J Clin Psychiatry, and Szukis et al. 2018. Poster presented at US Psych Congress, October 25-28, 2018, Orlando, F, respectively. Mean costs were obtained in cohorts matched on demographics (TRD to non-TRD MDD and to those without MDD)

## Supplementary Table 2. Mean Annual Adjusted Productivity Costs<sup>a,b</sup>

	Medicare	Medicaid	Commercial	US VHA
TRD	\$13,795	\$13,195	\$11,916	\$14,614
Controls without MDD, matched to TRD	\$6,407	\$6,129	\$5,535	\$6,787
Non-TRD MDD	\$12,348	\$11,811	\$10,665	\$13,080
Controls without MDD, matched to non-TRD MDD	\$6,019	\$5,756	\$5,199	\$6,376

MDD = major depressive disorder; TRD = treatment-resistant depression; US VHA = United States Veterans Health Administration.

#### **Notes:**

- <sup>a</sup> Costs were standardized to 2018 USD using the Consumer Price Index for All Urban Consumers (CPI-U): US city average, all items
- Data was from Kantar National Health and Wellness Survey (NHWS) 2017. Productivity costs were measured using the Work Productivity and Activity Impairment questionnaire, a 6-item validated instrument that includes and presenteeism. For each employed respondent the number of hours missed in the last week because of absenteeism and presenteeism were multiplied by the hourly rates to arrive at estimated costs. These figures were then multiplied by the average number of workweeks in a year to obtain annual estimates. Mean adjusted costs were estimated in matched cohorts subset by payer type, to employees who provided answers to the questionnaire controlling for sex, age, race, body mass index, Charlson comorbidity index, and household income, using negative binomial regression models.

## Supplementary Table 3. Adjusted Unemployment Rates<sup>a</sup>

	Overall US population <sup>b</sup>	Medicare	Medicaid	Commercial	US VHA
TRD	50%	87%	67%	34%	70%
Controls without MDD, matched to TRD	-	82%	58%	26%	62%
Non-TRD MDD	45%	84%	62%	29%	65%
Controls without MDD, matched to non-TRD MDD	-	81%	57%	25%	61%

MDD = major depressive disorder; TRD = treatment-resistant depression; US VHA = United States Veterans Health Administration.

### **Notes:**

- Data was from Kantar National Health and Wellness Survey (NHWS) 2017. Employment status was self-reported. Cohorts with TRD and non-TRD MDD matched separately to respondents without MDD were subset by payer type. Mean adjusted unemployment rates were then estimated by payer type for respondents with TRD, non-TRD MDD and without MDD controlling for sex, age, race, body mass index, Charlson comorbidity index, and income, using logistic models
- b Unemployment rate for US population was calculated by weighting unemployment rates across Medicare, Medicaid, commercial, and US VHA payer types by the prevalence of each payer type in the insured US population