

Supplemental Online Content

Bommersbach TJ, Rosenheck RA, Rhee TG. National trends of mental health care among US adults who attempted suicide in the past 12 months. *JAMA Psychiatry*. Published online January 19, 2022. doi:10.1001/jamapsychiatry.2021.3958

eMethods. Goodness of Fit for Sociodemographic and Clinical Factors Associated With Past-Year Suicide Attempts

eFigure. Goodness of Fit for Sociodemographic and Clinical Factors Associated With Past-Year Suicide Attempts

eReferences

This supplementary material has been provided by the authors to give readers additional information about their work.

eMethods. Goodness of Fit for Sociodemographic and Clinical Factors Associated With Past-Year Suicide Attempts

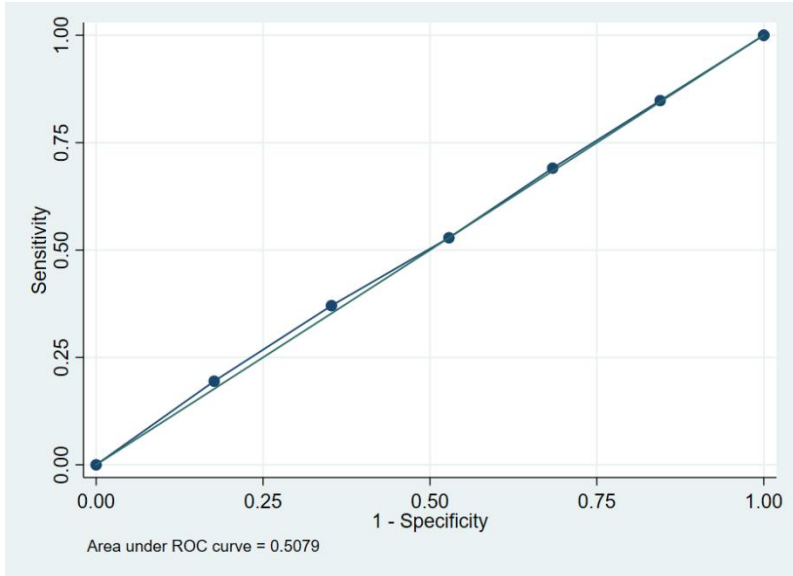
Each socio-demographic and clinical factors listed in **Table 3** were associated with past-year suicide attempts in bivariate analyses. We developed the following four cumulative multivariate models to examine how socio-demographic and clinical factors are associated with the magnitudes of effects of the dependent variable, past-year suicide attempts. We developed the following four consecutive models: 1) survey years alone (Model 1); 2) survey years plus socio-demographic factors (Model 2); 3) survey years and socio-demographic factors, plus past-year SUDs (Model 3); and 4) survey years, socio-demographic factors, and past-year SUDs, plus past-year mental health problems (Model 4).

We considered socio-demographic factors as predisposing factors whereas past-year substance use disorders (SUDs) and past-year mental health problems as acquired conditions. In addition, we expected that SUDs and mental health problems would have the stronger effects on suicide attempts, and thus added these in Models 3 and 4, consecutively.

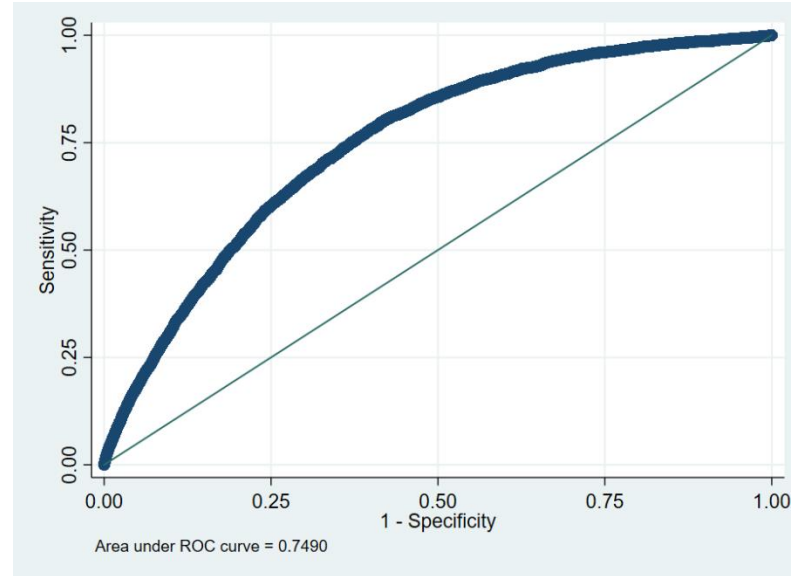
We conducted tests for goodness of fit for these models (**eFigure 1**).¹⁻³ In Model 1, the *c*-statistic was 0.5079, which indicates a poor model. In Model 2, the *c*-statistic was 0.7490, which indicates a “good” model according to the general rule of thumb. In Model 3, when past-year SUDs were added, the *c*-statistics increased to 0.7965, which is substantially better than that of Model 2. Finally, the *c*-statistic in our final model, Model 4, was 0.8956, indicating that past-year mental health problems are important factors associated with past-year suicide attempts.

eFigure. Goodness of Fit for Sociodemographic and Clinical Factors Associated With Past-Year Suicide Attempts

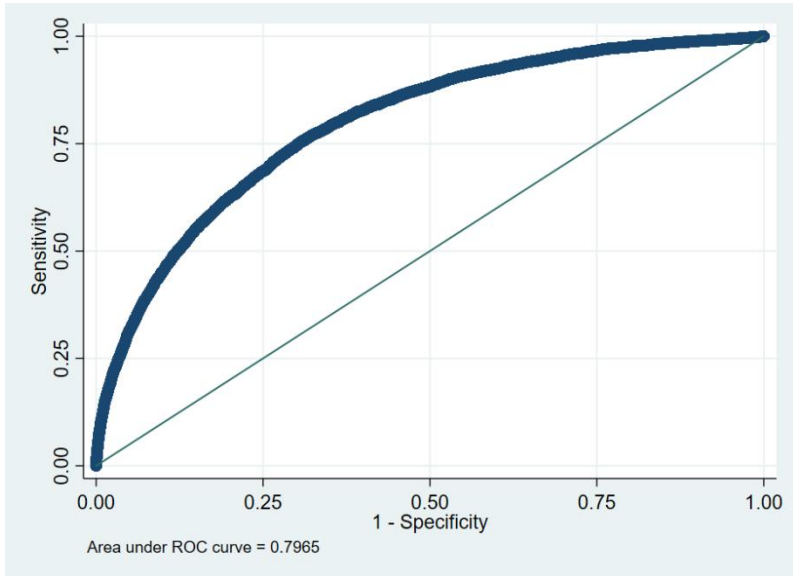
Model 1:



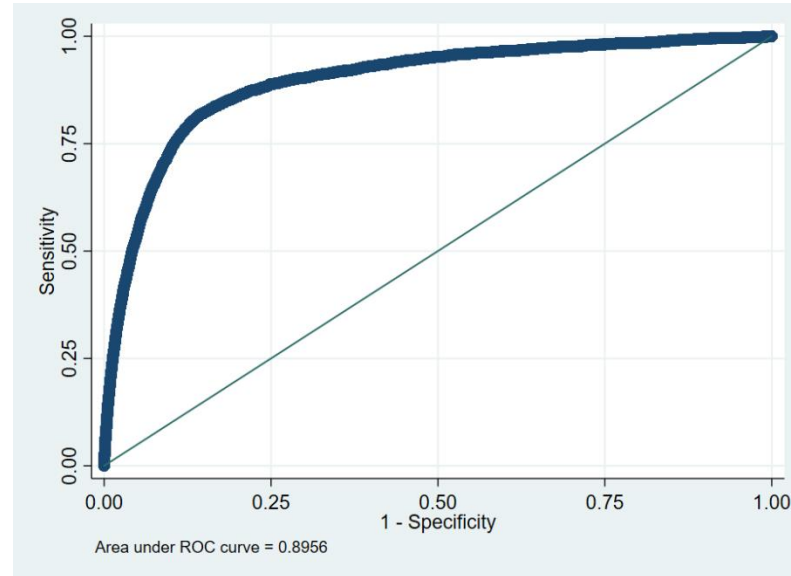
Model 2:



Model 3:



Model 4:



Note: The following variables were fitted: 1) survey years alone (Model 1); 2) survey years plus socio-demographic factors (Model 2); 3) survey years and socio-demographic factors, plus past-year SUDs (Model 3); and 4) survey years, socio-demographic factors, and past-year SUDs, plus past-year mental health problems (Model 4).

eReferences

1. Hosmer DW, Lemeshow S. *Applied Logistic Regression* (2nd Ed.). New York, NY: John Wiley & Sons; 2000.
2. Cleves MA. From the help desk: Comparing areas under receiver operating characteristic curves from two or more probit or logit models. *The Stata J.* 2002; 2(3): 301-313.
3. Austin PC, Steyerberg EW. Interpreting the concordance statistic of a logistic regression model: Relation to the variance and odds ratio of a continuous explanatory variable. *BMC Med Res Methodol.* 2012; 12: 82.