

## Supplementary Online Content

McCoy TH Jr, Castro VM, Roberson AM, Snapper LA, Perlis RH. Improving prediction of suicide and accidental death after discharge from general hospitals with natural language processing. *JAMA Psychiatry*. Published online September 14, 2016. doi:10.1001/jamapsychiatry.2016.2172.

**eTable.** Positive Valence Terms That Appear in At Least 10% of a Random Sample of 5,000 Notes

**eFigure 1.** Comparison of Survival Curves for Models Without and With Positive and Negative Valence (Suicide Death)

**eFigure 2.** Comparison of Survival Curves for Models Without and With Positive and Negative Valence (Suicide and Accidental Death)

**eFigure 3.** Decision Curve Illustrating Optimal Application of the Risk Stratification Model (Suicide Plus Accidental Death, Model 2)

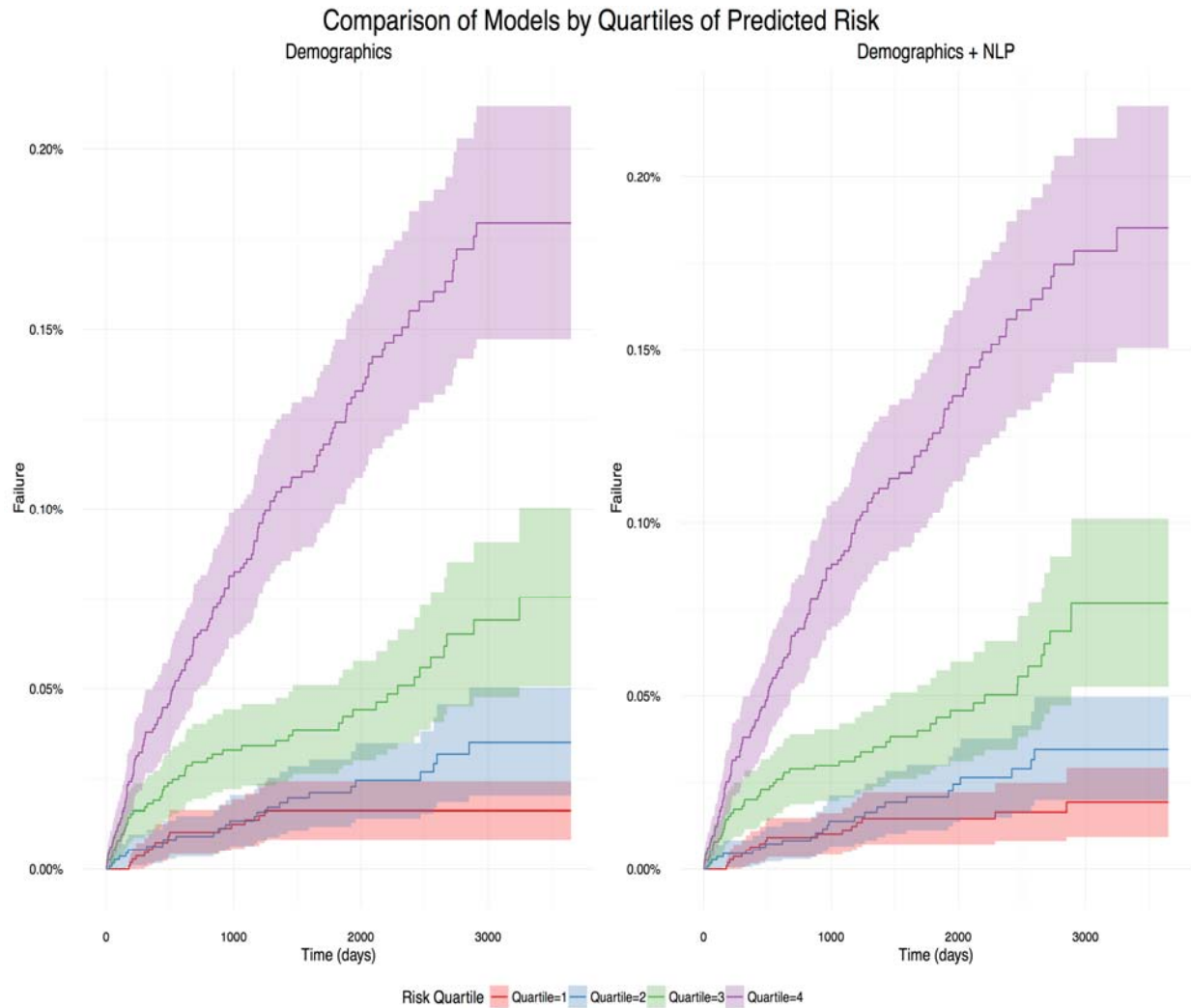
This supplementary material has been provided by the authors to give readers additional information about their work.

**eTable.** Positive Valence Terms That Appear in At Least 10% of a Random Sample of 5,000 Notes

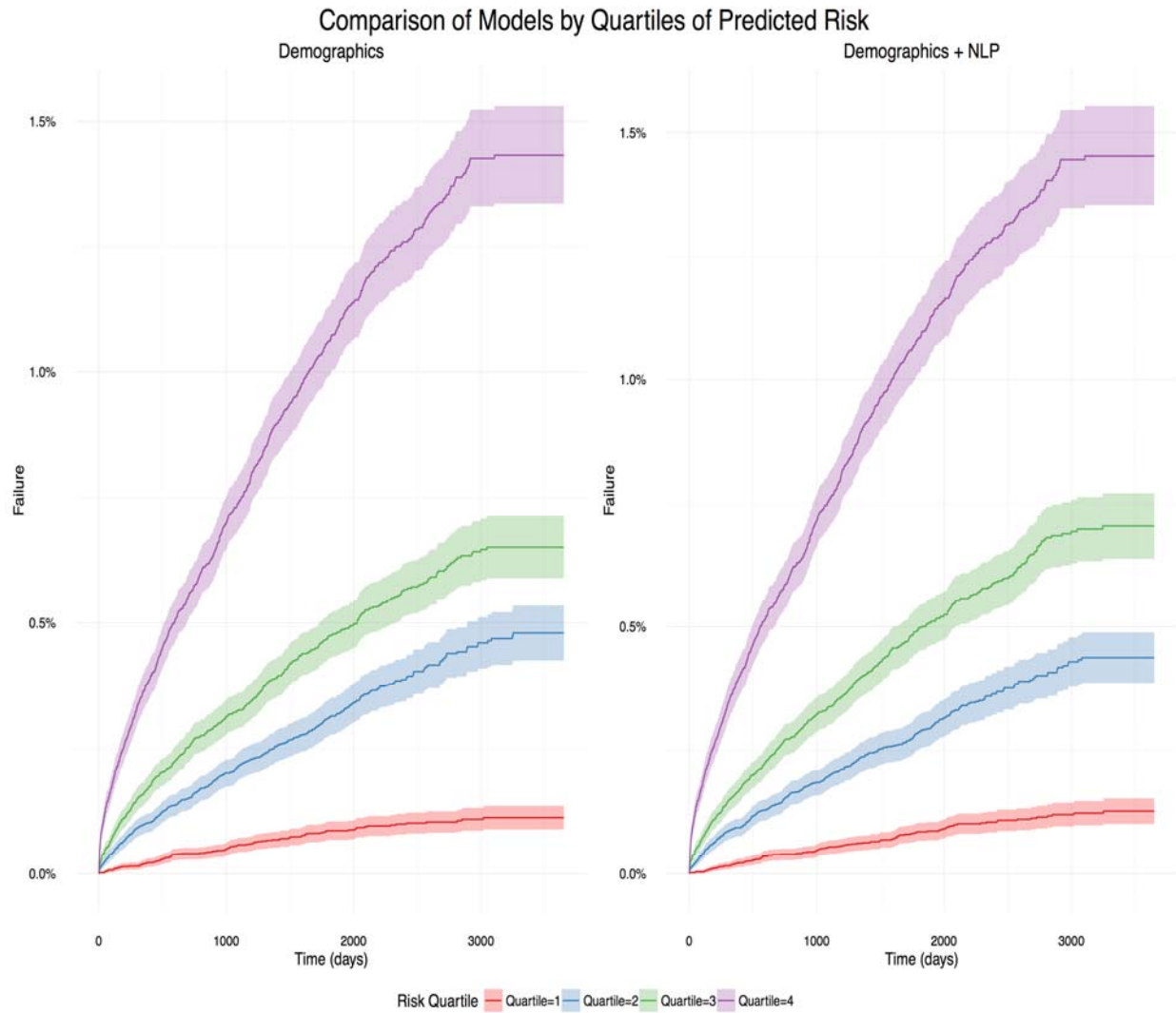
<b>Terms</b>
Right
Normal
Significant
New
Most
Full
Mild
Soft
Clear
Old
Acute
More
Primary
General
Good
Social
Positive
Greater
Vital
High
Able
Consistent
Very
Available
Developed
First
Large
Clean
Complete
Appropriate
Important
Responsible
Warm
Advanced
Top
Accomplished

Better
Light
Direct
Spontaneous
Early
Notable
Free
Mildly
Aware
Much
Confirmed
Sure
Married
Adequate
Own
Appreciated
Comfortable
Ready
Main
Superior
Pleasant
Frequent
Many
Completely
Healthy
Rare
Appropriately

**eFigure 1.** Comparison of Survival Curves for Models Without and With Positive and Negative Valence (Suicide Death). The left side depicts Kaplan-Meier curves for time to death by suicide among 458,053 individuals with at least one hospital discharge, by risk quartile using only sociodemographic and clinical coded data ("model 1"); the right side depicts the same cohort, by risk quartile incorporating positive and negative valence ("model 2").



**eFigure 2.** Comparison of Survival Curves for Models Without and With Positive and Negative Valence (Suicide and Accidental Death). The left side depicts Kaplan-Meier curves for time to death by suicide or accidental cause among 458,053 individuals with at least one hospital discharge, by risk quartile using only sociodemographic and clinical coded data ("model 1"); the right side depicts the same cohort, by risk quartile incorporating positive and negative valence ("model 2").



**eFigure 3.** Decision Curve Illustrating Optimal Application of the Risk Stratification Model (Suicide Plus Accidental Death, Model 2)

