Supplemental Online Content

Gebran A, Thakur SS, Maurer LR, et al. Development of a machine learning–based prescriptive tool to address racial disparities in access to care after penetrating trauma. *JAMA Surg*. Published online August 23, 2023. doi:10.1001/jamasurg.2023.2293

eFigure. Complete optimal classification tree using unadjusted data with dotted rectangle delineating portion of the tree represented in Figure 2
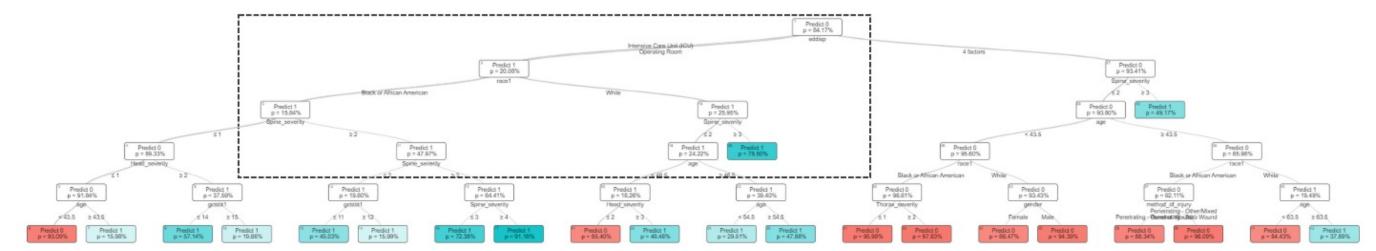
eTable 1. Variables requiring imputation

eTable 2. Relative variable importance from a logistic regression model used to inform weighted severity metric

eTable 3. Metrics for the area under the curve (AUC) across the test set for 10 random seeds

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

eFigure. Complete optimal classification tree using unadjusted data with dotted rectangle delineating portion of the tree represented in Figure 2

eTable 1. Variables requiring imputation

Variable	Number of imputed observations	Percentage of imputed observation
Age	121	0.23%
Gender	5	0.01%
Arrived with signs of life	4,817	9.18%
Systolic blood pressure	693	1.32%
Heart rate	661	1.26%
Oxygen Saturation	4,229	8.06%
Temperature	10,892	20.76%
GCS	719	1.37%
Respiratory rate	1,243	2.37%

Abbreviations: GCS, Glasgow Coma Scale.

eTable 2. Relative variable importance from a logistic regression model used to inform weighted severity metric

Variable	Importance
AIS Spine: 5	4.13
AIS Spine: 4	3.15
AIS Spine: 3	2.71
AIS Head: 5	2.28
AIS Head: 4	1.25
AIS Face: 3	0.85
AIS Face: 4	0.69
AIS Head: 3	0.57
AIS Neck: 4	0.47
AIS Lower Extremity: 3	0.28
Abbreviations: AIS, Abbreviated Injury Scale.	

eTable 3. Metrics for the area under the curve (AUC) across the test set for 10 random seeds

Metrics	AUC Original Labels	AUC Updated Labels
Mean	0.79	0.87
Standard Deviation	4.09×10^{-3}	5.40×10^{-3}
Standard Error	1.29×10^{-3}	1.71×10^{-3}
Abbreviations: AUC, Area Under the Curve.		