|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table S1. Spearman correlations for childhood adversity frequencies (n=999)** | | | | | | | | | | | |
|  | **Physical abuse** |  | **Sexual abuse** |  | **Emotional abuse** |  | **Physical neglect** |  | **Emotional neglect** |  | **Bullying** |
| Physical abuse | 1.0 |  | -- |  | -- |  | -- |  | -- |  | -- |
| Sexual abuse | 0.5\* |  | 1.0 |  | -- |  | -- |  | -- |  | -- |
| Emotional abuse | 0.7\* |  | 0.6\* |  | 1.0 |  | -- |  | -- |  | -- |
| Physical neglect | 0.3\* |  | 0.3\* |  | 0.4\* |  | 1.0 |  | -- |  | -- |
| Emotional neglect | 0.4\* |  | 0.3\* |  | 0.5\* |  | 0.8\* |  | 1.0 |  | -- |
| Bullying | 0.5\* |  | 0.4\* |  | 0.6\* |  | 0.2\* |  | 0.2\* |  | 1.0 |
|  |  |  |  |  |  |  |  |  |  |  |  |

\*Significant at the .05 level, two-sided test.

**Figure S1. Flowchart of patients reviewed in records at the participating emergency departments as of 1/31/2020**

Ineligible based on record review (n=4,883)

*Excluded via record review prior to approaching patient. Examples of exclusion criteria include:*

* *No traumatic event, event occurred more than 72 hours ago, doesn’t speak/read English, not alert/oriented, unable to follow protocol, impaired in ability to use smart phone (deaf, blind, physically impaired), age LT than 18 or GT 75*
* *Solid organ injury GT AAST Grade 1, long bone fracture, requires chest tube, significant hemorrhage, likely admit > 72 hours, requires operation with anesthesia, not presented within 72 hours*

ED records screened before 12/17/2019, or who completed 90% of the Month 3 survey by 3/30/2020

n=17,358

Potentially Eligible, after medical record review

n=12,475

Dropped, withdrawn or Incomplete Follow up Surveys (n=1,097)

*Dropped or withdrew within 104 days of enrollment or did not complete all 3 follow-up surveys: 2-week, 8-week, 3-month.*

Ineligible Type of Trauma for current analysis (n=4,178)

*Not an occupant of a vehicle in a motor vehicle collision.*

Refused before completion of screening (n=4,991)

*Patient refused or left during screening.*

Ineligible based on patient screening (n=889)

*Examples of exclusion criteria include:*

* *Occupational injury, domestic violence, police custody, event occurred more than 72 hours ago*
* *Doesn’t speak/read English, unable to follow protocol, no smartphone or smartphone < 1 year, no email, won't give SSN/TIN*
* *Incomplete baseline data (ED Data Extraction), as of 3/30/2020*

Refused after screening (n=321)

*Did not consent to participate in the study.*

Occupants of a Motor Vehicle Collision

n=8,297

Study Sample

n=999

Enrolled

n=2,096

Eligible

n=2,417

Completed Screening

n=3,306

**Figure S2. Area under the receiver operating characteristic curves (AUCs) in the test sample predicting 3-month APNS in Model C with and without XGBoost predicted probabilities**

*Note:* APNS, Adverse Neuropsychiatric Sequelae, defined as meeting criteria for posttraumatic stress disorder and/or major depressive episode.