**Appendix Tables 1-24 and Appendix Figure 1**

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| **Contents** | **Page** |
|  |  |
| 1. Description of administrative datasets | 1 |
| 1. Offense codes used to identify categories of criminal perpetration and victimization | 4 |
| 1. Overview of independent variables   Overview by conceptual categories  ICD-9-CM codes used to identify mental disorders  First Databank medication classifications  Definitions of traumatic brain injury | 7  7  9  12  13 |
| 1. Incidence by sex, deployment, and time-in-service | 14 |
| 1. Bivariate associations   Men  Core  Socio-demographic  Army career  Prior crime  Clinical  Outpatient visit and inpatient admission diagnoses  Medication and polypharmacy  Contextual  Women  Core  Socio-demographic  Army career  Prior crime  Clinical  Outpatient visit and inpatient admission diagnoses  Medication and polypharmacy  Contextual | 15  15  16  17  19  21  21  27  29  31  32  33  35  37  37  43  45 |
| 1. Classification accuracy and proportion of observed crimes committed by those in the top-ventile of predicted risk, all models | 47 |
| 1. Incremental contributions of previous deployment and combat occupation | 48 |
| 1. Stability of associations for unit leader experience | 49 |
| 1. Receiver operating characteristic curves of final models | 50 |
|  |  |

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| **Appendix Table 1. List and brief descriptions of administrative datasets included in the Army STARRS Historical Administrative Data Systems (HADS)** | |
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| **Database Acronym** | **Description** |
| AFMETS | ARMED FORCES MEDICAL EXAMINER TRACKING SYSTEM (AFMETS): Variables include manner of death and cause of death, including self-inflicted. |
| MDR | MEDICAL DATA REPOSITORY (MDR): This database contains information about medical, dental, pharmaceutical, and ancillary claims data for both in network and purchased care as well as both inpatient and outpatient treatment. Data are collected on both Army personnel and their beneficiaries. |
| DCIPS | DEFENSE CASUALTY INFORMATION PROCESSING SYSTEM (DCIPS): Casualty data system for Army, Navy, Air Force, and Marines. It contains information on all casualties including deceased active duty members (and cause of death). |
| DMDC/Casualty | DEFENSE MANPOWER DATA CENTER (DMDC) / CASUALTY: Provides information on war deaths and active duty deaths, wounds, injuries, and illnesses. |
| DMDC/CTS | DEFENSE MANPOWER DATA CENTER (DMDC) / CONTINGENCY TRACKING SYSTEM (CTS): Collection of activation, mobilization, and deployment data. Provides information to DoD decision makers and includes a CTS Deployment File used for tracking the location of deployed personnel. |
| DMDC/Master Personnel & DMDC/Transaction files | DEFENSE MANPOWER DATA CENTER (DMDC) / MASTER PERSONNEL & TRANSACTION FILES: The Active Duty Master File provides an inventory of all individuals on active duty (excluding reservists on active duty for training) at a point in time. It is a standardized and centralized database of present and past members of the active duty force. Personal data elements include social security number, education level, home of record, date of birth, marital status, number of dependents, race, ethnic group, and name. Military data elements include Service, pay grade, Armed Forces Qualification Test percentile (enlisted only), source of commission (officers only), military primary duty and secondary occupation, Unit Identification Code, months of service, duty location, Estimated Termination of Service date, basic active service date, date of current rank, pay entry base date, foreign language ability, and major command code. |
| DODSER | DEPARTMENT OF DEFENSE SUICIDE EVENT REPORT (DODSER): Provides risk and protective factor information for suicide events. This file will contain unsuccessful attempts and completed suicide cases. |
| TMDS | THEATER MEDICAL DATA STORE (TMDS): Used to track, analyze, view and manage Soldier medical treatment information recorded on the battlefield. Features of TMDS: accessibility and visibility of service members' deployed medical records, outpatient and inpatient treatment records created in theater facilities, treatment records from other applications, reports on movement of patients, patient status and injury/illnesses. |
| DMDC/DEERS | DEFENSE MANPOWER DATA CENTER (DMDC) / DEFENSE ENROLLMENT ELIGIBILITY REPORTING SYSTEM (DEERS): A DoD PDR containing personnel data and data related to DoD affiliation, benefits, employment, and pay. |
| MEDPROS/Readiness | MEDICAL PROTECTION SYSTEM (MEDPROS) / READINESS: The comprehensive Medical Readiness data includes all medical and dental readiness requirements IAW AR 600-8-101. They include immunizations, permanent physical profiles/duty limitations, eyeglasses/inserts, blood type, medical warning tags, personal deployment meds, pregnancy screening, DNA, HIV and dental status among other data elements. |
| DMDC/Perstempo | DEFENSE MANPOWER DATA CENTER (DMDC) / PERSONNEL TEMPO: Provides information on soldier movement. Perstempo is a Congressionally mandated definition of time in which servicemembers engaged in official duties spend off-duty time away from housing associated with their garrison duty (time away from home station). The definition also applies to contingency operations such as OIF and OEF. |
| ACR | ARMY CENTRAL REGISTRY (ACR): This is a victim-based registry documenting spouse and child abuse events involving Army service members. |
| AWD | ARMY WAIVER DATA (AWD): Information on waivers granted to new recruits to join the Army. The waivers are provided for four primary categories: 1) dependence (married with over two children), 2) conduct, 3) drug and alcohol, and 4) medical. |
| DAMIS | DRUG AND ALCOHOL MANAGEMENT INFORMATION SYSTEM (DAMIS): Includes data from the Army drug and alcohol prevention training and substance abuse program. |
| DMDC/MEPCOM | DEFENSE MANPOWER DATA CENTER (DMDC) / MILITARY ENTRANCE PROCESSING COMMAND (MEPCOM): Contains transaction records on all individuals processed and examined at Military Entrance Processing Stations (MEPS) since July 1970. Examination data prior to FY 1976 is incomplete. Data elements in the USMEPCOM Files are divided into three groups: Personal, Medical, and Administrative. The primary user is the Office of the Undersecretary of Defense (Personnel and Readiness) where ASVAB data provides the basis for aptitude-related studies. |
| DMDC/Payroll | DEFENSE MANPOWER DATA CENTER (DMDC) / Payroll: Contains elements with information such as: Demographics, Special and Incentive Pays, Basic Pay and Allowances. This file is also used to answer pay-related questions for the General Accounting Office, Military Services research centers, and other government agencies. |
| DTMS | DIGITAL TRAINING MANAGEMENT SYSTEM (DTMS): Contains information on training requirements and standards, training planned and scheduled by Army units, and training accomplished by individuals and units in the Army. |
| MEDPROS/DHA | MEDICAL PROTECTION SYSTEM (MEDPROS) / DEPLOYMENT HEALTH ASSESSMENT (DHA): The DHA cycle begins when a Soldier completes the DD Form 2795 (Pre-Deployment Health Assessment) prior to deployment. Soldiers complete the DD Form 2796 Post Deployment Health Assessment (PDHA) prior to redeployment/demobilization. This triggers their PDHRA eligibility. At 90 days after completion of the DD Form 2796, Soldiers become eligible to participate in a PDHRA screening. The targeted window for PDHRA is 90-180 days after deployment. Once the Soldier is screened, follow-up appointments and treatment will be scheduled as needed. |
| MEDPROS/PHA | MEDICAL PROTECTION SYSTEM (MEDPROS) / PERIODIC HEALTH ASSESSMENT (PHA): The PHA is an annual physical and consists of two parts. Part one is a self-assessment completed by the Soldier; Part two is the provider assessment. PHA results consist of the health assessment, height, weight, PULHES, and potential for deployability within six months. These items will be entered into MEDPROS at the point of service. The PHA is intended to improve Individual Medical Readiness and to evaluate deployability. |
| RRPS | RISK AND REDUCTION PROGRAM SYSTEM (RRPS): The RRPS collects data at the unit level that may show that members of the unit are at a higher risk. The Risk Reduction Program collects the number of incidents of high risk behavior by battalion level or separate company. |
| SADMS | SEXUAL ASSAULT DATA MANAGEMENT SYSTEM (SADMS): Centralized repository of relevant data regarding the entire lifecycle of sexual assault cases, involving victims and/or alleged offenders. |
| TRAC2ES | TRANSCOM REGULATING AND COMMAND AND CONTROL EVACUATION SYSTEM (TRAC2ES): A tracking system for all medical transfers across the world for all DOD services. |
| ASMIS-R | ARMY SAFETY MANAGEMENT INFORMATION SYSTEM-REVISED (ASMIS-R): Contains incident information data. Components consist of the reporting, analysis, and tracking of data, as well as, efforts to provide preventative measures via risk assessments. ReportIT provides for the collection, verification, and timely dissemination of incident investigation and safety inspection data. AnalyzeIT serves as the business intelligence suite designed to identify trends and problem areas via data mining techniques and ad hoc analysis. TrackIT is designed for monitoring recommended controls and logging hazards. PreventIT encompasses risk assessment and guidance tools for units, battalions, commanders, civilians, and contractors. |
| CIMS/AC12 | CRIMINAL INVESTIGATION DIVISION INFORMATION MANAGEMENT SYSTEM (CIMS) / AUTOMATED CRIMINAL INVESTIGATION/CRIMINAL INTELLIGENCE (ACI2): Event level crime record database. Separate system from ASCRC; Entity IDs are associated with offenses. |
| CIMS/ASCRC | CRIMINAL INVESTIGATION DIVISION INFORMATION MANAGEMENT SYSTEM (CIMS) / AUTOMATED SYSTEM CRIME RECORD CENTER (ASCRC): Receives, maintains, accounts for, disseminates information from, and disposes of Army crime records; retrieves and correlates data and statistics from the records and provides to authorized recipients; coordinates automation of crime records data and information; and serves as functional proponent for the electronic imaging of crime record. |
| COPS/VRS | CENTRALIZED OPERATIONS POLICE SUITE (COPS) / VEHICLE REGISTRATION SYSTEM (VRS): Provides information on privately owned vehicles of civilians and military personnel utilized at military installations. |
| PDCAPS | PHYSICAL DISABILITY CASE PROCESSING SYSTEM (PDCAPS): Contains information on fitness and applicable disability benefits of Soldiers with duty related impairments, including clinical information of all medical conditions the Soldier manifests to determine whether each condition meets medical retention standards. |
| ACMIS | ARMY COURT MARTIAL INFORMATION SYSTEM (ACMIS): Contains data on Soldiers (including Officers) arraigned on court-martial charges at either a Special or General Court-Martial. It also contains some basic information concerning them such as their rank, their GT score (if available), their SSNs, and their birthdays. The database includes such information as where the Soldier was tried, which General Court-Martial Jurisdiction convened the case, the offenses charged, how the accused plead, the findings in the case as well as the sentence (if any). It also contains information concerning cases required to proceed through the appellate court process and outcome in the appellate court system. It includes the location of the offenses and trial, and tracks the dates of certain events in the court-martial process. It does not contain any information concerning whether or not an accused has committed suicide. |
| ANAM | AUTOMATED NEUROPSYCHOLOGICAL ASSESSMENT METRICS (ANAM): This is an Army-developed and Army-owned, objective, computer-based test of human performance and neuropsychological functioning used to assess the cognitive performance of all active duty, reserve, and National Guard Soldiers. |
| ATRRS | ARMY TRAINING AND REQUIREMENTS RESOURCE SYSTEM (ATRRS): This is a system of record for management of personnel input to training and is the repository for training requirements, programs, personnel data and training costs. |
| COPS/ MPRS | CENTRALIZED OPERATIONS POLICE SUITE (COPS) / MILITARY POLICE REPORTING SYSTEM (MPRS): Centralized database that contains subsystems supporting the Military Police Corps Army wide. Contains information included in law enforcement reports. |
| COPS/Violations | CENTRALIZED OPERATIONS POLICE SUITE (COPS) / VIOLATIONS: Violation information contained in MPRS system (e.g., incident, time of incident). |
| COPS/ACIS | CENTRALIZED OPERATIONS POLICE SUITE (COPS) / ARMY CORRECTIONAL INFORMATION SYSTEM (ACIS): This System has information for the confinement facility on new prisoners, currently confined prisoners, departed prisoners, and a monthly summary report of confinement facility activity data. |
| SFT | SOLDIER FITNESS TRACKER (SFT): Formerly known as the Comprehensive Soldier Fitness Global Assessment Tool (CSF-GAT), this source provides baseline information on strength in four areas: emotional, social, spiritual and family. Also provides an opportunity to track self-development and growth in these areas over time. The Chief of Staff of the Army is requiring all Soldiers to take the GAT by May 2010. The object of this program is to enhance performance and build resilience. |
| EORS | EQUAL OPPORTUNITY REPORTING SYSTEM (EORS): Database is used to collect, record, and maintain racial, ethnic group, and gender data and statistics needed to support the Army EO Program, to include AAP reporting requirements. No health related data. Contains information such as: rank, race, complaint type, category, gender, timeline case start to end, resolution. |
| ITAPDB | INTEGRATED TOTAL ARMY PERSONNEL DATABASE (ITAPDB): Contains consolidated human resource database providing the Army and DOD with a single repository for personnel information for all components of the Army. |
| WWAS | WOUNDED WARRIOR ACCOUNTABILITY SYSTEM (WWAS): Integrated applications that support the accurate, timely, and effective tracking and management of Warfighters in the Wounded Warrior Lifecycle. |
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| **Appendix Table 2. The National Corrections Reporting Program (NCRP) offense codes used to identify categories of criminal perpetration and victimization** |
|  |
| **I. Major Physical Violent Crime** |
| **A. Murder/Homicide/Manslaughter** |
| 1. Murder |
| 2. Unspecified Homicide |
| 3. Voluntary/Nonnegligent Manslaughter |
| 5. Manslaughter – Non-Vehicular |
| **B. Kidnapping** |
| 6. Kidnapping |
| **C. Aggravated Arson** |
| 22.1 Aggravated Arson |
| **D. Aggravated Assault** |
| 14. Aggravated Assault |
| 16.1 Aggravated Assault On A Public Officer |
| 87. Aggravated Assault Of Military Official |
| 20.1 Violent Offenses, Other – Aggravated Assault |
| **E. Family-Related Aggravated Assault** |
| 64.2 Family Related Aggravated Assault |
| 19. Child Abuse |
| **F. Robbery** |
| 11. Armed Robbery |
| 12. Unarmed Robbery |
| **II. Minor Physical Violent Crime** |
| **A. Simple Assault** |
| 15. Simple Assault |
| 16.2 Simple Assault On A Public Officer |
| 86. Simple Assault Of Military Official |
| 20.2 Violent Offenses, Other - Simple Assault |
| **B. Family-Related Simple Assault** |
| 89.1 Family-Related Simple Assault |
| **C. Other Physical Violence** |
| 20.5 Violent Offenses, Other – Violent Offenses |
| **III. Verbal Violent Crime** |
| **A. Blackmail/Extortion/Intimidation** |
| 17. Blackmail/Extortion/Intimidation |
| **B. Rioting** |
| 56. Rioting |
| **C. Harassment (Non-Sexual)** |
| 69.2 Invasion Of Privacy – Other Harassment |
| 73.1 Other Public Order Offenses- Harassment |
| **D. Family-Related Emotional Abuse** |
| 89.2 Family-Related Emotional Abuse |
| **E. Sexual Verbal Violence (Sexual Harassment)** |
| 66.1 Morals/Decency - Sexual Harassment |
| 69.1 Invasion Of Privacy – Sexual Harassment |
| **IV. Sexual Violent Crime** |
| **A. Rape/Sodomy/Sexual Assault** |
| 7. Rape – Force |
| 8. Rape – Statutory – No Force |
| 13. Forcible Sodomy |
| 9. Sexual Assault - Other |
| 10. Lewd Act With Children |
| **B. Family-Related Sexual Violence** |
| 89.3 Family-Related Sexual Offenses |
| **V. Non-Violent Offenses** |
| **A. Reckless Endangerment** |
| 4. Manslaughter - Vehicular |
| 18. Hit And Run Driving |
| 32. Hit/Run Driving - Property Damage |
| 61. Driving While Intoxicated |
| 62. Driving Under The Influence (Dui) |
| 63. Driving Under Influence (Dui) - Drugs |
| 20.3 Violent Offenses, Other – Reckless Endangerment |
| **B. Burglary** |
| 21. Burglary |
| **C. Simple Arson** |
| 22.2 Simple Arson |
| **D. Forgery/Fraud** |
| 24. Forgery/Fraud |
| **E. Theft** |
| 23. Auto Theft |
| 25. Grand Larceny – Theft Over $200 |
| 26. Petty Larceny - Theft Under $200 |
| 27. Larceny/Theft – Value Unknown |
| 28. Embezzlement |
| 29. Stolen Property – Receiving |
| 30. Stolen Property – Trafficking |
| 33. Unauthorized Use Of Vehicle |
| 73.2 Public Order Offenses, Other – Theft |
| **F. Property Offenses** |
| 31. Destruction Of Property |
| 34. Trespassing |
| 35. Property Offenses - Other |
| **G. Commercialized Vice, Illegal Substances** |
| 36. Trafficking – Heroin |
| 37. Trafficking - Cocaine Or Crack |
| 38. Trafficking – Other Controlled Substances |
| 39. Trafficking Marijuana/Hashish |
| 40. Trafficking - Drug Unspecified |
| **H. Commercialized Vice, Other** |
| 70. Commercialized Vice |
| 72.1 Liquor Law Violations – Commercialized Vice |
| **I. Possession/Use/Other Violation Of Illegal Substance** |
| 41. Possession/Use – Heroin |
| 42. Possession/Use – Cocaine Or Crack |
| 43. Possession/Use - Other Controlled Substances |
| 44. Possession/Use - Marijuana/Hashish |
| 45. Possession/Use - Drug Unspecified |
| 46. Heroin Violation Offense Unspecified |
| 47. Cocaine Or Crack Violation Offense Unspecified |
| 48. Controlled Substance – Offense Unspecified |
| 49. Marijuana/Hashish Violation - Offense Unspecified |
| 50. Drug Offenses - Violation/Drug Unspecified |
| **J. Court-Ordered Violations** |
| 51. Escape From Custody |
| 52. Flight To Avoid Prosecution |
| 54. Parole Violation |
| 55. Probation Violations |
| 58. Contempt Of Court |
| 59. Offenses Against Courts, Legislatures And Commissions |
| 68. Obstruction - Law Enforcement |
| **K. Weapon Offense** |
| 53. Weapon Offense |
| **L. Traffic Offense – Minor** |
| 60. Traffic Offenses – Minor |
| **M. Drunkenness/Vagrancy/Disorderly Conduct** |
| 65. Drunkenness/Vagrancy/Disorderly Conduct |
| 72.2 Liquor Law Violations, Other |
| **N. Military Specific Non-Violent Offenses** |
| 88. Disobey Army Orders |
| 89. Awol/Desertion/Treason |
| **O. Family-Related Non-Violent Offenses** |
| 58. Family Related Offenses – Contempt Of Court |
| 64.1 Family Related Offenses – Reckless Endangerment |
| 64.3 Family Related Offenses – Domestic Disturbance |
| 64.4 Family Related Offenses – Custody Offenses |
| 66.2 Family Related Offenses – Morals/Decency – Other Moral/Decency Offense |
| **P. Other Non-Violent Offenses** |
| 20.4 Violent Offenses, Other – Non-Violent Offenses |
| 57. Habitual Offender |
| 66.2 Morals/Decency – Other Moral/Decency Offense |
| 67. Immigration Violations |
| 69.3 Invasion Of Privacy –Other |
| 71. Contributing To The Delinquency Of A Minor |
| 73.4 All Other Public Order Offenses |
| 74. Bribery And Conflict Of Interest |
| 75. Juvenile Offenses |
| 76. Felony – Unspecified |
| 77. Misdemeanor Unspecified |
| 78. Other/Unknown |
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| **Appendix Table 3. Overview of the 456 Historical Adminstrative Data System (HADS) variables used to predict first accusation of non-familial major physical violent crime perpetration, organized by broad conceptual categorya** | |
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| **Core controls for time (10 variables)b** | “Core” control variables included the year (2004, 2005, 2006, 2007, 2008, or 2009) and season (Spring, Summer, Fall, or Winter) of observation. See Appendix Table 8 (men) and Appendix Table 15 (women) for the bivariate associations of year-season with first accusation of non-familial major physical violent crime perpetration. |
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| **Socio-demographics (21 variables)** | Socio-demographic variables included: age, marital status, race-ethnicity, religion, number of dependents, and education. For the full list of socio-demographic variables and their bivariate associations with first accusation of non-familial major physical violent crime perpetration, see Appendix Table 9 (men) and Appendix Table 16 (women). |
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| **Army career (38 variables)** | We examined the following Army career variables: age-at-enlistment, Armed Forces Qualification Test (AFQT) scores at enlistment, time-in-service, military occupation, rank, demotion in the past 12 months, command (the major organizational subdivision of the Army), and current deployment either to a combat zone or in direct support outside the combat zone of Operation Enduring Freedom (Afghanistan) or Operation Iraqi Freedom at time of physical violent crime perpetration. We also assessed deployment history, including number of deployments, time in current deployment, length of most recent deployment, and time since ending most recent deployment. For a full list of Army career history variables and their bivariate associations with first accusation of non-familial major physical violent crime perpetration, see Appendix Table 10 (men) and Appendix Table 17 (women). |
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| **Prior crime (66 variables)** | In addition to the outcome of interest (non-familial major physical violent crime perpetration), dichotomous independent variables were created to distinguish soldiers with prior criminal perpetration or victimization in the past 12 months and the past 24 months (HADS data on criminal offenses only goes back to 2002 which is 24 months before the first month of observation). A total of 10 dichotomous measures of first accusation of perpetration were created for each time period including:  major physical violent crime (i.e., familial physical violent crime, as our outcome was *first accusation of* *non-familial* major physical violent crime), minor physical violent crime, major sexual violent crime, sexual and non-sexual verbal violent crime, 5 categories of non-violent crime (reckless endangerment; possession/use of illegal substance; weapons offence; drunkenness/disorderly conduct/vagrancy; other non-violent crime), and any crime. Parallel variables were developed for the *number of times* each respondent was a perpetrator of each crime in the past 12 and 24 months. The same victimization variables were created except that the five non-violent crime categories were collapsed into a single independent variable of non-violent crime victimization. A list of NCRP offense codes included in each independent variable can be found in Appendix Table 2. We also included among the prior crime variables two variables pertaining to failed drug tests (in the past 3 months or past 12 months). See Appendix Table 11 (men) and Appendix Table 18 (women) for a full list of the past perpetration and victimization variables and their bivariate associations with first accusation of non-familial major physical violent crime perpetration. |
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| **Clinical factors (282 variables)** | Several variables were created to distinguish soldiers with inpatient and outpatient medical encounters occurring in the year prior to the first accusation non-familial major physical violent crime perpetration. As many soldiers had healthcare visits for physical-mental disorder combinations, information was included on comorbid physical disorders, distinguishing cases where physical disorders were primary versus secondary. Physical disorders were classified into a single physical category that included the 17 major ICD-9-CM categories (e.g., diseases of the circulatory system [ICD-9-CM 520-579]). However, we also distinguished between four particular physical disorders of interest: traumatic brain injury (TBI) (any of the definitions proposed by CDC, DoD, or VHA; see Appendix Table 6); other severely traumatic injuries (amputations, burns, sensory losses, paralysis); pain diagnoses; and sleep diagnoses (distinguishing dysomnias and parasomnias). We also distinguished 23 categories of mental disorder diagnoses largely focused on aggregated ICD-9-CM codes (e.g., ADHD/learning disorders [ICD-9-CM 314.0-315.9]), 8 additional categories of behavioral stressors (e.g., marital problems, other stressors/adversities, suicidal ideation and self-damaging behavior), and a summary measure of any of these 31 diagnoses (see Appendix Table 4). These variables included yes/no variables for any past year inpatient admission or outpatient visit diagnoses and parallel variables coded 0-4 for number of days in the hospital (for inpatient encounters) and number visits (for outpatient encounters; 0=None, 1=1-2, 2=3-5, 3=6-10, 4=11+). Separate summary variables were also created to reflect past month, past 3-month, and past 12-month encounters. In regard to medication and polypharmacy clinical factors, National Drug Code (NDC) psychotropic medication codes were collapsed into 15 categories (e.g., antianxiety, antidepressant, antipsychotic) and 25 sub-categories (e.g., SSRI, SNRI, TCA) using the First Databank (FDB) Enhanced Therapeutic Classification System™ ([www.fdbhealth.com](http://www.fdbhealth.com)) (Appendix Table 5) and both dichotomized (yes-no; any prescription) and categorical (number of times prescribed) variables were created. Categorical variables were coded 0-4 for number of filled prescriptions (0=None, 1=1-30, 2=31-60, 3=61-90, 4=91+). For a full list of clinical variables and their bivariate associations with the first accusation of non-familial major physical violent crime perpetration see Appendix Tables 12-13 (men) and Appendix Tables 19-20 (women). |
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| **Contextual factors (39 variables)** | A series of unit-level and weapons-registry variables were created as potential contextual risk factors for non-familial major physical violent crime perpetration. Unit-level variables were focused on *parent* unit characteristics (i.e., at the level of the battalion). Unit-level measures included how long the soldier had been in his/her current duty unit, whether or not the soldier’s current duty unit was his/her assigned unit, the number of months in the past 12 the soldier was on duty in a unit that was not his/her assigned unit, how many different duty units the soldier had been assigned to in the past 12 months, the median length of time in the Army (in months) of all non-commissioned officers (E5-E9) and warrant/commissioned officers in the soldiers’ current duty unit over the past 3 and 12 months, the median length of time in the current unit of all lower enlisted soldiers (E1-E4), non-commissioned officers, and warrant/commissioned officers in the soldier’s current duty unit over the past 3 and 12 months, and the median length ever deployed of all lower enlisted soldiers (E1-E4), non-commissioned officers, and warrant/commissioned officers in the soldier’s current duty unit over the past 3 and 12 months. Access-to-weapons variables included both dichotomous and count variables for the number of guns, pistols, rifles, shotguns, knives, swords, bows, and any other weapon registered by soldiers for legal possession over the past 4 years. See Appendix Table 14 (men) and Appendix Table 21 (women) for the full list of contextual variables and their bivariate associations with non-familial major physical violent crime perpetration. |
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aAs HADS variables were not collected for research, there was a larger amount of missing-inconsistent data than would be typical for a research dataset. However, HADS datasets were updated monthly and missing values in one month almost always appeared in earlier and/or later months, allowing imputations using nearest neighbor methods. The few remaining missing values were resolved using single imputations selected randomly from a series of multiple imputations based on analysis of the entire dataset. Inconsistencies were reconciled using rational imputations (e.g., a soldier classified female in one month but male in all others was recoded as male in all months).

bAll bivariate models controlled for the year (2004, 2005, 2006, 2007, 2008, 2009) and season (Spring, Summer, Fall, Winter) of the observation, hence why these time-related variables are labeled “core” variables.

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| **Appendix Table 4. International Classification of Diseases, Ninth Revision Clinical Modification (ICD-9-CM) codes used to identify mental disorders** | |
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| **Diagnoses** | **ICD-9-CM codes** |
| Adjustment disorder | 309, .29, .3, .4, .82, .83, .89, .9 |
|  |  |
| Dysthymic disorder/Neurasthenia/Depression NOS | 296.82, .90, .99  300.4, .5  309.0, .1  311, .0, .1  313.1 |
|  |  |
| Major depression | 296.2, .20, .21, .22, .23, .24, .25, .26, .3, .30, .31, .32, .33, .34, .35, .36 |
|  |  |
| Bipolar disorder | 296.00, .01, .02, .03, .04, .05, .06, .10, .11, .12, .13, .14, .15, .16, .40, .41, .42, .43, .44, .45, .46, .50, .51, .52, .53, .54, .55, .56, .60, .61, .62, .63, .64, .65, .66, .7, .80, .81, .89  301.13 |
|  |  |
| Anxiety state/Anxiety disorder | 300, .00, .01, .02, .09, .20, .21, .22, .23, .29, .3  309.21, .24, .28  313.0, .21, .22, .23 |
|  |  |
| PTSD | 309.81 |
|  |  |
| ADHD/Learning disorders | 314.0, .00, .01, .1, .2, .8, .9  315.00, .01, .02, .09, .1, .2, .3, .31, .32, .34, .39, .4, .5, .8, .9 |
|  |  |
| Conduct disorder/Oppositional defiant disorder | 301.7  312.4, .8, .81, .82, .89, .9  313.81  V62.83 |
|  |  |
| Eating disorders | 307.1, .50, .51, .59 |
|  |  |
| Other impulse control disorders | 312.00, .01, .02, .03, .10, .11, .12, .13, .20, .21, .22, .23, .3, .30, .31, .32, .33, .34, .35, .39 |
|  |  |
| Alcohol induced mental disorders/Alcohol dependence/Alcohol abuse | 291.0, .1, .2, .3, .4, .5, .8, .81, .82, .89, .9  303.00, .01, .02, .03, .9, .90, .91, .92, .93  305, .0, .00, .01, .02, .03 |
|  |  |
| Drug induced mental disorders | 292 |
|  |  |
| Non-dependent drug abuse | 305.2, .20, .21, .22, .23, .3, .30, .31, .32, .33, .4, .40, .41, .42, .43, .5, .50, .51, .52, .53, .6, .60, .61, .62, .63, .7, .70, .71, .72, .73, .8, .80, .81, .82, .83, .9, .90, .91, .92, .93 |
|  |  |
| Drug dependence | 304 |
|  |  |
| Tobacco use disorder | 305.1, .10, .11, .12, .13 |
|  |  |
| Personality disorders | 301.0, .1, .10, .11, .12, .20, .21, .22, .3, .4, .50, .51, .59, .6, .8, .80, .81, .82, .83, .84, .89, .9 |
|  |  |
| Non-affective psychosis | 295.00, .01, .02, .03, .04, .05, .10, .11, .12, .13, .14, .15, .20, .21, .22, .23, .24, .25, .30, .31, .32, .33, .34, .35, .40, .41, .42, .43, .44, .45, .50, .51, .52, .53, .54, .60, .61, .62, .63, .64, .65, .70, .71, .72, .73, .74, .75, .80, .81, .82, .83, .84, .85, .90, .91, .92, .93, .94, .95  297.0, .1, .2, .3, .8, .9  298.0, .1, .2, .3, .4, .8, .9, .90 |
|  |  |
| Somatoform/Dissociative disorders | 300.10, .11, .12, .13, .14, .15, .16, .19, .6, .7, .80, .81, .82, .89  306.0, .1, .2, .3, .4, .50, .51, .52, .53, .59, .6, .7, .8, .9  307.54, .80, .81, .89 |
|  |  |
| Organic mental disorders | 290.0, .10, .11, .12, .13, .20, .21, .3, .40, .41, .42, .43, .8, .9  293.0, .1, .81, .82, .83, .84, .89, .89, .9  294.0, .1, .10, .11, .8, .9  307.20, .21, .22, .23, .3  310.0, .8, .9  317  318.0, .1, 2  319 |
|  |  |
| Sexual disorders | 302, .0, .1, .2, .3, .4, .50, .51, .52, .53, .6, .70, .71, .72, .73, .74, .75, .76, .79, .81, .82, .83, .84, .85, .89, .9 |
|  |  |
| Sleep disorders | 307.4, .40, .41, .42, .43, .44, .45, .46, .47, .48, .49 |
|  |  |
| Postconcussion syndrome | 310.2 |
|  |  |
| Other mental disorders/Mental illness | 292.85  299.00, .01, .10, .80, .81, .90, .91  300.9  307.0, .52, .53, .6, .7, .9  309.22  310.1  313.3, .82, .89, .9  316 |
|  |  |
| Suicidal ideation | V62.84 |
|  |  |
| Self-Damaging behavior | V69.8 |
|  |  |
| Symptoms, signs, and ill-defined conditions, mental | 797  798, .0, .1, .2, .9  799, .0, .01, .02, .1, .2, .21, .22, .23, .24, .25, .29, .3, .4, .8, .81, .82, .89, .9 |
|  |  |
| Prior history of mental disorders | V11.0, .1, .2, .3, .8, .80, .9, .90  V66.3  V67.3 |
|  |  |
| Indicator of impulsivity and risky behavior | V69.2, .3 |
|  |  |
| Stressors/Adversities | V40.0, .00, .1, .2, .20, .3, .30, .9, .90  V61, .0, .01, .02, .03, .04, .05, .06, .07, .08, .09, .2, .20, .21, .22, .23, .24, .29, .3, .4, .41, .42, .49, .8, .9  V62., .0, .1, .1 0, .2, .20, .21, .22, .29, .3, .4, .5, .8, 80, .81, .810, .811, .812, .82, .89, .9, .90  V69.4, .5, .9 |
|  |  |
| Marital problems | V61.1, .10, .11, .12 |
|  |  |
| Traumatic stress | 308, .0, .1, .2, .3, .4, .9 |
|  |  |

Abbreviations: NOS, Not Otherwise Specified; PTSD, posttraumatic stress disorder; ADHD, Attention Deficit-Hyperactivity Disorder.

|  |
| --- |
| **Appendix Table 5. Medication classificationa** |
|  |
| **Psychotropic medications** |
| Antianxiety Agent |
| Antihistamine Type |
| Benzodiazepines |
| Non-Benzodiazepine |
| GABA Analog |
| Antidepressants |
| MAOI SARI NaSSA NDRI or Other |
| SNRI |
| SSRI |
| TCAs and related |
| Sedative-hypnotic |
| Benzodiazepines |
| Antidepressant Type |
| Others |
| CNS Stimulant - Armodafinil/Modafinil |
| ADHD Therapy |
| Chemical Dependency |
| Narcotic or Alcohol Treatment Agents |
| Smoking Deterrents and Combinations |
| Migraine Therapy |
| Serotonin Agonists |
| All other |
| Antianxiety and Anticonvulsant Agent – Benzodiazepines |
| Anticonvulsant |
| Bipolar Therapy Agents |
| Antipsychotics (Neuroleptics) |
| Eating Disorder Therapy |
| Cognitive Disorder Therapy |
| PTSD Therapy – Prazosin |
| Sedative-Hypnotic and Anticonvulsant Agent – Barbiturates |
|  |
| **Non-narcotic and narcotic pain relievers** |
| Analgesic – Non-narcotic |
| Analgesic or Antipyretic Non-Narcotic and Combinations |
| NSAID Analgesics |
| Salicylate Analgesic and Salicylate Combinations |
| Analgesic – Narcotic |
| Long-acting |
| Short-acting Schedule II |
|  |
| **Other medications** |
| Dermatological – Isotretinoin |
|  |

Abbreviations: GABA, Gamma-Aminobutyric Acid; MAOI, Monoamine Oxidase Inhibitor; SARI, Serotonin Antagonist and Reuptake Inhibitor; NaSSA, Noradrenergic and Specific Serotonergic Antidepressant; NDRI, Norepinephrine-Dopamine Reuptake Inhibitor; SNRI, Serotonin–Norepinephrine Reuptake Inhibitor; SSRI, Selective Serotonin Reuptake Inhibitor; TCAs, Tricyclic antidepressants; CNS, Central Nervous System; ADHD, attention deficit-hyperactivity disorder; NSAID, Nonsteroidal Anti-Inflammatory Drug. PTSD, posttraumatic stress disorder

aSource: First Databank (FDB) Enhanced Therapeutic Classification System™. Reprinted with permission by First Databank, Inc. All rights reserved. ©2013. [www.fdbhealth.com](file:///\\skywalker\RonKServer\Kessler%20Papers%20and%20Chapters\Papers\In%20Progress%20Papers\R981%20Army%20STARRS%20Hosp%20(JAMA)\Tables\www.fdbhealth.com)

|  |  |
| --- | --- |
| **Appendix Table 6. Definitions of Traumatic Brain Injury (TBI) used in the analysis a** | |
|  |  |
| **Definitions** | **ICD-9-CM codesb** |
| CDC definition | 800.xx, 801.xx, 803.xx, 804.xx, 850.xx, 851.xx, 852.xx, 853.xx, 854.xx, 873.xx, 905.0, 907.0 |
|  |  |
| DoD definition | Definition A: 310.2, 800.xx, 801.xx, 803.xx, 804.xx, 850.xx, 851.xx, 852.xx, 853.xx, 854.xx, 907.0, 950.1, .2, .3, 959.01, V15.5\_1-9, V15.5\_A-F, V15.59\_1-9, V15.59\_A-F  Definition B: 310.2, 800.xx, 801.xx, 803.xx, 804.xx, 850.xx, 851.xx, 852.xx, 853.xx, 854.xx, 907.0, 950.1, .2, .3, 959.01a |
|  |  |
| VHA definition | 800.xx, 801.xx, 803.xx, 850.xx, 851.xx, 852.xx, 853.xx, 854.xx |
|  |  |

Abbreviations: CDC, Center for Disease Control; DoD, Department of Defense; VHA, Veterans Health Administration; ICD-9-CM;International Classification of Diseases, Ninth Revision Clinical Modification.

aAs some data sources did not include enough digits for the V-codes to be recorded, a decision was made to code DoD TBI both with and without V-extensions (i.e., the digit after the decimal in V-codes).

b“XX” indicates the inclusion of all fourth and/or fifth digits for that code.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Appendix Table 7. Incidence/1,000 person-years of first accusations of non-familial major physical violent crime perpetration by sex, time-in-service, and deployment status among Regular U.S. Army soldiers in the Army STARRS 2004-2009 Historical Administrative Data Systems (HADS)a** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  |  | | | | | | | | |  |  | | | | | | | |  |  |  | | | | | | | | |
|  | **Never deployed** | | | | | | | | |  | **Currently deployed** | | | | | | | | |  | **Previously deployed** | | | | | | | | |
| **Years-in-**  **Service** | **Incidence/1,000 person-years** | | |  | **Distribution of the crimes** | |  | **Population distribution** | |  | **Incidence/1,000 person-years** | | |  | **Distribution of the crimes** | |  | **Population distribution** | |  | **Incidence/1,000 person-years** | | |  | **Distribution of the crimes** | |  | **Population distribution** | |
| **I. Men** | Est | (se) | (n)b |  | % | (se) |  | %c | (se) |  | Est | (se) | (n)b |  | % | (se) |  | %c | (se) |  | Est | (se) | (n)b |  | % | (se) |  | %c | (se) |
| 0-1 | 2.6 | (0.1) | (794) |  | 32.8 | (1.0) |  | 30.5 | (0.3) |  | 1.6 | (0.3) | (26) |  | 4.7 | (0.9) |  | 2.6 | (0.1) |  | 3.3 | (2.0) | (3) |  | 0.1 | (0.1) |  | 0.1 | (0.0) |
| 1-2 | 4.9 | (0.2) | (850) |  | 35.2 | (1.0) |  | 17.5 | (0.3) |  | 1.1 | (0.1) | (100) |  | 18.0 | (1.6) |  | 14.7 | (0.3) |  | 5.8 | (0.5) | (155) |  | 6.5 | (0.5) |  | 2.6 | (0.1) |
| 2-3 | 3.8 | (0.2) | (320) |  | 13.2 | (0.7) |  | 8.4 | (0.2) |  | 1.1 | (0.1) | (102) |  | 18.3 | (1.6) |  | 15.1 | (0.3) |  | 5.4 | (0.3) | (502) |  | 20.9 | (0.8) |  | 9.2 | (0.2) |
| 3-4 | 2.7 | (0.3) | (132) |  | 5.5 | (0.5) |  | 4.9 | (0.1) |  | 1.2 | (0.1) | (85) |  | 15.3 | (1.5) |  | 11.5 | (0.3) |  | 4.6 | (0.2) | (515) |  | 21.5 | (0.8) |  | 11.1 | (0.2) |
| 4-5 | 1.8 | (0.3) | (56) |  | 2.3 | (0.3) |  | 3.1 | (0.1) |  | 0.8 | (0.1) | (44) |  | 7.9 | (1.1) |  | 8.4 | (0.2) |  | 3.2 | (0.2) | (277) |  | 11.5 | (0.7) |  | 8.4 | (0.2) |
| 5-10 | 1.4 | (0.1) | (159) |  | 6.6 | (0.5) |  | 11.4 | (0.2) |  | 0.9 | (0.1) | (129) |  | 23.2 | (1.8) |  | 22.6 | (0.4) |  | 2.2 | (0.1) | (655) |  | 27.3 | (0.9) |  | 29.2 | (0.3) |
| 10-20 | 0.5 | (0.1) | (95) |  | 3.9 | (0.4) |  | 17.9 | (0.3) |  | 0.5 | (0.1) | (68) |  | 12.2 | (1.4) |  | 21.2 | (0.4) |  | 0.8 | (0.1) | (268) |  | 11.2 | (0.6) |  | 32.1 | (0.3) |
| 20+ | 0.2 | (0.1) | (12) |  | 0.5 | (0.1) |  | 6.3 | (0.2) |  | 0.1 | (0.1) | (3) |  | 0.5 | (0.3) |  | 3.9 | (0.2) |  | 0.3 | (0.1) | (25) |  | 1.0 | (0.2) |  | 7.4 | (0.2) |
| Total | 2.4 | (0.1) | (2,418) |  | 100.0 | -- |  | 100.0 | -- |  | 0.9 | (0.0) | (557) |  | 100.0 | -- |  | 100.0 | -- |  | 2.3 | (0.1) | (2,400) |  | 100.0 | -- |  | 100.0 | -- |
| 27 | 1070.3\* | |  |  |  |  |  |  |  |  | 112.8\* | |  |  |  |  |  |  |  |  | 991.3\* | |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **II. Women** | Est | (se) | (n)b |  | % | (se) |  | %c | (se) |  | Est | (se) | (n)b |  | % | (se) |  | %c | (se) |  | Est | (se) | (n)b |  | % | (se) |  | %c | (se) |
| 0-1 | 0.8 | (0.1) | (47) |  | 18.4 | (2.4) |  | 24.3 | (0.9) |  | 0.5 | (0.5) | (1) |  | 4.3 | (4.3) |  | 2.9 | (0.6) |  | 0.0 | (0.0) | (0)d |  | 0.0 | (0.0) |  | 0.0 | (0.0) |
| 1-2 | 2.0 | (0.3) | (76) |  | 29.7 | (2.9) |  | 15.9 | (0.8) |  | 0.4 | (0.2) | (4) |  | 17.4 | (7.9) |  | 15.7 | (1.4) |  | 1.8 | (0.8) | (6) |  | 5.1 | (2.0) |  | 2.7 | (0.5) |
| 2-3 | 1.7 | (0.3) | (40) |  | 15.6 | (2.3) |  | 9.7 | (0.6) |  | 0.7 | (0.3) | (8) |  | 34.8 | (9.9) |  | 15.9 | (1.4) |  | 1.6 | (0.4) | (19) |  | 16.2 | (3.4) |  | 9.3 | (0.8) |
| 3-4 | 1.5 | (0.3) | (26) |  | 10.2 | (1.9) |  | 7.1 | (0.5) |  | 0.5 | (0.3) | (4) |  | 17.4 | (7.9) |  | 10.7 | (1.2) |  | 1.0 | (0.3) | (17) |  | 14.5 | (3.3) |  | 13.0 | (1.0) |
| 4-5 | 1.2 | (0.3) | (17) |  | 6.6 | (1.6) |  | 5.8 | (0.5) |  | 0.0 | (0.0) | (0)d |  | 0.0 | (0.0) |  | 11.2 | (1.2) |  | 1.7 | (0.4) | (22) |  | 18.8 | (3.6) |  | 10.1 | (0.9) |
| 5-10 | 0.8 | (0.1) | (29) |  | 11.3 | (2.0) |  | 16.2 | (0.8) |  | 0.2 | (0.1) | (3) |  | 13.0 | (7.0) |  | 23.5 | (1.7) |  | 0.9 | (0.2) | (38) |  | 32.5 | (4.3) |  | 32.1 | (1.3) |
| 10-20 | 0.5 | (0.1) | (19) |  | 7.4 | (1.6) |  | 16.6 | (0.8) |  | 0.3 | (0.1) | (3) |  | 13.0 | (7.0) |  | 17.4 | (1.5) |  | 0.4 | (0.1) | (15) |  | 12.8 | (3.1) |  | 27.7 | (1.3) |
| 20+ | 0.2 | (0.1) | (2) |  | 0.8 | (0.6) |  | 4.4 | (0.4) |  | 0.0 | (0.0) | (0)d |  | 0.0 | (0.0) |  | 2.6 | (0.6) |  | 0.0 | (0.0) | (0)d |  | 0.0 | (0.0) |  | 5.1 | (0.6) |
| Total | 1.1 | (0.1) | (256) |  | 100.0 | -- |  | 100.0 | -- |  | 0.3 | (0.1) | (23) |  | 100.0 | -- |  | 100.0 | -- |  | 0.9 | (0.1) | (117) |  | 100.0 | -- |  | 100.0 | -- |
| 27 | 64.2\* | |  |  |  |  |  |  |  |  | 7.7 | |  |  |  |  |  |  |  |  | 28.1\* | |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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

a5,375 men and 396 women had first accusations of non-familial major physical violent crime perpetration between January 1, 2004 and December 31, 2009 out of the 821,807 male and 153,250 female Regular Army soldiers in service over that time period.

bn = number of soldiers with first accusations of non-familial major physical violent crime perpetration in the time interval represented by the row.

CPercent of the population person-months in the time interval represented by the row.

dYears-in-service categories with zero cases of the outcome were collapsed with adjacent categories (e.g., 0-1 and 1-2 years-in-service among previously deployed women; 4-5 and 5-10 years-in-service among currently deployed women; 10-20 and 20+ years-in-service among currently and previously deployed women). Four degrees of freedom tests 2were then used to test for significant differences in incidence across years-in-service.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Appendix Table 8. Predicting first accusation of non-familial major physical violent crime perpetration among men with core variablesa** | | | | |
|  |  |  |  |  |
|  | **%** | **(se)** | **OR** | **(95% CI)** |
| Year of Observation |  |  |  |  |
| 2005 | 15.8 | (0.2) | 1.1 | (1.0-1.2) |
| 2006 | 16.2 | (0.2) | 1.2 | (1.1-1.3) |
| 2007 | 16.7 | (0.2) | 1.3 | (1.2-1.4) |
| 2008 | 17.4 | (0.2) | 1.2 | (1.1-1.3) |
| 2009 | 18.0 | (0.2) | 1.2 | (1.1-1.3) |
| 2004 (reference) | 16.0 | (0.2) | -- | -- |
| 25 |  | | 34.4\* | |
| Season of Observation |  |  |  |  |
| Spring | 24.9 | (0.2) | 1.1 | (1.0-1.1) |
| Summer | 25.0 | (0.2) | 1.1 | (1.0-1.1) |
| Fall | 25.3 | (0.2) | 1.0 | (1.0-1.1) |
| Winter (reference) | 24.8 | (0.2) | -- | -- |
| 23 |  | | 2.8\* | |
|  |  |  |  |  |

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

aBased on a multivariate discrete-time (person-month) survival model.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Appendix Table 9. Predicting first accusation of non-familial major physical violent crime perpetration among men with core and socio-demographic variablesa** | | | | |
|  |  |  |  |  |
|  | **%** | **(se)** | **OR** | **(95% CI)** |
| Age |  |  |  |  |
| 17-19 | 6.3 | (0.1) | 2.6 | (2.4-2.9) |
| 20-22 | 19.2 | (0.2) | 2.8 | (2.6-3.0) |
| 23+ (reference) | 74.5 | (0.2) | -- | -- |
| 22 |  | | 1382.7\* | |
| Marital status |  |  |  |  |
| Currently Married(reference) | 60.2 | (0.2) | -- | -- |
| Previously Married | 3.8 | (0.1) | 0.9 | (0.7-1.0) |
| Never Married | 36.0 | (0.2) | 1.7 | (1.6-1.8) |
| 22 |  | | 388.8\* | |
| Race |  |  |  |  |
| Asian | 3.9 | (0.1) | 1.1 | (0.9-1.2) |
| Non-Hispanic Black | 18.5 | (0.2) | 2.2 | (2.1-2.4) |
| Hispanic | 10.4 | (0.1) | 1.4 | (1.2-1.5) |
| Other | 2.0 | (0.1) | 1.2 | (1.0-1.4) |
| Non-Hispanic White (reference) | 65.2 | (0.2) | -- | -- |
| 24 |  | | 695.7\* | |
| Religious affiliation |  |  |  |  |
| Catholic | 20.5 | (0.2) | 0.8 | (0.7-0.8) |
| Other Christian sub-groups (reference) | 51.6 | (0.2) | -- | -- |
| Other Religions | 1.8 | (0.1) | 0.9 | (0.8-1.2) |
| None/Unknown | 26.1 | (0.2) | 1.0 | (1.0-1.1) |
| 23 |  | | 60.6\* | |
| Number of dependents |  |  |  |  |
| 0 | 34.8 | (0.2) | 2.3 | (2.1-2.5) |
| 1-2 | 34.1 | (0.2) | 1.8 | (1.7-1.9) |
| 3+ (reference) | 31.1 | (0.2) | -- | -- |
| 22 |  | | 483.8\* | |
| Education level |  |  |  |  |
| Did not complete high school | 11.1 | (0.1) | 12.2 | (10.7-14.0) |
| High school graduate | 64.2 | (0.2) | 5.5 | (4.8-6.2) |
| Some college completed/college graduate (reference) | 24.7 | (0.2) | -- | -- |
| 22 |  | | 1570.9\* | |
|  |  |  |  |  |

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

aBased on a series of multivariate discrete-time (person-month) survival models each examining the association of one socio-demographic variable controlling for the core variables in Appendix Table 8.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Appendix Table 10. Predicting first accusation of non-familial major physical violent crime perpetration among men with core and Army career variablesa** | | | | |
|  |  |  |  |  |
|  | **%** | **(se)** | **OR** | **(95% CI)** |
| Age of enlistment |  |  |  |  |
| 17-19 | 44.3 | (0.2) | 2.1 | (2.0—2.3) |
| 20-21 | 20.6 | (0.2) | 1.7 | (1.6-1.9) |
| 27+ | 8.2 | (0.1) | 0.9 | (0.8-1.0) |
| 22-26 (reference) | 27.0 | (0.2) | -- | -- |
| 23 |  | | 505.8 | |
| Duty Military Occupational Specialty |  |  |  |  |
| Basic training | 5.8 | (0.1) | 0.6 | (0.5-0.7) |
| Non-job | 1.5 | (0.1) | 0.5 | (0.4-0.7) |
| On duty (reference) | 92.7 | (0.1) | -- | -- |
| 22 |  | | 57.2\* | |
| Military Occupational Specialty - Infantry |  |  |  |  |
| Yes | 15.0 | (0.2) | 1.6 | (1.5-1.7) |
| No (reference) | 85.0 | (0.2) | -- | -- |
| 21 |  | | 201.8\* | |
| Deployment |  |  |  |  |
| Currently in 1st deployment | 13.5 | (0.1) | 0.4 | (0.4-0.4) |
| Currently in 2nd | 7.3 | (0.1) | 0.3 | (0.3-0.4) |
| Currently in 3rd (or higher) | 3.0 | (0.1) | 0.3 | (0.2-0.4) |
| Previously deployed once | 25.1 | (0.2) | 1.1 | (1.0-1.1) |
| Previously deployed twice | 10.0 | (0.1) | 0.8 | (0.7-0.8) |
| Previously deployed three or more times | 3.5 | (0.1) | 0.5 | (0.4-0.6) |
| Never Deployed (reference) | 37.6 | (0.2) | -- | -- |
| 27 |  | | 612.7\* | |
| Command |  |  |  |  |
| FORSCOM | 47.6 | (0.2) | 3.4 | (2.9-3.9) |
| TRADOC | 14.4 | (0.1) | 1.5 | (1.3-1.8) |
| N/S America, Europe/Central/Africa, Pacific | 18.0 | (0.2) | 3.9 | (3.3-4.5) |
| Special Ops | 4.7 | (0.1) | 1.6 | (1.3-2.0) |
| MEDCOM | 4.6 | (0.1) | 1.9 | (1.6-2.4) |
| AMC/Other/Unknown (reference) | 10.7 | (0.1) | -- | -- |
| 25 |  | | 670.4\* | |
| Rank |  |  |  |  |
| Junior enlisted (E1-E4) | 45.0 | (0.2) | 12.7 | (10.5-15.3) |
| Intermediate enlisted (E5-E6) | 27.8 | (0.2) | 5.6 | (4.6-6.8) |
| Senior enlisted (E7-E9) | 11.0 | (0.1) | 1.9 | (1.5-2.4) |
| Officer (reference) | 16.2 | (0.2) | -- | -- |
| 23 |  | | 1607.2\* | |
| Years-in-service |  |  |  |  |
| 0-1 | 12.1 | (0.1) | 10.5 | (7.6-14.4) |
| 1-2 | 11.1 | (0.1) | 15.4 | (11.2-21.1) |
| 2-3 | 10.3 | (0.1) | 13.9 | (10.1-19.1) |
| 3-4 | 8.8 | (0.1) | 12.7 | (9.3-17.5) |
| 4-5 | 6.4 | (0.1) | 9.0 | (6.5-12.5) |
| 5-10 | 20.9 | (0.2) | 6.9 | (5.1-9.5) |
| 10-20 | 24.2 | (0.2) | 2.7 | (2.0-3.8) |
| 20+ (reference) | 6.1 | (0.1) | -- | -- |
| 26 |  | | 1411.0\* | |
| AFQT Score 0 - 49 percentile |  |  |  |  |
| Yes | 29.3 | (0.2) | 1.9 | (1.8-2.0) |
| No (reference) | 70.7 | (0.2) | -- | -- |
| 21 |  | | 499.6\* | |
| Last demotion occurred within 12 months | | |  |  |
| Yes | 2.9 | (0.1) | 5.2 | (4.8-5.6) |
| No (reference) | 97.1 | (0.1) | -- | -- |
| 21 |  | | 1667.5\* | |
|  |  |  |  |  |

Abbreviations: FORSCOM, forces command; TRADOC, training and doctrine command; N/S, North/South; MEDCOM, medical command; AMC, Army material command; AFQT, armed forces qualification test.

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

aBased on a series of multivariate discrete-time (person-month) survival models each examining the association of one Army career variable controlling for the core variables in Appendix Table 8.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Appendix Table 11. Predicting first accusation of non-familial major physical violent crime perpetration among men with core and prior crime variablea** | | | | | |
|  |  |  |  |  |  |
|  | **%** | **(se)** | **OR** | **(95% CI)** | **2** |
| Prior crime perpetration (past 12 months) |  |  |  |  |  |
| Familial major physical violence (Count) | -- | -- | 4.4 | (4.0-4.8) | 1266.3\* |
| Familial major physical violence (Yes/no) | 0.6 | (0.0) | 8.7 | (7.7-9.9) | 1175.4\* |
| Minor physical violence (Count) | -- | -- | 7.7 | (7.1-8.3) | 2461.4\* |
| Minor physical violence (Yes/no) | 0.6 | (0.0) | 11.5 | (10.4-12.8) | 2083.2\* |
| Verbal violence (Count) | -- | -- | 4.7 | (4.2-5.3) | 758.2\* |
| Verbal violence (Yes/no) | 0.2 | (0.0) | 11.2 | (9.5-13.2) | 811.1\* |
| Major sexual violence (Count) | -- | -- | 3.5 | (3.1-3.9) | 406.7\* |
| Major sexual violence (Yes/no) | 0.2 | (0.0) | 8.5 | (7.0-10.4) | 462.7\* |
| Non-violent reckless endangerment (Count) | -- | -- | 4.8 | (4.2-5.4) | 546.6\* |
| Non-violent reckless endangerment (Yes/no) | 0.7 | (0.0) | 5.3 | (4.5-6.1) | 490.6\* |
| Non-violent possession or use of illegal substance (Count) | -- | -- | 1.9 | (1.8-2.0) | 976.7\* |
| Non-violent possession or use of illegal substance (Yes/no) | 0.8 | (0.0) | 7.6 | (6.8-8.5) | 1250.3\* |
| Non-violent weapon offense (Count) | -- | -- | 6.9 | (5.3-8.9) | 210.3\* |
| Non-violent weapon offense (Yes/no) | 0.1 | (0.0) | 7.7 | (5.7-10.4) | 181.5\* |
| Non-violent drunkenness/vagrancy/disorderly crime (Count) | -- | -- | 4.8 | (4.3-5.3) | 1034.3\* |
| Non-violent drunkenness/vagrancy/disorderly crime (Yes/no) | 0.4 | (0.0) | 9.2 | (8.0-10.6) | 932.7\* |
| Non-violent crime in past 12 months (Count) | -- | -- | 1.5 | (1.5-1.6) | 2886.4\* |
| Other non-violent crime (Yes/no) | 3.9 | (0.1) | 6.0 | (5.6-6.4) | 2703.1\* |
| Any crime (Count of each type of perpetration) | -- | -- | 2.8 | (2.8-2.9) | 5967.8\* |
| Any crime (Yes/no) | 5.8 | (0.1) | 7.1 | (6.7-7.5) | 4380.3\* |
| Prior crime victimization (past 12 months) |  |  |  |  |  |
| Major physical violence (Count) | -- | -- | 3.7 | (3.2-4.3) | 362.3\* |
| Major physical violence (Yes/no) | 0.4 | (0.0) | 6.5 | (5.5-7.8) | 416.0\* |
| Minor physical violence (Count) | -- | -- | 3.9 | (3.3-4.7) | 224.5\* |
| Minor physical violence (Yes/no) | 0.3 | (0.0) | 4.8 | (3.9-5.9) | 216.1\* |
| Verbal violence (Count) | -- | -- | 2.4 | (1.5-3.8) | 13.0\* |
| Verbal violence (Yes/no) | 0.1 | (0.0) | 2.4 | (1.4-4.1) | 9.6\* |
| Major sexual violence (Count) | -- | -- | 2.1 | (1.2-3.9) | 6.3\* |
| Major sexual violence (Yes/no) | 0.0 | (0.0) | 5.7 | (2.5-12.6) | 18.0\* |
| Non-violent crime (Count) | -- | -- | 1.7 | (1.5-1.8) | 156.7\* |
| Non-violent crime (Yes/no) | 2.2 | (0.1) | 2.1 | (1.9-2.4) | 133.2\* |
| Any crime (Count of each type of victimization) | -- | -- | 2.5 | (2.3-2.7) | 506.3\* |
| Any crime (Yes/no) | 2.9 | (0.1) | 2.8 | (2.6-3.1) | 419.2\* |
| Prior crime perpetration (past 24 months) |  |  |  |  |  |
| Major familial physical violence (Count) | -- | -- | 3.5 | (3.3-3.8) | 1263.9\* |
| Major familial physical violence (Yes/no) | 0.9 | (0.0) | 7.1 | (6.4-8.0) | 1196.5\* |
| Minor physical violence (Count) | -- | -- | 6.4 | (6.0-6.9) | 2658.2\* |
| Minor physical violence (Yes/no) | 1.0 | (0.0) | 9.4 | (8.6-10.3) | 2198.0\* |
| Verbal violence (Count) | -- | -- | 3.3 | (3.0-3.7) | 601.0\* |
| Verbal violence (Yes/no) | 0.4 | (0.0) | 7.7 | (6.6-9.0) | 662.0\* |
| Major sexual violence (Count) | -- | -- | 2.3 | (2.1-2.6) | 301.1\* |
| Major sexual violence (Yes/no) | 0.4 | (0.0) | 5.5 | (4.6-6.6) | 344.3\* |
| Non-violent reckless endangerment (Count) | -- | -- | 3.8 | (3.4-4.2) | 633.7\* |
| Non-violent reckless endangerment (Yes/no) | 1.1 | (0.0) | 4.5 | (3.9-5.1) | 556.2\* |
| Non-violent possession or use of illegal substance (Count) | -- | -- | 1.6 | (1.6-1.7) | 1035.5\* |
| Non-violent possession or use of illegal substance (Yes/no) | 1.2 | (0.0) | 6.0 | (5.4-6.6) | 1094.7\* |
| Non-violent weapon offense (Count) | -- | -- | 6.0 | (4.7-7.5) | 230.9\* |
| Non-violent weapon offense (Yes/no) | 0.2 | (0.0) | 6.7 | (5.2-8.7) | 207.9\* |
| Non-violent drunkenness/vagrancy/disorderly crime (Count) | -- | -- | 4.1 | (3.7-4.5) | 1006.5\* |
| Non-violent drunkenness/vagrancy/disorderly crime (Yes/no) | 0.7 | (0.0) | 6.9 | (6.0-7.8) | 862.5\* |
| Non-violent crime in past 12 months (Count) | -- | -- | 1.5 | (1.4-1.5) | 2925.8\* |
| Other non-violent crime (Yes/no) | 6.1 | (0.1) | 4.9 | (4.6-5.2) | 2459.4\* |
| Any crime (Count of each type of perpetration) | -- | -- | 2.5 | (2.4-2.6) | 5612.9\* |
| Any crime (Yes/no) | 9.0 | (0.1) | 5.8 | (5.5-6.1) | 3799.4\* |
| Prior crime victimization (past 24 months) |  |  |  |  |  |
| Major physical violence (Count) | -- | -- | 3.1 | (2.7-3.5) | 352.0\* |
| Major physical violence (Yes/no) | 0.6 | (0.0) | 5.1 | (4.3-5.9) | 401.0\* |
| Minor physical violence (Count) | -- | -- | 3.8 | (3.3-4.4) | 286.0\* |
| Minor physical violence (Yes/no) | 0.5 | (0.0) | 4.4 | (3.7-5.3) | 274.7\* |
| Verbal violence (Count) | -- | -- | 1.8 | (1.3-2.6) | 10.5\* |
| Verbal violence (Yes/no) | 0.2 | (0.0) | 2.1 | (1.4-3.3) | 11.4\* |
| Major sexual violence (Count) | -- | -- | 2.4 | (1.4-3.9) | 11.8\* |
| Major sexual violence (Yes/no) | 0.0 | (0.0) | 5.2 | (2.6-10.4) | 21.8\* |
| Non-violent crime (Count) | -- | -- | 1.3 | (1.3-1.4) | 135.3\* |
| Non-violent crime (Yes/no) | 3.7 | (0.1) | 1.8 | (1.6-2.0) | 104.7\* |
| Any crime (Count of each type of victimization) | -- | -- | 2.2 | (2.0-2.3) | 473.7\* |
| Any crime (Yes/no) | 4.7 | (0.1) | 2.4 | (2.2-2.6) | 383.7\* |
| Positive drug test (Past 3 months) | 0.4 | (0.0) | 11.4 | (9.9-13.0) | 1279.5\* |
| Positive drug test (Past 12 months) | 0.9 | (0.0) | 8.3 | (7.5-9.2) | 1550.2\* |
|  |  |  |  |  |  |

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

aBased on a series of multivariate discrete-time (person-month) survival models each examining the association of prior crime variable controlling for the core variables in Appendix Table 8. Due to space limitations, the distributions and standard errors of count variables are not presented. For a list of NCRP offense codes included in each crime independent variable see Appendix Table 2.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Appendix Table 12. Predicting first accusation of non-familial major physical violent crime perpetration among men with core and clinical variables (inpatient admission and outpatient visit diagnoses)a** | | | | | |
|  |  |  |  |  |  |
|  | **%** | **(se)** | **OR** | **(95% CI)** | **2** |
| 1+ suicide attempts in past 12 months prior to current month (Yes/no) | 0.1 | (0.0) | 10.6 | (8.4-13.3) | 398.9\* |
| Any of the physical components of PULHES are 2 or higher (Yes/no) | 14.9 | (0.2) | 0.9 | (0.8-0.9) | 12.6\* |
| Mental component of PULHES is 2 or higher (Yes/no) | 0.3 | (0.0) | 4.2 | (3.2-5.4) | 117.3\* |
| Loss of an arm, hand, leg or foot in the past 12 months (Yes/no) | 0.0 | (0.0) | 0.4 | (0.1-2.6) | 1.0 |
| 10 or more % of body burned in the past 12 months (Yes/no) | 0.0 | (0.0) | 1.0 | (0.1-6.9) | 0.0 |
| 10 or more % of body severely burned in the past 12 months (Yes/no) | 0.0 | (0.0) | 0.0 | -- | 0.0 |
| Loss of vision in both eyes in the past 12 months (Yes/no) | 0.0 | (0.0) | 2.6 | (0.4-18.5) | 0.9 |
| Loss of hearing in the past 12 months (Yes/no) | 1.6 | (0.1) | 0.8 | (0.7-1.0) | 2.5 |
| Spinal injury in the past 12 months (Yes/no) | 0.1 | (0.0) | 1.3 | (0.5-3.1) | 0.4 |
| Serious injury in the past 12 months (Yes/no) | 1.7 | (0.1) | 0.8 | (0.7-1.0) | 2.4 |
| Outpatient visits in the past 12 months, any diagnosis priority |  |  |  |  |  |
| ADHD (Count of visits) | -- | -- | 1.4 | (1.3-1.6) | 36.1\* |
| ADHD (Yes/no) | 0.6 | (0.0) | 2.5 | (2.0-3.1) | 69.8\* |
| Conduct/ODD (Count of visits) | -- | -- | 3.3 | (2.8-3.9) | 219.1\* |
| Conduct/ODD (Yes/no) | 0.1 | (0.0) | 13.1 | (9.7-17.8) | 282.2\* |
| Eating disorders (Count of visits) | -- | -- | 0.0 | -- | 0.0\* |
| Eating disorders (Yes/no) | 0.0 | (0.0) | 0.0 | -- | 0.0 |
| Sex disorders (Count of visits) | -- | -- | 0.8 | (0.6-1.1) | 1.7\* |
| Sex disorders (Yes/no) | 0.7 | (0.0) | 0.8 | (0.6-1.2) | 1.2 |
| Other impulse (Count of visits) | -- | -- | 2.2 | (1.9-2.6) | 98.1\* |
| Other impulse (Yes/no) | 0.3 | (0.0) | 3.8 | (3.0-4.8) | 115.5\* |
| Any impulse (Count of visits) | -- | -- | 1.5 | (1.4-1.7) | 111.7\* |
| Any impulse (Yes/no) | 1.7 | (0.1) | 2.3 | (2.0-2.7) | 146.3\* |
| Adjustment disorder (Count of visits) | -- | -- | 1.8 | (1.8-1.9) | 535.6\* |
| Adjustment disorder (Yes/no) | 2.0 | (0.1) | 3.9 | (3.5-4.3) | 663.3\* |
| Stressors/adversities (Count of visits) | -- | -- | 1.7 | (1.6-1.7) | 676.2\* |
| Stressors/adversities (Yes/no) | 5.7 | (0.1) | 2.8 | (2.6-3.0) | 680.3\* |
| Marital problems (Count of visits) | -- | -- | 1.7 | (1.6-1.7) | 659.6\* |
| Marital problems (Yes/no) | 2.8 | (0.1) | 3.6 | (3.3-4.0) | 766.5\* |
| Traumatic stress (Count of visits) | -- | -- | 1.8 | (1.6-2.0) | 96.9\* |
| Traumatic stress (Yes/no) | 0.6 | (0.0) | 2.9 | (2.4-3.6) | 110.0\* |
| PTSD (Count of visits) | -- | -- | 1.4 | (1.4-1.5) | 202.4\* |
| PTSD (Yes/no) | 1.6 | (0.1) | 2.8 | (2.5-3.2) | 244.9\* |
| Any stress (Count of visits) | -- | -- | 1.6 | (1.6-1.6) | 1179.5\* |
| Any stress (Yes/no) | 9.4 | (0.1) | 3.0 | (2.9-3.2) | 1204.4\* |
| Alcohol (Count of visits) | -- | -- | 1.7 | (1.6-1.7) | 1123.0\* |
| Alcohol (Yes/no) | 2.6 | (0.1) | 4.8 | (4.4-5.2) | 1309.9\* |
| Drug-induced mental illness (Count of visits) | -- | -- | 2.0 | (1.7-2.2) | 124.2\* |
| Drug-induced mental illness (Yes/no) | 0.3 | (0.0) | 4.2 | (3.3-5.2) | 152.2\* |
| Drug abuse without dependence (Count of visits) | -- | -- | 2.0 | (1.9-2.1) | 536.3\* |
| Drug abuse without dependence (Yes/no) | 0.6 | (0.0) | 6.5 | (5.6-7.5) | 667.6\* |
| Drug dependence (Count of visits) | -- | -- | 1.8 | (1.6-1.9) | 221.5\* |
| Drug dependence (Yes/no) | 0.3 | (0.0) | 5.9 | (4.8-7.3) | 287.4\* |
| Any substance (Count of visits) | -- | -- | 1.7 | (1.7-1.8) | 1358.6\* |
| Any substance (Yes/no) | 3.0 | (0.1) | 5.0 | (4.7-5.4) | 1642.9\* |
| Suicidal ideation (Count of visits) | -- | -- | 3.3 | (2.7-3.9) | 181.7\* |
| Suicidal ideation (Yes/no) | 0.2 | (0.0) | 5.2 | (4.1-6.6) | 182.0\* |
| Self-damaging behavior (Count of visits) | -- | -- | 0.6 | (0.1-2.3) | 0.6 |
| Self-damaging behavior (Yes/no) | 0.1 | (0.0) | 0.6 | (0.1-2.3) | 0.6 |
| Any suicide (Count of visits) | -- | -- | 3.0 | (2.5-3.6) | 150.6\* |
| Any suicide (Yes/no) | 0.3 | (0.0) | 4.3 | (3.4-5.4) | 145.1\* |
| Bipolar (Count of visits) | -- | -- | 1.5 | (1.3-1.7) | 30.8\* |
| Bipolar (Yes/no) | 0.2 | (0.0) | 3.1 | 2.2-4.2) | 44.4\* |
| Non-affective psychosis (Count of visits) | -- | -- | 1.5 | (1.3-1.8) | 24.3\* |
| Non-affective psychosis (Yes/no) | 0.1 | (0.0) | 5.6 | (4.1-7.7) | 111.4\* |
| Organic mental disorders (Count of visits) | -- | -- | 1.2 | (1.0-1.5) | 5.6\* |
| Organic mental disorders (Yes/no) | 0.4 | (0.0) | 1.7 | (1.3-2.4) | 11.7\* |
| Any bipolar (Bipolar/NAP/Organic) (Count of visits) | -- | -- | 1.4 | (1.3-1.5) | 49.9\* |
| Any bipolar (Bipolar/NAP/Organic) (Yes/no) | 0.7 | (0.0) | 2.8 | (2.3-3.4) | 104.5\* |
| Depression (Count of visits) | -- | -- | 1.6 | (1.6-1.7) | 556.6\* |
| Depression (Yes/no) | 3.8 | (0.1) | 3.0 | (2.8-3.3) | 619.6\* |
| Depressive psychosis (Count of visits) | -- | -- | 1.5 | (1.4-1.6) | 139.4\* |
| Depressive psychosis (Yes/no) | 1.0 | (0.0) | 2.8 | (2.4-3.3) | 157.1\* |
| Any depression (Count of visits) | -- | -- | 1.6 | (1.5-1.6) | 541.9\* |
| Any depression (Yes/no) | 4.2 | (0.1) | 2.9 | (2.7-3.2) | 607.2\* |
| Any sleep problems (Count of visits) | -- | -- | 1.3 | (1.2-1.4) | 59.5\* |
| Any sleep problems (Yes/no) | 5.3 | (0.1) | 1.5 | (1.4-1.7) | 63.9\* |
| Any TBI (Count of visits) | -- | -- | 1.6 | (1.5-1.7) | 270.4\* |
| Any TBI (Yes/no) | 3.1 | (0.1) | 2.6 | (2.4-2.9) | 360.8\* |
| Somatoform/dissociative disorders (Count of visits) | -- | -- | 1.2 | (0.9-1.5) | 1.4 |
| Somatoform/dissociative disorders (Yes/no) | 0.6 | (0.0) | 1.4 | (1.0-1.9) | 4.1\* |
| Any pain (Seal or Sullivan) (Count of visits) | -- | -- | 1.1 | (1.1-1.1) | 119.0\* |
| Any pain (Seal or Sullivan) (Yes/no) | 48.4 | (0.2) | 1.5 | (1.4-1.6) | 224.4\* |
| Any physical-related (insomnia, somatoform, TBI, pain) (Count of visits) | -- | -- | 1.1 | (1.1-1.1) | 128.5\* |
| Any physical-related (insomnia, somatoform, TBI, pain) (Yes/no) | 50.0 | (0.2) | 1.5 | (1.4-1.6) | 231.1\* |
| Anxiety (Count of visits) | -- | -- | 1.6 | (1.5-1.6) | 434.8\* |
| Anxiety (Yes/no) | 3.7 | (0.1) | 2.7 | (2.5-3.0) | 451.1\* |
| Personality disorders (Count of visits) | -- | -- | 2.1 | (1.9-2.3) | 191.6\* |
| Personality disorders (Yes/no) | 0.3 | (0.0) | 5.2 | (4.2-6.4) | 241.6\* |
| Other disorders (Count of visits) | -- | -- | 2.0 | (1.7-2.2) | 136.6\* |
| Other disorders (Yes/no) | 0.6 | (0.0) | 3.8 | (3.2-4.6) | 206.1\* |
| Symptoms, signs and ill-defined conditions, mental (Count of visits) | -- | -- | 1.1 | (1.1-1.2) | 17.5\* |
| Symptoms, signs and ill-defined conditions, mental (Yes/no) | 12.0 | (0.1) | 1.3 | (1.2-1.4) | 40.9\* |
| Prior mental disorders (Count of visits) | -- | -- | 1.8 | (1.6-2.0) | 98.0\* |
| Prior mental disorders (Yes/no) | 0.9 | (0.0) | 2.5 | (2.1-2.9) | 96.4\* |
| Injury and poisoning (Count of visits) | -- | -- | 1.6 | (1.5-1.7) | 446.9\* |
| Injury and poisoning (Yes/no) | 12.7 | (0.1) | 2.0 | (1.8-2.1) | 414.3\* |
| Any physical (Count of visits) | -- | -- | 1.2 | (1.2-1.3) | 320.6\* |
| Any physical (Yes/no) | 95.2 | (0.1) | 1.7 | (1.4-2.0) | 41.6\* |
| Any mental health diagnosis |  |  |  |  |  |
| Outpatient visits in the past month, any priority (Count of visits) | -- | -- | 1.5 | (1.4-1.5) | 202.7\* |
| Outpatient visits in the past month, any priority (Yes/no) | 7.1 | (0.1) | 1.8 | (1.7-2.0) | 214.2\* |
| Outpatient visits in the past 3 months, any priority (Count of visits) | -- | -- | 1.6 | (1.6-1.7) | 1263.2\* |
| Outpatient visits in the past 3 months, any priority (Yes/no) | 14.0 | (0.2) | 2.4 | (2.3-2.6) | 851.0\* |
| Outpatient visits in the past 12 months, any priority (Count of visits) | -- | -- | 1.4 | (1.4-1.5) | 1293.1\* |
| Outpatient visits in the past 12 months, any priority (Yes/no) | 28.9 | (0.2) | 2.2 | (2.1-2.3) | 800.4\* |
| Outpatient visits in the past month, primary diagnosis (Count of visits) | -- | -- | 1.5 | (1.4-1.6) | 181.2\* |
| Outpatient visits in the past month, primary diagnosis (Yes/no) | 5.6 | (0.1) | 1.9 | (1.7-2.1) | 198.2\* |
| Outpatient visits in the past 3 months, primary diagnosis (Count of visits) | -- | -- | 1.6 | (1.6-1.7) | 1099.2\* |
| Outpatient visits in the past 3 months, primary diagnosis (Yes/no) | 10.8 | (0.1) | 2.5 | (2.3-2.6) | 765.9\* |
| Outpatient visits in the past 12 months, primary diagnosis (Count of visits) | -- | -- | 1.4 | (1.4-1.5) | 1137.2\* |
| Outpatient visits in the past 12 months, primary diagnosis (Yes/no) | 22.5 | (0.2) | 2.1 | (2.0-2.3) | 728.1\* |
| Hospitalizations in the past 12 months, any diagnosis priority |  |  |  |  |  |
| ADHD (Count of days admitted) | -- | -- | 1.7 | (1.3-2.2) | 16.1\* |
| ADHD (Yes/no) | 0.0 | (0.0) | 9.5 | (4.5-20.0) | 35.3\* |
| Conduct/ODD (Count of days admitted) | -- | -- | 1.9 | (1.5-2.4) | 25.9\* |
| Conduct/ODD (Yes/no) | 0.0 | (0.0) | 17.7 | (9.2-34.1) | 73.9\* |
| Eating disorders (Count of days admitted) | -- | -- | -- | -- | -- |
| Eating disorders (Yes/no) | -- | -- | -- | -- | -- |
| Sex disorders (Count of days admitted) | -- | -- | 0.0 | -- | 0.0 |
| Sex disorders (Yes/no) | 0.0 | (0.0) | 0.0 | -- | 0.0 |
| Other impulse (Count of days admitted) | -- | -- | 3.2 | (2.3-4.6) | 41.3\* |
| Other impulse (Yes/no) | 0.0 | (0.0) | 23.3 | (9.7-56.2) | 49.1\* |
| Any impulse (Count of days admitted) | -- | -- | 1.9 | (1.6-2.2) | 52.6\* |
| Any impulse (Yes/no) | 0.0 | (0.0) | 12.4 | (7.8-19.6) | 113.0\* |
| Adjustment disorder (Count of days admitted) | -- | -- | 2.0 | (1.8-2.2) | 143.4\* |
| Adjustment disorder (Yes/no) | 0.1 | (0.0) | 6.7 | (4.9-9.1) | 138.8\* |
| Stressors/adversities (Count of days admitted) | -- | -- | 1.6 | (1.5-1.8) | 75.3\* |
| Stressors/adversities (Yes/no) | 0.1 | (0.0) | 4.9 | (3.5-6.7) | 91.9\* |
| Marital problems (Count of days admitted) | -- | -- | 1.9 | (1.7-2.2) | 77.3\* |
| Marital problems (Yes/no) | 0.1 | (0.0) | 8.8 | (5.9-13.1) | 112.6\* |
| Traumatic stress (Count of days admitted) | -- | -- | 2.0 | (1.5-2.8) | 17.7\* |
| Traumatic stress (Yes/no) | 0.0 | (0.0) | 9.0 | (3.8-21.7) | 24.1\* |
| PTSD (Count of days admitted) | -- | -- | 1.8 | (1.6-1.9) | 196.0\* |
| PTSD (Yes/no) | 0.2 | (0.0) | 6.9 | (5.3-8.9) | 222.3\* |
| Any stress (Count of days admitted) | -- | -- | 1.8 | (1.7-1.9) | 345.3\* |
| Any stress (Yes/no) | 0.4 | (0.0) | 6.4 | (5.3-7.6) | 413.7\* |
| Alcohol (Count of days admitted) | -- | -- | 1.8 | (1.7-1.9) | 294.2\* |
| Alcohol (Yes/no) | 0.3 | (0.0) | 6.3 | (5.2-7.7) | 343.0\* |
| Drug-induced mental illness (Count of days admitted) | -- | -- | 2.2 | (1.9-2.6) | 101.5\* |
| Drug-induced mental illness (Yes/no) | 0.0 | (0.0) | 12.5 | (7.5-20.7) | 94.8\* |
| Drug abuse without dependence (Count of days admitted) | -- | -- | 2.0 | (1.8-2.3) | 136.5\* |
| Drug abuse without dependence (Yes/no) | 0.1 | (0.0) | 8.8 | (6.1-12.7) | 136.7\* |
| Drug dependence (Count of days admitted) | -- | -- | 1.8 | (1.6-2.1) | 115.8\* |
| Drug dependence (Yes/no) | 0.1 | (0.0) | 8.8 | (5.9-13.1) | 117.2\* |
| Any substance (Count of days admitted) | -- | -- | 1.8 | (1.7-1.9) | 366.4\* |
| Any substance (Yes/no) | 0.4 | (0.0) | 6.5 | (5.5-7.8) | 433.9\* |
| Suicidal ideation (Count of days admitted) | -- | -- | 1.7 | (1.4-2.0) | 41.4\* |
| Suicidal ideation (Yes/no) | 0.1 | (0.0) | 5.1 | (3.2-8.2) | 44.8\* |
| Self-damaging behavior (Count of days admitted) | -- | -- | 10.4 | (5.1-21.2) | 41.0\* |
| Self-damaging behavior (Yes/no) | 0.0 | (0.0) | 1118.4 | (130.5-9583.3) | 41.0\* |
| Any suicide (Count of days admitted) | -- | -- | 1.7 | (1.5-2.0) | 47.7\* |
| Any suicide (Yes/no) | 0.1 | (0.0) | 5.4 | (3.4-8.6) | 50.8\* |
| Bipolar (Count of days admitted) | -- | -- | 1.7 | (1.5-2.0) | 53.7\* |
| Bipolar (Yes/no) | 0.0 | (0.0) | 6.4 | (3.9-10.5) | 54.9\* |
| Non-affective psychosis (Count of days admitted) | -- | -- | 1.6 | (1.3-1.9) | 21.4\* |
| Non-affective psychosis (Yes/no) | 0.0 | (0.0) | 4.7 | (2.4-8.9) | 21.2\* |
| Organic mental disorders (Count of days admitted) | -- | -- | 1.4 | (1.1-1.8) | 5.7\* |
| Organic mental disorders (Yes/no) | 0.0 | (0.0) | 4.2 | (1.8-10.2) | 10.4\* |
| Any bipolar (Bipolar/NAP/Organic) (Count of days admitted) | -- | -- | 1.6 | (1.4-1.8) | 70.3\* |
| Any bipolar (Bipolar/NAP/Organic) (Yes/no) | 0.1 | (0.0) | 5.3 | (3.7-7.6) | 80.1\* |
| Depression (Count of days admitted) | -- | -- | 1.8 | (1.7-2.0) | 294.3\* |
| Depression (Yes/no) | 0.2 | (0.0) | 6.8 | (5.5-8.4) | 321.9\* |
| Depressive psychosis (Count of days admitted) | -- | -- | 1.8 | (1.7-1.9) | 230.7\* |
| Depressive psychosis (Yes/no) | 0.1 | (0.0) | 8.5 | (6.7-10.9) | 293.6\* |
| Any depression (Count of days admitted) | -- | -- | 1.8 | (1.7-1.9) | 410.1\* |
| Any depression (Yes/no) | 0.3 | (0.0) | 7.0 | (5.8-8.3) | 469.4\* |
| Any sleep problems (Count of days admitted) | -- | -- | 1.6 | (1.4-1.9) | 36.3\* |
| Any sleep problems (Yes/no) | 0.1 | (0.0) | 3.7 | (2.2-6.2) | 25.8\* |
| Any TBI (Count of days admitted) | -- | -- | 1.3 | (1.2-1.5) | 20.1\* |
| Any TBI (Yes/no) | 0.2 | (0.0) | 2.7 | (2.0-3.8) | 36.5\* |
| Somatoform/dissociative disorders (Count of days admitted) | -- | -- | 1.9 | (1.2-2.8) | 8.6\* |
| Somatoform/dissociative disorders (Yes/no) | 0.0 | (0.0) | 4.9 | (1.6-15.4) | 7.7\* |
| Any pain (Seal or Sullivan) (Count of days admitted) | -- | -- | 1.3 | (1.2-1.4) | 79.3\* |
| Any pain (Seal or Sullivan) (Yes/no) | 1.8 | (0.1) | 2.0 | (1.7-2.3) | 81.8\* |
| Any physical-related (insomnia, somatoform, TBI, pain) (Count of days admitted) | -- | -- | 1.3 | (1.3-1.4) | 112.6\* |
| Any physical-related (insomnia, somatoform, TBI, pain) (Yes/no) | 1.9 | (0.1) | 2.1 | (1.8-2.4) | 110.4\* |
| Anxiety (Count of days admitted) | -- | -- | 1.7 | (1.5-1.9) | 125.2\* |
| Anxiety (Yes/no) | 0.2 | (0.0) | 5.4 | (4.0-7.2) | 125.2\* |
| Personality disorders (Count of days admitted) | -- | -- | 1.9 | (1.7-2.1) | 113.3\* |
| Personality disorders (Yes/no) | 0.1 | (0.0) | 9.3 | (6.6-13.3) | 153.6\* |
| Other disorders(Count of days admitted) | -- | -- | 2.8 | (2.2-3.5) | 77.7\* |
| Other disorders (Yes/no) | 0.0 | (0.0) | 5.5 | (2.9-10.7) | 26.3\* |
| Symptoms, signs and ill-defined conditions, mental (Count of days admitted) | -- | -- | 1.4 | (1.0-1.8) | 4.9\* |
| Symptoms, signs and ill-defined conditions, mental (Yes/no) | 0.0 | (0.0) | 2.9 | (1.3-6.4) | 6.7\* |
| Prior mental disorders (Count of days admitted) | -- | -- | 1.4 | (0.8-2.6) | 1.4 |
| Prior mental disorders (Yes/no) | 0.0 | (0.0) | 3.2 | (0.4-22.6) | 1.3 |
| Injury and poisoning (Count of days admitted) | -- | -- | 1.4 | (1.3-1.5) | 86.2\* |
| Injury and poisoning (Yes/no) | 0.6 | (0.0) | 2.8 | (2.3-3.4) | 95.1\* |
| Any physical (Count of days admitted) | -- | -- | 1.3 | (1.3-1.4) | 170.3\* |
| Any physical (Yes/no) | 3.8 | (0.1) | 2.0 | (1.8-2.2) | 160.6\* |
| Any mental health diagnosis |  |  |  |  |  |
| Hospitalizations in the past month, any priority (Count of days admitted) | -- | -- | 1.5 | (1.3-1.7) | 42.8\* |
| Hospitalizations in the past month, any priority (Yes/no) | 0.2 | (0.0) | 3.2 | (2.2-4.4) | 43.2\* |
| Hospitalizations in the past 3 months, any priority (Count of days admitted) | -- | -- | 1.8 | (1.7-1.9) | 431.4\* |
| Hospitalizations in the past 3 months, any priority (Yes/no) | 0.5 | (0.0) | 5.9 | (5.0-6.9) | 447.3\* |
| Hospitalizations in the past 12 months, any priority (Count of days admitted) | -- | -- | 1.7 | (1.6-1.7) | 588.4\* |
| Hospitalizations in the past 12 months, any priority (Yes/no) | 1.2 | (0.0) | 4.5 | (4.0-5.1) | 601.5\* |
| Hospitalizations in the past month, primary diagnosis (Count of days admitted) | -- | -- | 1.6 | (1.4-1.8) | 52.8\* |
| Hospitalizations in the past month, primary diagnosis (Yes/no) | 0.1 | (0.0) | 4.6 | (3.2-6.6) | 70.0\* |
| Hospitalizations in the past 3 months, primary diagnosis(Count of days admitted) | -- | -- | 1.9 | (1.8-2.0) | 465.9\* |
| Hospitalizations in the past 3 months, primary diagnosis (Yes/no) | 0.3 | (0.0) | 8.1 | (6.8-9.8) | 505.1\* |
| Hospitalizations in the past 12 months, primary diagnosis (Count of days admitted) | -- | -- | 1.8 | (1.7-1.9) | 669.8\* |
| Hospitalizations in the past 12 months, primary diagnosis (Yes/no) | 0.6 | (0.0) | 6.9 | (6.0-7.9) | 756.8\* |
|  |  |  |  |  |  |

Abbreviations: ADHD, attention deficit-hyperactivity disorder; ODD, oppositional defiant disorder; PTSD, posttraumatic stress disorder; NAP, non-affective psychosis; TBI, traumatic brain injury.

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

aBased on a series of multivariate discrete-time (person-month) survival models each examining the association of one medical history variable controlling for the core variables in Appendix Table 8. If no odds ratio is provided for a particular independent variable, the independent variable was too rare to generate a stable estimate (i.e., less than 5 cases of the independent variable being associated with the outcome). Independent variables representing count of outpatient visit and count of days admitted in the hospital were categorically coded 0-4 (0=0 visits/days; 1=1-2 visits/days; 2=3-5 visits/days; 3=6-10 visits/days; 4=11+ visits/days).Due to space limitations, the distributions and standard errors of count variables are not presented. For a list of ICD-10 diagnostic codes included in each of the above clinical variables see Appendix Table 4.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Appendix Table 13. Predicting first accusation of non-familial major physical violent crime perpetration among men with core and clinical variables (medication and polypharmacy)a** | | | | | |
|  |  |  |  |  |  |
|  | **%** | **(se)** | **OR** | **(95% CI)** | **2** |
| Flag of four or more narcotic or psychotropic medications in 3-month period in the past 3 months | 2.7 | (0.1) | 2.7 | (2.4-3.0) | 353.8\* |
| Flag of four or more narcotic or psychotropic medications in 3-month period in the past 12 months | 5.4 | (0.1) | 2.1 | (1.9-2.3) | 292.4\* |
| Non-narcotic and Narcotic pain relievers prescribed in past 12 months |  |  |  |  |  |
| Analgesic - Non-Narcotic (Yes/no) | 51.5 | (0.2) | 1.5 | (1.4-1.6) | 208.8\* |
| Analgesic - Non-Narcotic (Times prescribed) | -- | -- | 1.2 | (1.2-1.3) | 347.0\* |
| Analgesic or Antipyretic Non-Narcotic and Combinations (Yes/no) | 16.0 | (0.2) | 1.7 | (1.6-1.8) | 272.7\* |
| Analgesic or Antipyretic Non-Narcotic and Combinations (Times prescribed) | -- | -- | 1.4 | (1.3-1.4) | 289.4\* |
| NSAID Analgesics (Yes/no) | 47.5 | (0.2) | 1.4 | (1.4-1.5) | 181.0\* |
| NSAID Analgesics(Times prescribed) | -- | -- | 1.2 | (1.2-1.3) | 293.9\* |
| Salicylate Analgesic and Salicylate Combinations (Yes/no) | 1.4 | (0.1) | 0.5 | (0.4-0.7) | 15.3\* |
| Salicylate Analgesic and Salicylate Combinations (Times prescribed) | -- | -- | 0.6 | (0.5-0.7) | 20.2\* |
| Analgesic – Narcotic (Yes/no) | 26.8 | (0.2) | 1.4 | (1.4-1.5) | 162.2\* |
| Analgesic – Narcotic (Times prescribed) | -- | -- | 1.2 | (1.2-1.3) | 250.6\* |
| Long-acting (Yes/no) | 0.4 | (0.0) | 1.3 | (0.9-1.9) | 1.6 |
| Long-acting (Times prescribed) | -- | -- | 1.2 | (1.0-1.4) | 2.8 |
| Short-acting Schedule II (Yes/no) | 16.2 | (0.2) | 1.5 | (1.4-1.6) | 140.8\* |
| Short-acting Schedule II (Times prescribed) | -- | -- | 1.3 | (1.2-1.3) | 191.0\* |
| Short-acting not Schedule II (Yes/no) | 16.0 | (0.2) | 1.5 | (1.4-1.6) | 140.2\* |
| Short-acting not Schedule II (Times prescribed) | -- | -- | 1.2 | (1.2-1.3) | 149.1\* |
| Psychotropic medications prescribed in past 12 months |  |  |  |  |  |
| Antianxiety Agent (Yes/no) | 6.0 | (0.1) | 1.4 | (1.3-1.5) | 41.4\* |
| Antianxiety Agent (Times prescribed) | -- | -- | 1.2 | (1.2-1.3) | 59.2\* |
| Antihistamine Type (Yes/no) | 1.6 | (0.1) | 1.7 | (1.4-2.0) | 37.0\* |
| Antihistamine Type (Times prescribed) | -- | -- | 1.5 | (1.3-1.7) | 45.0\* |
| Benzodiazepines (Yes/no) | 3.7 | (0.1) | 1.3 | (1.2-1.5) | 18.0\* |
| Benzodiazepines (Times prescribed) | -- | -- | 1.2 | (1.2-1.3) | 31.9\* |
| Non-Benzodiazepine (Yes/no) | 0.1 | (0.0) | 4.2 | (2.9-6.1) | 59.7\* |
| Non-Benzodiazepine (Times prescribed) | -- | -- | 1.7 | (1.4-2.0) | 24.8\* |
| GABA Analog (Yes/no) | 1.2 | (0.0) | 1.3 | (1.0-1.6) | 4.8\* |
| GABA Analog (Times prescribed) | -- | -- | 1.1 | (1.0-1.2) | 4.0 |
| Antidepressants (Yes/no) | 5.9 | (0.1) | 2.3 | (2.1-2.5) | 407.5\* |
| Antidepressants (Times prescribed) | -- | -- | 1.4 | (1.4-1.4) | 377.6\* |
| MAOI SARI NaSSA NDRI or Other (Yes/no) | 1.5 | (0.1) | 2.3 | (2.0-2.7) | 118.7\* |
| MAOI SARI NaSSA NDRI or Other (Times prescribed) | -- | -- | 1.4 | (1.3-1.5) | 80.2\* |
| SNRI (Yes/no) | 0.6 | (0.0) | 2.5 | (2.0-3.1) | 65.2\* |
| SNRI (Times prescribed) | -- | -- | 1.4 | (1.3-1.6) | 48.3\* |
| SSRI (Yes/no) | 3.5 | (0.1) | 2.7 | (2.5-3.0) | 451.9\* |
| SSRI (Times prescribed) | -- | -- | 1.5 | (1.4-1.5) | 359.6\* |
| TCAs (Yes/no) | 1.1 | (0.0) | 1.4 | (1.1-1.8) | 9.3\* |
| TCAs (Times prescribed) | -- | -- | 1.1 | (1.0-1.3) | 2.2 |
| Sedative-Hypnotic (Yes/no) | 4.6 | (0.1) | 1.7 | (1.6-1.9) | 113.3\* |
| Sedative-Hypnotic (Times prescribed) | -- | -- | 1.3 | (1.3-1.4) | 103.6\* |
| Benzodiazepines (Yes/no) | 0.4 | (0.0) | 2.6 | (2.0-3.4) | 49.0\* |
| Benzodiazepines (Times prescribed) | -- | -- | 1.9 | (1.6-2.2) | 60.4\* |
| Antidepressant Type (Yes/no) | 1.3 | (0.1) | 2.5 | (2.2-2.9) | 152.2\* |
| Antidepressant Type (Times prescribed) | -- | -- | 1.5 | (1.4-1.6) | 102.4\* |
| Others (Yes/no) | 4.4 | (0.1) | 1.7 | (1.5-1.9) | 100.2\* |
| Others (Times prescribed) | -- | -- | 1.3 | (1.2-1.4) | 80.7\* |
| CNS Stimulant - Armodafinil/Modafinil (Yes/no) | 0.1 | (0.0) | 1.2 | (0.5-2.7) | 0.2 |
| CNS Stimulant - Armodafinil/Modafinil (Times prescribed) | -- | -- | 1.1 | (0.7-1.6) | 0.1 |
| ADHD Therapy (Yes/no) | 0.5 | (0.0) | 1.6 | (1.2-2.2) | 10.5\* |
| ADHD Therapy (Times prescribed) | -- | -- | 1.1 | (1.0-1.3) | 3.0 |
| Chemical Dependency |  |  |  |  |  |
| Narcotic or Alcohol Treatment Agents (Yes/no) | 0.1 | (0.0) | 4.4 | (3.1-6.2) | 69.4\* |
| Narcotic or Alcohol Treatment Agents (Times prescribed) | -- | -- | 2.0 | (1.7-2.5) | 54.6\* |
| Smoking Deterrents and Combinations (Yes/no) | 1.8 | (0.1) | 1.1 | (0.9-1.3) | 1.1 |
| Smoking Deterrents and Combinations (Times prescribed) | -- | -- | 1.0 | (1.0-1.1) | 0.7 |
| Migraine Therapy (Yes/no) | 1.6 | (0.1) | 1.4 | (1.2-1.7) | 13.8\* |
| Migraine Therapy (Times prescribed) | -- | -- | 1.1 | (0.9-1.2) | 0.8 |
| Serotonin Agonists (Yes/no) | 1.0 | (0.0) | 1.3 | (1.0-1.6) | 4.7\* |
| Serotonin Agonists (Times prescribed) | -- | -- | 1.0 | (0.9-1.2) | 0.0 |
| All other (Yes/no) | 0.8 | (0.0) | 1.4 | (1.1-1.8) | 7.2\* |
| All other (Times prescribed) | -- | -- | 1.1 | (0.9-1.3) | 1.2 |
| Anticonvulsant (Yes/no) | 0.6 | (0.0) | 2.3 | (1.8-2.9) | 50.5\* |
| Anticonvulsant (Times prescribed) | -- | -- | 1.4 | (1.3-1.6) | 41.8\* |
| Antipsychotics (Neuroleptics) (Yes/no) | 0.9 | (0.0) | 4.1 | (3.6-4.7) | 384.7\* |
| Antipsychotics (Neuroleptics) (Times prescribed) | -- | -- | 1.8 | (1.7-1.9) | 347.9\* |
| Bipolar medication(Yes/no) | 1.3 | (0.1) | 2.8 | (2.4-3.2) | 188.0\* |
| Bipolar medication (Times prescribed) | -- | -- | 1.5 | (1.4-1.6) | 191.8\* |
| Bipolar Therapy Agents prescribed (Yes/no) | 0.2 | (0.0) | 3.1 | (2.3-4.2) | 51.5\* |
| Bipolar Therapy Agents prescribed (Times prescribed) | -- | -- | 1.5 | (1.3-1.8) | 33.1\* |
| Eating Disorder Therapy (Yes/no) | 0.0 | (0.0) | 1.8 | (0.2-12.6) | 0.3 |
| Eating Disorder Therapy (Times prescribed) | -- | -- | 1.7 | (0.8-3.5) | 2.1 |
| Cognitive Disorder Therapy (Yes/no) | 0.0 | (0.0) | 6.4 | (1.6-25.6) | 6.9\* |
| Cognitive Disorder Therapy (Times prescribed) | -- | -- | 1.3 | (0.6-2.9) | 0.4 |
| PTSD Therapy - Prazosin (Yes/no) | 0.2 | (0.0) | 3.5 | (2.6-4.6) | 68.2\* |
| PTSD Therapy – Prazosin (Times prescribed) | -- | -- | 1.7 | (1.5-1.9) | 60.8\* |
| Antianxiety and Anticonvulsant Agent – Benzodiazepines (Yes/no) | 0.6 | (0.0) | 3.6 | (3.0-4.4) | 183.9\* |
| Antianxiety and Anticonvulsant Agent – Benzodiazepines (Times prescribed) | -- | -- | 1.7 | (1.6-1.8) | 184.4\* |
| Sedative-Hypnotic and Anticonvulsant Agent – Barbiturates (Yes/no) | 0.0 | (0.0) | 15.3 | (2.1-109.1) | 7.4\* |
| Sedative-Hypnotic and Anticonvulsant Agent – Barbiturates (Times prescribed) | -- | -- | 15.3 | (2.1-109.1) | 7.4\* |
| Dermatological - Isotretinoin (Yes/no) | 0.1 | (0.0) | 1.6 | (0.8-3.5) | 1.7 |
| Dermatological – Isotretinoin (Times prescribed) | -- | -- | 1.2 | (0.9-1.6) | 2.2 |
| ACE Inhibitors (Yes/no) | 1.9 | (0.1) | 0.5 | (0.4-0.7) | 23.6\* |
| ACE Inhibitors (Times prescribed) | -- | -- | 0.7 | (0.6-0.8) | 26.4\* |
| Angiotensin II Receptor Blockers (Yes/no) | 0.3 | (0.0) | 0.6 | (0.3-1.1) | 3.2 |
| Angiotensin II Receptor Blockers (Times prescribed) | -- | -- | 0.7 | (0.5-0.9) | 5.8\* |
| Angiotensin II Receptor Blockers Combinations (Yes/no) | 0.2 | (0.0) | 0.6 | (0.3-1.4) | 1.5 |
| Angiotensin II Receptor Blockers Combinations (Times prescribed) | -- | -- | 0.7 | (0.5-1.1) | 2.6 |
| Migraine Therapy and Analgesic - Non-Narcotic - NSAID Analgesics (Yes/no) | -- | -- | -- | -- | -- |
| Migraine Therapy and Analgesic - Non-Narcotic - NSAID Analgesics (Times prescribed) | -- | -- | -- | -- | -- |
| Other Medication (Yes/no) | 62.6 | (0.2) | 1.4 | (1.3-1.5) | 139.0\* |
| Other Medication (Times prescribed) | -- | -- | 1.1 | (1.1-1.2) | 163.8\* |
| Any medication (Yes/no) | 72.9 | (0.2) | 1.5 | (1.4-1.6) | 151.5\* |
| Any medication (Times prescribed) | -- | -- | 1.2 | (1.2-1.2) | 223.5\* |
|  |  |  |  |  |  |

Abbreviations: NSAID, nonsteroidal anti-inflammatory drug; GABA, gamma-aminobutyric acid; MAOI, monoamine oxidase inhibitor; SARI, serotonin antagonist and reuptake inhibitor; NaSSA, noradrenergic and specific serotonergic antidepressants; NDRI, norepinephrine-dopamine reuptake inhibitor; SNRI, serotonin–norepinephrine reuptake inhibitor; SSRI, selective serotonin reuptake inhibitor; TCA, tricyclic antidepressant; CNS, central nervous system; ADHD, attention deficit-hyperactivity disorder; PTSD, posttraumatic stress disorder; ACE, angiotensin-converting-enzyme.

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

aBased on a series of multivariate discrete-time (person-month) survival models each examining the association of one medication variable controlling for the core variables in Appendix Table 8. If no odds ratio is provided for a particular independent variable, the independent variable was too rare to generate a stable estimate (i.e., less than 5 cases of the independent variable being associated with the outcome). Independent variables representing times prescribed were categorically coded 0-4 (0=None, 1=1-30, 2=31-60, 3=61-90, 4=91+).Due to space limitations, the distributions and standard errors of count variables are not presented. For a list of medications included in each of the above medication variables see Appendix Table 5.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Appendix Table 14. Predicting first accusation of non-familial major physical violent crime perpetration among men with core and contextual variablesa** | | | | | |
|  | **%** | **(se)** | **OR** | **(95% CI)** | **2** |
| Number of months in current duty unit | -- | -- | 1.0 | (1.0-1.0) | 61.2\* |
| Duty unit different than assigned unit (Yes/no) | 1.4 | (0.1) | 0.1 | (0.1-0.2) | 40.0\* |
| Number of months in the past 12 where duty unit differed from assigned unit2 | -- | -- | 0.7 | (0.6-0.7) | 71.5\* |
| In the past 12 months, duty unit differed from assigned unit (Yes/no) | 4.4 | (0.1) | 0.2 | (0.1-0.2) | 126.9\* |
| Number of different duty units over past 12 months | -- | -- | 1.2 | (1.2-1.2) | 146.2\* |
| Percentage of combat deaths for duty units over past 12 months | -- | -- | 1.2 | (1.1-1.3) | 18.7\* |
| Percentage of suicidal deaths for duty units over past 12 months | -- | -- | 1.2 | (0.8-1.8) | 0.4 |
| Unit(s) over past 3 months |  |  |  |  |  |
| Median months in the Army all NCOs (E5-9) in unit(s) | -- | -- | 1.0 | (1.0-1.0) | 492.5\* |
| Median months in the Army all officers (WO/CO) in unit(s) | -- | -- | 1.0 | (1.0-1.0) | 581.9\* |
| Median months ever deployed of all NCOs (E5-9) in unit(s) | -- | -- | 1.0 | (1.0-1.1) | 360.8\* |
| Median months ever deployed of all officers (WO/CO ) in unit(s) | -- | -- | 1.0 | (1.0-1.0) | 13.68\* |
| Median months all lower enlisted soldiers (E1-E4) have been on duty in this unit | -- | -- | 1.0 | (1.0-1.0) | 38.5\* |
| Median months all higher enlisted soldiers (E5-E9) have been on duty in this unit | -- | -- | 1.0 | (1.0-1.0) | 41.6\* |
| Median months all officers (CO/WO) have been on duty in this unit | -- | -- | 1.0 | (1.0-1.0) | 45.1\* |
| Unit(s) over past 12 months |  |  |  |  |  |
| Median months in the Army all NCOs (E5-9) in unit(s) | -- | -- | 1.0 | (1.0-1.0) | 492.1\* |
| Median months in the Army all officers (WO/CO) in unit(s) | -- | -- | 1.0 | (1.0-1.0) | 553.0\* |
| Median months ever deployed of all NCOs (E5-9) in unit(s) | -- | -- | 1.1 | (1.1-1.1) | 600.98 |
| Median months ever deployed of all officers (WO/CO ) in unit(s) | -- | -- | 1.0 | (1.0-1.0) | 157.9\* |
| Median months all lower enlisted soldiers (E1-E4) have been on duty in this unit | -- | -- | 1.0 | (1.0-1.0) | 184.3\* |
| Median months all higher enlisted soldiers (E5-E9) have been on duty in this unit | -- | -- | 1.0 | (1.0-1.0) | 80.2\* |
| Median months all officers (CO/WO) have been on duty in this unit | -- | -- | 1.0 | (1.0-1.0) | 1.4 |
| Weapons registered in the last four years, not counting current month |  |  |  |  |  |
| All guns, including pistols, shotguns and rifles |  |  |  |  |  |
| Count | -- | -- | 0.9 | (0.9-0.9) | 19.0\* |
| Yes/no | 4.6 | (0.1) | 0.8 | (0.7-0.9) | 11.7\* |
| All pistols |  |  |  |  |  |
| Count | -- | -- | 0.9 | (0.8-1.0) | 4.8\* |
| Yes/no | 3.0 | (0.1) | 0.9 | (0.7-1.0) | 3.1 |
| All rifles |  |  |  |  |  |
| Count | -- | -- | 0.8 | (0.7-0.9) | 19.1\* |
| Yes/no | 2.4 | (0.1) | 0.5 | (0.4-0.7) | 25.9\* |
| All shotguns |  |  |  |  |  |
| Count | -- | -- | 0.7 | (0.6-0.8) | 19.8\* |
| Yes/no | 1.8 | (0.1) | 0.5 | (0.4-0.7) | 19.9\* |
| All knives |  |  |  |  |  |
| Count2 | -- | -- | 0.0 | -- | 0.0 |
| Yes/no | 0.0 | (0.0) | 0.0 | -- | 0.0 |
| All swords |  |  |  |  |  |
| Count | -- | -- | -- | -- | 0.0 |
| Yes/no | 0.0 | (0.0) | -- | -- | 0.0 |
| All bows |  |  |  |  |  |
| Count | -- | -- | 0.6 | (0.3-1.2) | 1.9 |
| Yes/no | 0.2 | (0.0) | 0.5 | (0.2-1.1) | 2.9 |
| All other weapons not in other weapon classes |  |  |  |  |  |
| Count2 | -- | -- | 0.7 | (0.4-1.2) | 1.4 |
| Yes/no | 0.2 | (0.0) | 0.7 | (0.3-1.5) | 0.7 |
| All weapons |  |  |  |  |  |
| Count | -- | -- | 0.9 | (0.9-0.9) | 19.4\* |
| Yes/no | 4.7 | (0.1) | 0.8 | (0.7-0.9) | 12.0\* |
|  |  |  |  |  |  |

Abbreviations: NCO, non-commissioned officer; WO, warrant officer; CO, commissioned officer.

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

aBased on a series of multivariate discrete-time (person-month) survival models each examining the association of one contextual factor variable controlling for the core variables in Appendix Table 8. If no odds ratio is provided for a particular independent variable, the independent variable was too rare to generate a stable estimate (i.e., less than 5 cases of the independent variable being associated with the outcome). Due to space limitations, the distributions and standard errors of count variables are not presented.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Appendix Table 15. Predicting first accusation of non-familial major physical violent crime perpetration among women with core variablesa** | | | | |
|  |  |  |  |  |
|  | **%** | **(se)** | **OR** | **(95% CI)** |
| Year of Observation |  |  |  |  |
| 2005 | 16.4 | (0.6) | 1.2 | (0.8-1.7) |
| 2006 | 16.2 | (0.6) | 1.2 | (0.8-1.7) |
| 2007 | 16.4 | (0.6) | 1.6 | (1.2-2.3) |
| 2008 | 16.8 | (0.6) | 1.4 | (1.0-2.0) |
| 2009 | 17.2 | (0.6) | 1.3 | (0.9-1.9) |
| 2004 (reference) | 17.1 | (0.6) | -- | -- |
| 25 |  | | 10.0 | |
| Season of Observation |  |  |  |  |
| Spring | 25.1 | (0.7) | 1.0 | (0.7-1.3) |
| Summer | 24.9 | (0.7) | 1.0 | (0.8-1.3) |
| Fall | 25.2 | (0.7) | 0.9 | (0.7-1.2) |
| Winter (reference) | 24.8 | (0.7) | -- | -- |
| 23 |  | | 1.3 | |
|  |  |  |  |  |

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

aBased on a multivariate discrete-time (person-month) survival model.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Appendix Table 16. Predicting first accusation of non-familial major physical violent crime perpetration among women with core and socio-demographic variablesa** | | | | |
|  |  |  |  |  |
|  | **%** | **(se)** | **OR** | **(95% CI)** |
| Age |  |  |  |  |
| 17-19 | 7.9 | (0.4) | 2.1 | (1.5-2.9) |
| 20-22 | 19.9 | (0.6) | 2.5 | (2.0-3.1) |
| 23+ (reference) | 72.2 | (0.7) | -- | -- |
| 22 |  | | 75.3\* | |
| Marital status |  |  |  |  |
| Currently Married (reference) | 39.3 | (0.8) | -- | -- |
| Previously Married | 7.9 | (0.4) | 0.6 | (0.3-0.9) |
| Never Married | 52.9 | (0.8) | 1.1 | (0.9-1.4) |
| 22 |  | | 8.3\* | |
| Race |  |  |  |  |
| Asian | 4.8 | (0.3) | 1.0 | (0.5-1.9) |
| Non-Hispanic Black | 37.8 | (0.8) | 3.2 | (2.5-4.1) |
| Hispanic | 12.1 | (0.5) | 1.8 | (1.2-2.5) |
| Other | 2.4 | (0.2) | 0.6 | (0.2-1.9) |
| Non-Hispanic White (reference) | 42.8 | (0.8) | -- | -- |
| 24 |  | | 105.9\* | |
| Religious affiliation |  |  |  |  |
| Catholic | 20.9 | (0.6) | 0.5 | (0.4-0.7) |
| Other Christian sub-groups (reference) | 58.7 | (0.8) | -- | -- |
| Other Religions | 1.7 | (0.2) | 0.8 | (0.4-1.8) |
| None/Unknown | 18.7 | (0.6) | 1.1 | (0.8-1.4) |
| 23 |  | | 18.3\* | |
| Number of dependents |  |  |  |  |
| 0 | 41.5 | (0.8) | 1.0 | (0.8-1.4) |
| 1-2 | 40.6 | (0.8) | 1.2 | (0.9-1.6) |
| 3+ (reference) | 17.9 | (0.6) | -- | -- |
| 22 |  | | 1.6 | |
| Education level |  |  |  |  |
| Did not complete high school | 7.4 | (0.4) | 6.1 | (4.0-9.3) |
| High school graduate | 61.5 | (0.8) | 4.3 | (3.1-6.1) |
| Some college completed/college graduate (reference) | 31.1 | (0.7) | -- | -- |
| 22 |  | | 80.7\* | |
|  |  |  |  |  |

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

a Based on a series of multivariate discrete-time (person-month) survival models each examining the association of one demographic variable controlling for the core variables in Appendix Table 15.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Appendix Table 17. Predicting first accusation of non-familial major physical violent crime perpetration among women with core and Army career variablesa** | | | | |
|  |  |  |  |  |
|  | **%** | **(se)** | **OR** | **(95% CI)** |
| Age of enlistment |  |  |  |  |
| 17-19 | 43.4 | (0.8) | 2.3 | (1.7-3.1) |
| 20-21 | 18.3 | (0.6) | 2.0 | (1.4-2.8) |
| 27+ | 11.3 | (0.5) | 0.9 | (0.5-1.4) |
| 22-26 (reference) | 27.1 | (0.7) | -- | -- |
| 23 |  | | 48.1\* | |
| Duty Military Occupational Specialty |  |  |  |  |
| Basic training | 6.8 | (0.4) | 0.2 | (0.1-0.5) |
| Non-job | 1.0 | (0.2) | 0.5 | (0.1-1.9) |
| On duty (reference) | 92.1 | (0.4) | -- | -- |
| 22 |  | | 14.5\* | |
| Military Occupational Specialty - Infantry |  |  |  |  |
| Yes | 0.4 | (0.1) | 0.0 | (0.0-0.0) |
| No (reference) | 99.6 | (0.1) | -- | -- |
| 21 |  | | 0.0\* | |
| Deployment |  |  |  |  |
| Currently in 1st deployment | 10.2 | (0.5) | 0.4 | (0.3-0.6) |
| Currently in 2nd | 4.3 | (0.3) | 0.1 | (0.0-0.4) |
| Currently in 3rd (or higher) | 1.3 | (0.2) | 0.2 | (0.0-1.1) |
| Previously deployed once | 21.9 | (0.6) | 0.8 | (0.6-1.0) |
| Previously deployed twice | 6.1 | (0.4) | 1.1 | (0.7-1.6) |
| Previously deployed three or more times | 1.0 | (0.2) | 0.9 | (0.4-2.3) |
| Never Deployed (reference) | 55.1 | (0.8) | -- | -- |
| 26 |  | | 31.7\* | |
| Command |  |  |  |  |
| FORSCOM | 40.4 | (0.8) | 2.3 | (1.6-3.5) |
| TRADOC | 15.0 | (0.6) | 1.0 | (0.6-1.7) |
| N/S America, Europe/Central/Africa, Pacific | 16.9 | (0.6) | 2.2 | (1.4-3.4) |
| Special Ops | 1.2 | (0.2) | 1.1 | (0.3-3.6) |
| MEDCOM | 14.2 | (0.5) | 0.8 | (0.5-1.4) |
| AMC/Other/Unknown (reference) | 12.3 | (0.5) | -- | -- |
| 25 |  | | 56.2\* | |
| Rank |  |  |  |  |
| Junior enlisted (E1-E4) | 47.9 | (0.8) | 9.8 | (5.5-17.4) |
| Intermediate enlisted (E5-E6) | 25.9 | (0.7) | 4.2 | (2.3-7.7) |
| Senior enlisted (E7-E9) | 8.3 | (0.4) | 1.1 | (0.4-2.9) |
| Officer (reference) | 18.0 | (0.6) | -- | -- |
| 23 |  | | 116.6\* | |
| Years-in-service |  |  |  |  |
| 0-1 | 13.8 | (0.5) | 7.6 | (1.8-31.3) |
| 1-2 | 12.0 | (0.5) | 15.6 | (3.8-63.5) |
| 2-3 | 10.6 | (0.5) | 13.9 | (3.4-56.7) |
| 3-4 | 9.4 | (0.5) | 11.0 | (2.7-45.5) |
| 4-5 | 7.9 | (0.4) | 10.8 | (2.6-44.8) |
| 5-10 | 22.0 | (0.6) | 7.0 | (1.7-28.5) |
| 10-20 | 20.0 | (0.6) | 4.0 | (1.0-16.6) |
| 20+ (reference) | 4.3 | (0.3) | -- | -- |
| 26 |  | | 79.0\* | |
| AFQT Score 0 - 49 percentile |  |  |  |  |
| Yes | 33.3 | (0.7) | 2.1 | (1.7-2.5) |
| No (reference) | 66.7 | (0.7) | -- | -- |
| 21 |  | | 52.2\* | |
| Last demotion occurred within 12 months | | |  |  |
| Yes | 2.3 | (0.2) | 5.1 | (3.8-7.0) |
| No (reference) | 97.7 | (0.2) | -- | -- |
| 21 |  | | 104.3\* | |
|  |  |  |  |  |

Abbreviations: FORSCOM, forces command; TRADOC, training and doctrine command; N/S, North/South; MEDCOM, medical command; AMC, Army material command; AFQT, armed forces qualification test.

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

aBased on a series of multivariate discrete-time (person-month) survival models each examining the association of one Army career variable controlling for the core variables in Appendix Table 15.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Appendix Table 18. Predicting first accusation of non-familial major physical violent crime perpetration among women with core and prior crime variablesa** | | | | | |
|  |  |  |  |  |  |
|  | **%** | **(se)** | **OR** | **(95% CI)** | **2** |
| Perpetrator in past 12 months of |  |  |  |  |  |
| Familial major physical violence (Count) | -- | -- | 7.8 | (4.4-13.8) | 48.5\* |
| Familial major physical violence (Yes/no) | 0.4 | (0.1) | 7.8 | (4.4-13.9) | 48.5\* |
| Minor physical violence (Count) | -- | -- | 7.3 | (5.0-10.6) | 110.4\* |
| Minor physical violence (Yes/no) | 0.6 | (0.1) | 8.6 | (5.4-13.7) | 83.2\* |
| Verbal violence (Count) | -- | -- | 52.4 | (22.9-119.8) | 88.0\* |
| Verbal violence (Yes/no) | 0.0 | (0.0) | 46.3 | (18.4-116.5) | 66.4\* |
| Major sexual violence (Count) | -- | -- | -- | -- | -- |
| Major sexual violence (Yes/no) | -- | -- | -- | -- | -- |
| Non-violent reckless endangerment (Count) | -- | -- | 3.5 | (1.3-9.5) | 6.3\* |
| Non-violent reckless endangerment (Yes/no) | 0.3 | (0.1) | 3.5 | (1.3-9.5) | 6.3\* |
| Non-violent possession or use of illegal substance (Count) | -- | -- | 3.8 | (2.7-5.2) | 64.9\* |
| Non-violent possession or use of illegal substance (Yes/no) | 0.4 | (0.1) | 9.3 | (5.5-15.6) | 70.7\* |
| Non-violent weapon offense (Count) | -- | -- | 0.0 | -- | 0.0 |
| Non-violent weapon offense (Yes/no) | 0.0 | (0.0) | 0.0 | -- | 0.0 |
| Non-violent drunkenness/vagrancy/disorderly crime (Count) | -- | -- | 7.3 | (3.6-14.8) | 30.8\* |
| Non-violent drunkenness/vagrancy/disorderly crime (Yes/no) | 0.3 | (0.1) | 6.4 | (3.0-13.6) | 23.5\* |
| Non-violent crime in past 12 months (Count) | -- | -- | 1.5 | (1.4-1.7) | 61.3\* |
| Other non-violent crime (Yes/no) | 3.8 | (0.3) | 3.5 | (2.6-4.7) | 66.0\* |
| Any crime (Count of each type of perpetration) | -- | -- | 2.7 | (2.3-3.0) | 194.6\* |
| Any crime (Yes/no) | 4.9 | (0.3) | 4.8 | (3.8-6.2) | 157.1\* |
| Victim in past 12 months of |  |  |  |  |  |
| Major physical violence (Count) | -- | -- | 2.2 | (1.8-2.6) | 62.9\* |
| Major physical violence (Yes/no) | 0.7 | (0.1) | 8.6 | (5.7-13.0) | 103.2\* |
| Minor physical violence (Count) | -- | -- | 2.6 | (2.0-3.3) | 56.6\* |
| Minor physical violence (Yes/no) | 0.6 | (0.1) | 7.9 | (5.0-12.4) | 78.8\* |
| Verbal violence (Count) | -- | -- | 2.0 | (1.2-3.4) | 8.0\* |
| Verbal violence (Yes/no) | 0.4 | (0.1) | 5.1 | (2.5-10.4) | 20.8\* |
| Major sexual violence (Count) | -- | -- | 1.5 | (1.0-2.2) | 4.3\* |
| Major sexual violence (Yes/no) | 1.2 | (0.2) | 2.5 | (1.4-4.5) | 9.9\* |
| Non-violent crime (Count) | -- | -- | 1.9 | (1.5-2.4) | 24.4\* |
| Non-violent crime (Yes/no) | 2.6 | (0.2) | 2.7 | (1.9-4.0) | 25.9\* |
| Any crime (Count of each type of victimization) | -- | -- | 2.3 | (2.0-2.6) | 123.1\* |
| Any crime (Yes/no) | 4.5 | (0.3) | 4.3 | (3.3-5.5) | 116.6\* |
| Perpetrator in past 24 months of |  |  |  |  |  |
| Familial major physical violence (Count) | -- | -- | 6.2 | (3.7-10.6) | 45.1\* |
| Familial major physical violence (Yes/no) | 0.6 | (0.1) | 5.8 | (3.3-10.2) | 38.5\* |
| Minor physical violence (Count) | -- | -- | 5.0 | (3.6-7.1) | 87.8\* |
| Minor physical violence (Yes/no) | 1.1 | (0.2) | 5.5 | (3.6-8.3) | 63.7\* |
| Verbal violence (Count) | -- | -- | 5.9 | (3.3-10.4) | 37.2\* |
| Verbal violence (Yes/no) | 0.1 | (0.0) | 20.1 | (8.8-46.1) | 50.5\* |
| Major sexual violence (Count) | -- | -- | -- | -- | -- |
| Major sexual violence (Yes/no) | -- | -- | -- | -- | -- |
| Non-violent reckless endangerment (Count) | -- | -- | 3.7 | (1.7-8.3) | 10.1\* |
| Non-violent reckless endangerment (Yes/no) | 0.4 | (0.1) | 3.7 | (1.7-8.3) | 10.1\* |
| Non-violent possession or use of illegal substance (Count) | -- | -- | 3.7 | (2.7-5.0) | 68.1\* |
| Non-violent possession or use of illegal substance (Yes/no) | 0.6 | (0.1) | 8.1 | (5.0-13.0) | 74.1\* |
| Non-violent weapon offense (Count) | -- | -- | 12.3 | (1.7-89.2) | 6.1\* |
| Non-violent weapon offense (Yes/no) | 0.0 | (0.0) | 12.3 | (1.7-89.2) | 6.1\* |
| Non-violent drunkenness/vagrancy/disorderly crime (Count) | -- | -- | 5.6 | (3.5-9.0) | 50.6\* |
| Non-violent drunkenness/vagrancy/disorderly crime (Yes/no) | 0.3 | (0.1) | 8.6 | (4.6-16.1) | 44.4\* |
| Non-violent crime in past 12 months (Count) | -- | -- | 1.6 | (1.4-1.7) | 94.7\* |
| Other non-violent crime (Yes/no) | 5.3 | (0.3) | 3.9 | (3.1-5.1) | 110.5\* |
| Any crime (Count of each type of perpetration) | -- | -- | 2.6 | (2.3-2.9) | 245.9\* |
| Any crime (Yes/no) | 7.0 | (0.4) | 4.8 | (3.9-6.0) | 189.4\* |
| Victim in past 12 months of |  |  |  |  |  |
| Major physical violence (Count) | -- | -- | 2.1 | (1.8-2.5) | 64.5\* |
| Major physical violence (Yes/no) | 1.2 | (0.2) | 6.2 | (4.2-9.0) | 87.9\* |
| Minor physical violence (Count) | -- | -- | 2.6 | (2.1-3.3) | 71.1\* |
| Minor physical violence (Yes/no) | 0.9 | (0.2) | 6.6 | (4.4-9.9) | 81.2\* |
| Verbal violence (Count) | -- | -- | 2.7 | (1.9-3.8) | 29.7\* |
| Verbal violence (Yes/no) | 0.6 | (0.1) | 6.0 | (3.5-10.2) | 42.9\* |
| Major sexual violence (Count) | -- | -- | 1.5 | (1.1-2.2) | 6.7\* |
| Major sexual violence (Yes/no) | 1.6 | (0.2) | 2.4 | (1.4-3.9) | 11.5\* |
| Non-violent crime (Count) | -- | -- | 1.7 | (1.3-2.1) | 19.1\* |
| Non-violent crime (Yes/no) | 4.3 | (0.3 | 2.3 | (1.6-3.2) | 22.9\* |
| Any crime (Count of each type of victimization) | -- | -- | 2.1 | (1.8-2.4) | 126.5\* |
| Any crime (Yes/no) | 7.1 | (0.4) | 3.6 | (2.8-4.6) | 107.7\* |
| Positive drug test within 3 months | 0.2 | (0.1) | 10.8 | (5.4-21.9) | 43.9\* |
| Positive drug test within 12 months | 0.4 | (0.1) | 8.9 | (5.2-15.2) | 62.9\* |
|  |  |  |  |  |  |

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

aBased on a series of multivariate discrete-time (person-month) survival models each examining the association of one crime/drug variable controlling for the core variables in Appendix Table 15. If no odds ratio is provided for a particular independent variable, the independent variable was too rare to generate a stable estimate (i.e., less than 5 cases of the independent variable being associated with the outcome). Due to space limitations, the distributions and standard errors of count variables are not presented. For a list of NCRP offense codes included in each crime independent variable see Appendix Table 2.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Appendix Table 19. Predicting first accusation of non-familial major physical violent crime perpetration among women with core and clinical variables (inpatient admission and outpatient visit diagnoses)a** | | | | | |
|  |  |  |  |  |  |
|  | **%** | **(se)** | **OR** | **(95% CI)** | **2** |
| 1+ suicide attempts in past 12 months prior to current month (Yes/no) | 0.2 | (0.1) | 9.6 | (4.9-18.7) | 44.3\* |
| Any of the physical components of PULHES are 2 or higher (Yes/no) | 19.5 | (0.6) | 1.0 | (0.7-1.2) | 0.1 |
| Mental component of PULHES is 2 or higher (Yes/no) | 0.3 | (0.1) | 1.6 | (0.4-6.6) | 0.5 |
| Loss of an arm, hand, leg or foot in the past 12 months (Yes/no) | -- | -- | -- | -- | -- |
| 10 or more % of body burned in the past 12 months (Yes/no) | -- | -- | -- | -- | -- |
| 10 or more % of body severely burned in the past 12 months (Yes/no) | -- | -- | -- | -- | -- |
| Loss of vision in both eyes (369.0-369.4) in the past 12 months (Yes/no) | -- | -- | -- | -- | -- |
| Loss of hearing in the past 12 months (Yes/no) | 0.5 | (0.1) | 0.9 | (0.2-3.8) | 0.0 |
| Spinal injury in the past 12 months (Yes/no) | 0.1 | (0.0) | 0.0 | -- | 0.0 |
| Serious injury in the past 12 months (Yes/no) | 0.6 | (0.1) | 0.8 | (0.2-3.4) | 0.1 |
| Outpatient visits in the past 12 months, any diagnosis priority |  |  |  |  |  |
| ADHD (Count of visits) | -- | -- | 1.0 | (0.6-1.8) | 0.0 |
| ADHD (Yes/no) | 0.7 | (0.1) | 1.5 | (0.6-4.1) | 0.7 |
| Conduct/ODD (Count of visits) | -- | -- | 0.0 | -- | 0.0 |
| Conduct/ODD (Yes/no) | 0.1 | (0.0) | 0.0 | -- | 0.0 |
| Eating disorders (Count of visits) | -- | -- | 2.0 | (1.1-3.6) | 5.8\* |
| Eating disorders (Yes/no) | 0.2 | (0.1) | 3.0 | (0.7-12.1) | 2.4 |
| Sex disorders (Count of visits) | -- | -- | 0.0 | -- | 0.0 |
| Sex disorders (Yes/no) | 0.1 | (0.0) | 0.0 | -- | 0.0 |
| Other impulse (Count of visits) | -- | -- | 2.5 | (1.1-5.5) | 5.0\* |
| Other impulse (Yes/no) | 0.4 | (0.1) | 3.1 | (1.3-7.4) | 6.1\* |
| Any impulse (Count of visits) | -- | -- | 1.3 | (0.9-1.8) | 1.9 |
| Any impulse (Yes/no) | 1.4 | (0.2) | 1.9 | (1.0-3.5) | 3.8 |
| Adjustment disorder (Count of visits) | -- | -- | 1.8 | (1.5-2.1) | 55.6\* |
| Adjustment disorder (Yes/no) | 2.7 | (0.3) | 4.3 | (3.1-6.0) | 80.2\* |
| Stressors/adversities (Count of visits) | -- | -- | 1.6 | (1.4-1.8) | 55.6\* |
| Stressors/adversities (Yes/no) | 8.8 | (0.4) | 2.6 | (2.1-3.4) | 59.8\* |
| Marital problems (Count of visits) | -- | -- | 1.5 | (1.4-1.8) | 42.7\* |
| Marital problems (Yes/no) | 3.5 | (0.3) | 3.4 | (2.5-4.7) | 57.8\* |
| Traumatic stress (Count of visits) | -- | -- | 1.8 | (1.3-2.4) | 15.9\* |
| Traumatic stress (Yes/no) | 1.2 | (0.2) | 3.7 | (2.2-6.0) | 25.5\* |
| PTSD (Count of visits) | -- | -- | 1.3 | (1.0-1.6) | 3.7 |
| PTSD (Yes/no) | 1.2 | (0.2) | 2.6 | (1.4-4.6) | 10.2\* |
| Any stress (Count of visits) | -- | -- | 1.6 | (1.4-1.7) | 99.5\* |
| Any stress (Yes/no) | 13.1 | (0.5) | 3.0 | (2.5-3.8) | 104.3\* |
| Alcohol (Count of visits) | -- | -- | 1.8 | (1.6-2.0) | 74.4\* |
| Alcohol (Yes/no) | 1.6 | (0.2) | 5.2 | (3.6-7.5) | 78.4\* |
| Drug-induced mental illness (Count of visits) | -- | -- | 4.7 | (2.7-8.4) | 27.8\* |
| Drug-induced mental illness (Yes/no) | 0.2 | (0.1) | 8.9 | (4.4-18.1) | 36.7\* |
| Drug abuse without dependence (Count of visits) | -- | -- | 2.7 | (2.1-3.7) | 46.9\* |
| Drug abuse without dependence (Yes/no) | 0.4 | (0.1) | 7.9 | (4.3-14.4) | 45.1\* |
| Drug dependence (Count of visits) | -- | -- | 1.7 | (1.3-2.2) | 14.4\* |
| Drug dependence (Yes/no) | 0.2 | (0.1) | 9.1 | (4.3-19.3) | 32.7\* |
| Any substance (Count of visits) | -- | -- | 1.7 | (1.6-2.0) | 85.8\* |
| Any substance (Yes/no) | 2.1 | (0.2) | 5.5 | (4.0-7.7) | 107.4\* |
| Suicidal ideation (Count of visits) | -- | -- | 7.7 | (3.6-16.3) | 28.3\* |
| Suicidal ideation (Yes/no) | 0.2 | (0.1) | 6.6 | (2.9-14.8) | 20.7\* |
| Self-damaging behavior (Count of visits) | -- | -- | 0.0 | -- | 0.0 |
| Self-damaging behavior (Yes/no) | 0.1 | (0.1) | 0.0 | -- | 0.0 |
| Any suicide (Count of visits) | -- | -- | 4.9 | (2.3-10.5) | 17.5\* |
| Any suicide (Yes/no) | 0.4 | (0.1) | 4.2 | (1.9-9.5) | 12.2\* |
| Bipolar (Count of visits) | -- | -- | 1.3 | (0.9-1.9) | 2.6 |
| Bipolar (Yes/no) | 0.5 | (0.1) | 3.8 | (1.8-8.0) | 11.9\* |
| Non-affective psychosis (Count of visits) | -- | -- | 5.0 | (2.8-8.9) | 30.8\* |
| Non-affective psychosis (Yes/no) | 0.1 | (0.0) | 15.0 | (6.6-33.9) | 42.2\* |
| Organic mental disorders (Count of visits) | -- | -- | 1.3 | (0.8-2.2) | 1.0 |
| Organic mental disorders (Yes/no) | 0.4 | (0.1) | 2.7 | (1.0-7.3) | 3.9\* |
| Any bipolar (Bipolar/NAP/Organic) (Count of visits) | -- | -- | 1.5 | (1.1-1.9) | 8.5\* |
| Any bipolar (Bipolar/NAP/Organic) (Yes/no) | 0.9 | (0.2) | 4.6 | (2.8-7.7) | 35.4\* |
| Depression (Count of visits) | -- | -- | 1.5 | (1.4-1.7) | 55.5\* |
| Depression (Yes/no) | 9.1 | (0.4) | 2.6 | (2.0-3.3) | 59.2\* |
| Depressive psychosis (Count of visits) | -- | -- | 1.5 | (1.3-1.8) | 23.5\* |
| Depressive psychosis (Yes/no) | 2.3 | (0.2) | 2.7 | (1.8-4.1) | 22.4\* |
| Any depression (Count of visits) | -- | -- | 1.5 | (1.3-1.7) | 58.1\* |
| Any depression (Yes/no) | 9.9 | (0.5) | 2.5 | (2.0-3.2) | 58.2\* |
| Any sleep problems (Count of visits) | -- | -- | 1.4 | (1.1-1.7) | 9.4\* |
| Any sleep problems (Yes/no) | 8.2 | (0.4) | 1.6 | (1.2-2.2) | 10.0\* |
| Any TBI (Count of visits) | -- | -- | 1.4 | (0.9-2.3) | 1.8 |
| Any TBI (Yes/no) | 2.2 | (0.2) | 1.5 | (0.8-2.5) | 1.7 |
| Somatoform/dissociative disorders (Count of visits) | -- | -- | 1.1 | (0.7-2.0) | 0.2 |
| Somatoform/dissociative disorders (Yes/no) | 1.7 | (0.2) | 1.2 | (0.6-2.5) | 0.4 |
| Any pain (Seal or Sullivan) (Count of visits) | -- | -- | 1.0 | (1.0-1.1) | 1.0 |
| Any pain (Seal or Sullivan) (Yes/no) | 67.2 | (0.7) | 1.3 | (1.1-1.6) | 5.9\* |
| Any physical-related (insomnia, somatoform, TBI, pain) (Count of visits) | -- | -- | 1.0 | (1.0-1.1) | 1.0 |
| Any physical-related (insomnia, somatoform, TBI, pain) (Yes/no) | 68.5 | (0.7) | 1.4 | (1.1-1.7) | 6.9\* |
| Anxiety (Count of visits) | -- | -- | 1.5 | (1.3-1.7) | 31.8\* |
| Anxiety (Yes/no) | 6.8 | (0.4) | 2.2 | (1.7-3.0) | 30.1\* |
| Personality disorders (Count of visits) | -- | -- | 2.1 | (1.7-2.5) | 51.7\* |
| Personality disorders (Yes/no) | 0.7 | (0.1) | 5.2 | (3.0-9.1) | 34.1\* |
| Other disorders (Count of visits) | -- | -- | 2.0 | (1.5-2.7) | 20.5\* |
| Other disorders (Yes/no) | 1.1 | (0.2) | 3.7 | (2.3-6.2) | 26.3\* |
| Symptoms, signs and ill-defined conditions, mental (Count of visits) | -- | -- | 1.2 | (1.0-1.3) | 5.1\* |
| Symptoms, signs and ill-defined conditions, mental (Yes/no) | 19.8 | (0.6) | 1.4 | (1.1-1.8) | 9.7\* |
| Prior mental disorders (Count of visits) | -- | -- | 1.1 | (0.7-1.7) | 0.2 |
| Prior mental disorders (Yes/no) | 1.6 | (0.2) | 1.2 | (0.6-2.4) | 0.3 |
| Injury and poisoning (Count of visits) | -- | -- | 1.6 | (1.3-1.8) | 30.4\* |
| Injury and poisoning (Yes/no) | 19.3 | (0.6) | 1.7 | (1.4-2.1) | 23.8\* |
| Any physical (Count of visits) | -- | -- | 1.4 | (1.2-1.6) | 24.3\* |
| Any physical (Yes/no) | 98.3 | (0.2) | 2.1 | (0.7-6.5) | 1.6 |
| Any mental health diagnosis |  |  |  |  |  |
| Outpatient visits in the past month, any priority (Count of visits) | -- | -- | 1.5 | (1.3-1.7) | 22.8\* |
| Outpatient visits in the past month, any priority (Yes/no) | 11.2 | (0.5) | 1.9 | (1.5-2.5) | 27.2\* |
| Outpatient visits in the past 3 months, any priority (Count of visits) | -- | -- | 1.6 | (1.5-1.7) | 106.2\* |
| Outpatient visits in the past 3 months, any priority (Yes/no) | 22.0 | (0.6) | 2.4 | (1.9-2.9) | 69.4\* |
| Outpatient visits in the past 12 months, any priority (Count of visits) | -- | -- | 1.4 | (1.3-1.5) | 108.3\* |
| Outpatient visits in the past 12 months, any priority (Yes/no) | 41.3 | (0.8) | 2.3 | (1.9-2.8) | 64.6\* |
| Outpatient visits in the past month, primary diagnosis (Count of visits) | -- | -- | 1.5 | (1.3-1.8) | 22.7\* |
| Outpatient visits in the past month, primary diagnosis (Yes/no) | 9.3 | (0.5) | 2.0 | (1.6-2.6) | 27.8\* |
| Outpatient visits in the past 3 months, primary diagnosis (Count of visits) | -- | -- | 1.6 | (1.4-1.7) | 90.9\* |
| Outpatient visits in the past 3 months, primary diagnosis (Yes/no) | 18.0 | (0.6) | 2.4 | (1.9-2.9) | 64.8\* |
| Outpatient visits in the past 12 months, primary diagnosis (Count of visits) | -- | -- | 1.5 | (1.4-1.6) | 110.9\* |
| Outpatient visits in the past 12 months, primary diagnosis (Yes/no) | 34.8 | (0.7) | 2.5 | (2.0-3.0) | 79.0\* |
| Hospitalizations in the past 12 months, any diagnosis priority |  |  |  |  |  |
| ADHD (Count of days admitted) | -- | -- | 3.5 | (1.3-9.5) | 6.2\* |
| ADHD (Yes/no) | 0.0 | (0.0) | 12.5 | (1.7-90.9) | 6.2\* |
| Conduct/ODD (Count of days admitted) | -- | -- | -- | -- | -- |
| Conduct/ODD (Yes/no) | -- | -- | -- | -- | -- |
| Eating disorders (Count of days admitted) | -- | -- | -- | -- | -- |
| Eating disorders (Yes/no) | -- | -- | -- | -- | -- |
| Sex disorders (Count of days admitted) | -- | -- | 0.0 | -- | 0.0 |
| Sex disorders (Yes/no) | 0.0 | (0.0) | 0.0 | -- | 0.0 |
| Other impulse (Count of days admitted) | -- | -- | -- | -- | -- |
| Other impulse (Yes/no) | -- | -- | -- | -- | -- |
| Any impulse (Count of days admitted) | -- | -- | 3.3 | (1.2-9.1) | 5.1\* |
| Any impulse (Yes/no) | 0.0 | (0.0) | 6.1 | (0.8-43.5) | 3.2 |
| Adjustment disorder (Count of days admitted) | -- | -- | 5.5 | (4.0-7.6) | 107.3\* |
| Adjustment disorder (Yes/no) | 0.1 | (0.1) | 12.9 | (5.7-29.1) | 37.9\* |
| Stressors/adversities (Count of days admitted) | -- | -- | 5.1 | (3.8-6.8) | 114.8\* |
| Stressors/adversities (Yes/no) | 0.1 | (0.0) | 17.3 | (7.0-42.4) | 38.7\* |
| Marital problems (Count of days admitted) | -- | -- | 1.9 | (1.3-2.8) | 10.5\* |
| Marital problems (Yes/no) | 0.1 | (0.0) | 9.8 | (3.1-30.9) | 15.2\* |
| Traumatic stress (Count of days admitted) | -- | -- | 0.0 | -- | 0.0 |
| Traumatic stress (Yes/no) | 0.0 | (0.0) | 0.0 | -- | 0.0 |
| PTSD (Count of days admitted) | -- | -- | 1.3 | (0.8-2.3) | 1.2 |
| PTSD (Yes/no) | 0.1 | (0.1) | 2.1 | (0.3-14.7) | 0.5 |
| Any stress (Count of days admitted) | -- | -- | 2.2 | (1.8-2.6) | 65.8\* |
| Any stress (Yes/no) | 0.3 | (0.1) | 9.0 | (4.9-16.6) | 50.5\* |
| Alcohol (Count of days admitted) | -- | -- | 2.1 | (1.6-2.8) | 28.1\* |
| Alcohol (Yes/no) | 0.2 | (0.1) | 8.8 | (3.9-19.8) | 27.3\* |
| Drug-induced mental illness (Count of days admitted) | -- | -- | -- | -- | -- |
| Drug-induced mental illness (Yes/no) | -- | -- | -- | -- | -- |
| Drug abuse without dependence (Count of days admitted) | -- | -- | 1.8 | (1.0-2.9) | 4.5\* |
| Drug abuse without dependence (Yes/no) | 0.0 | (0.0) | 5.1 | (0.7-36.8) | 2.6 |
| Drug dependence (Count of days admitted) | -- | -- | -- | -- | -- |
| Drug dependence (Yes/no) | -- | -- | -- | -- | -- |
| Any substance (Count of days admitted) | -- | -- | 2.0 | (1.6-2.6) | 31.7\* |
| Any substance (Yes/no) | 0.2 | (0.1) | 8.1 | (3.8-17.2) | 29.2\* |
| Suicidal ideation (Count of days admitted) | -- | -- | 2.0 | (1.4-2.9) | 15.9\* |
| Suicidal ideation (Yes/no) | 0.1 | (0.0) | 10.6 | (3.3-33.4) | 16.1\* |
| Self-damaging behavior (Count of days admitted) | -- | -- | -- | -- | -- |
| Self-damaging behavior (Yes/no) | -- | -- | -- | -- | -- |
| Any suicide (Count of days admitted) | -- | -- | 2.0 | (1.4-2.9) | 15.9\* |
| Any suicide (Yes/no) | 0.1 | (0.0) | 10.6 | (3.3-33.4) | 16.1\* |
| Bipolar (Count of days admitted) | -- | -- | 1.5 | (1.0-2.4) | 3.9\* |
| Bipolar (Yes/no) | 0.1 | (0.1) | 3.6 | (0.9-14.4) | 3.1 |
| Non-affective psychosis (Count of days admitted) | -- | -- | 1.7 | (1.0-2.8) | 3.8 |
| Non-affective psychosis (Yes/no) | 0.0 | (0.0) | 4.8 | (0.7-34.9) | 2.4 |
| Organic mental disorders (Count of days admitted) | -- | -- | -- | -- | -- |
| Organic mental disorders (Yes/no) | -- | -- | -- | -- | -- |
| Any bipolar (Bipolar/NAP/Organic) (Count of days admitted) | -- | -- | 1.5 | (1.0-2.3) | 3.4 |
| Any bipolar (Bipolar/NAP/Organic) (Yes/no) | 0.2 | (0.1) | 3.1 | (0.8-12.4) | 2.4 |
| Depression (Count of days admitted) | -- | -- | 1.7 | (1.3-2.3) | 12.5\* |
| Depression (Yes/no) | 0.4 | (0.1) | 4.6 | (2.3-9.4) | 18.3\* |
| Depressive psychosis (Count of days admitted) | -- | -- | 2.3 | (1.9-2.8) | 61.5\* |
| Depressive psychosis (Yes/no) | 0.1 | (0.0) | 20.6 | (10.0-42.5) | 67.4\* |
| Any depression (Count of days admitted) | -- | -- | 2.0 | (1.6-2.4) | 51.8\* |
| Any depression (Yes/no) | 0.5 | (0.1) | 6.7 | (3.9-11.5) | 48.1\* |
| Any sleep problems (Count of days admitted) | -- | -- | 1.3 | (0.4-3.5) | 0.2 |
| Any sleep problems (Yes/no) | 0.0 | (0.0) | 5.5 | (0.8-39.3) | 2.8 |
| Any TBI (Count of days admitted) | -- | -- | 1.0 | (0.3-3.2) | 0.0 |
| Any TBI (Yes/no) | 0.1 | (0.0) | 2.3 | (0.3-16.5) | 0.7 |
| Somatoform/dissociative disorders (Count of days admitted) | -- | -- | -- | -- | -- |
| Somatoform/dissociative disorders (Yes/no) | -- | -- | -- | -- | -- |
| Any pain (Seal or Sullivan) (Count of days admitted) | -- | -- | 1.3 | (1.0-1.7) | 5.0\* |
| Any pain (Seal or Sullivan) (Yes/no) | 2.1 | (0.2) | 1.3 | (0.7-2.4) | 0.9 |
| Any physical-related (insomnia, somatoform, TBI, pain) (Count of days admitted) | -- | -- | 1.3 | (1.0-1.6) | 3.6 |
| Any physical-related (insomnia, somatoform, TBI, pain) (Yes/no) | 2.2 | (0.2) | 1.3 | (0.7-2.3) | 0.5 |
| Anxiety (Count of days admitted) | -- | -- | 1.5 | (1.0-2.2) | 4.6\* |
| Anxiety (Yes/no) | 0.2 | (0.1) | 3.4 | (1.1-10.8) | 4.5\* |
| Personality disorders (Count of days admitted) | -- | -- | 2.4 | (1.9-3.2) | 43.5\* |
| Personality disorders (Yes/no) | 0.0 | (0.0) | 46.7 | (18.6-117.6) | 66.6\* |
| Other disorders(Count of days admitted) | -- | -- | 0.0 | -- | 0.0 |
| Other disorders (Yes/no) | 0.0 | (0.0) | 0.0 | -- | 0.0 |
| Symptoms, signs and ill-defined conditions, mental (Count of days admitted) | -- | -- | 1.8 | (0.8-4.2) | 1.7 |
| Symptoms, signs and ill-defined conditions, mental (Yes/no) | 0.0 | (0.0) | 5.1 | (0.7-36.7) | 2.6 |
| Prior mental disorders (Count of days admitted) | -- | -- | -- | -- | -- |
| Prior mental disorders (Yes/no) | -- | -- | -- | -- | -- |
| Injury and poisoning (Count of days admitted) | -- | -- | 1.5 | (1.2-1.9) | 10.0\* |
| Injury and poisoning (Yes/no) | 0.5 | (0.1) | 4.2 | (2.1-8.1) | 17.7\* |
| Any physical(Count of days admitted) | -- | -- | 1.4 | (1.2-1.5) | 36.4\* |
| Any physical (Yes/no) | 11.0 | (0.5) | 1.8 | (1.4-2.4) | 21.4\* |
| Any mental health diagnosis |  |  |  |  |  |
| Hospitalizations in the past month, any priority (Count of days admitted) | -- | -- | 2.4 | (1.5-3.7) | 12.9\* |
| Hospitalizations in the past month, any priority (Yes/no) | 0.1 | (0.1) | 3.7 | (0.9-15.0) | 3.4 |
| Hospitalizations in the past 3 months, any priority (Count of days admitted) | -- | -- | 2.4 | (1.9-2.9) | 65.1\* |
| Hospitalizations in the past 3 months, any priority (Yes/no) | 0.4 | (0.1) | 8.2 | (4.6-14.6) | 50.6\* |
| Hospitalizations in the past 12 months, any priority (Count of days admitted) | -- | -- | 1.9 | (1.6-2.2) | 73.7\* |
| Hospitalizations in the past 12 months, any priority (Yes/no) | 1.3 | (0.2) | 4.7 | (3.1-7.2) | 53.4\* |
| Hospitalizations in the past month, primary diagnosis (Count of days admitted) | -- | -- | 2.4 | (1.6-3.8) | 14.9\* |
| Hospitalizations in the past month, primary diagnosis (Yes/no) | 0.0 | (0.0) | 8.0 | (2.0-33.0) | 8.4\* |
| Hospitalizations in the past 3 months, primary diagnosis(Count of days admitted) | -- | -- | 2.4 | (2.0-3.0) | 72.1\* |
| Hospitalizations in the past 3 months, primary diagnosis (Yes/no) | 0.1 | (0.1) | 18.5 | (10.1-34.0) | 89.2\* |
| Hospitalizations in the past 12 months, primary diagnosis (Count of days admitted) | -- | -- | 2.1 | (1.8-2.4) | 94.2\* |
| Hospitalizations in the past 12 months, primary diagnosis (Yes/no) | 0.6 | (0.1) | 9.7 | (6.1-15.2) | 94.9\* |
|  |  |  |  |  |  |

Abbreviations: ADHD, attention deficit-hyperactivity disorder; ODD, oppositional defiant disorder; PTSD, posttraumatic stress disorder; NAP, non-affective psychosis ; TBI, traumatic brain injury.

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

aBased on a series of multivariate discrete-time (person-month) survival models each examining the association of one medical history variable controlling for the core variables in Appendix Table 15.If no odds ratio is provided for a particular independent variable, the independent variable was too rare to generate a stable estimate (i.e., less than 5 cases of the independent variable being associated with the outcome). Independent variables representing count of outpatient visit and count of days admitted in the hospital were categorically coded 0-4 (0=0 visits/days; 1=1-2 visits/days; 2=3-5 visits/days; 3=6-10 visits/days; 4=11+ visits/days). Due to space limitations, the distributions and standard errors of count variables are not presented. For a list of ICD-10 diagnostic codes included in each of the above clinical variables see Appendix Table 4.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Appendix Table 20. Predicting first accusation of non-familial major physical violent crime perpetration among women with core and clinical variables (medication and polypharmacy)a** | | | | | |
|  |  |  |  |  |  |
|  | **%** | **(se)** | **OR** | **(95% CI)** | **2** |
| Flag of four or more narcotic or psychotropic medications in 3-month period in the past 3 months | 4.3 | (0.3) | 2.0 | (1.4-2.8) | 13.7\* |
| Flag of four or more narcotic or psychotropic medications in 3-month period in the past 12 months | 8.6 | (0.4) | 1.5 | (1.1-2.1) | 8.0\* |
| Non-narcotic and Narcotic pain relievers prescribed in past 12 months |  |  |  |  |  |
| Analgesic - Non-Narcotic (Yes/no) | 69.3 | (0.7) | 1.4 | (1.1-1.8) | 8.9\* |
| Analgesic - Non-Narcotic (Times prescribed) | -- | -- | 1.2 | (1.1-1.3) | 12.2\* |
| Analgesic or Antipyretic Non-Narcotic and Combinations (Yes/no) | 28.1 | (0.7) | 1.7 | (1.4-2.1) | 29.6\* |
| Analgesic or Antipyretic Non-Narcotic and Combinations (Times prescribed) | -- | -- | 1.3 | (1.2-1.5) | 25.0\* |
| NSAID Analgesics (Yes/no) | 64.8 | (0.7) | 1.3 | (1.1-1.7) | 6.5\* |
| NSAID Analgesics(Times prescribed) | -- | -- | 1.1 | (1.0-1.2) | 6.9\* |
| Salicylate Analgesic and Salicylate Combinations (Yes/no) | 1.6 | (0.2) | 0.6 | (0.2-1.6) | 1.0 |
| Salicylate Analgesic and Salicylate Combinations (Times prescribed) | -- | -- | 0.6 | (0.3-1.3) | 1.7 |
| Analgesic – Narcotic (Yes/no) | 38.0 | (0.8) | 1.4 | (1.2-1.7) | 11.8\* |
| Analgesic – Narcotic (Times prescribed) | -- | -- | 1.2 | (1.1-1.3) | 14.6\* |
| Long-acting (Yes/no) | 0.4 | (0.1) | 0.7 | (0.1-4.7) | 0.2 |
| Long-acting (Times prescribed) | -- | -- | 0.6 | (0.2-2.4) | 0.5 |
| Short-acting Schedule II (Yes/no) | 23.0 | (0.7) | 1.3 | (1.0-1.6) | 5.4\* |
| Short-acting Schedule II (Times prescribed) | -- | -- | 1.2 | (1.1-1.4) | 9.3\* |
| Short-acting not Schedule II (Yes/no) | 25.1 | (0.7) | 1.5 | (1.2-1.8) | 12.6\* |
| Short-acting not Schedule II (Times prescribed) | -- | -- | 1.2 | (1.1-1.4) | 15.7\* |
| Psychotropic medications prescribed in past 12 months |  |  |  |  |  |
| Antianxiety Agent (Yes/no) | 9.5 | (0.5) | 1.3 | (1.0-1.7) | 2.7 |
| Antianxiety Agent (Times prescribed) | -- | -- | 1.1 | (1.0-1.4) | 2.0 |
| Antihistamine Type (Yes/no) | 3.5 | (0.3) | 1.5 | (0.9-2.3) | 2.8 |
| Antihistamine Type (Times prescribed) | -- | -- | 1.2 | (0.8-1.7) | 0.9 |
| Benzodiazepines (Yes/no) | 4.9 | (0.3) | 1.4 | (0.9-2.0) | 2.6 |
| Benzodiazepines (Times prescribed) | -- | -- | 1.3 | (1.0-1.6) | 4.6\* |
| Non-Benzodiazepine (Yes/no) | 0.2 | (0.1) | 3.7 | (0.9-14.8) | 3.3 |
| Non-Benzodiazepine (Times prescribed) | -- | -- | 4.4 | (2.2-9.0) | 17.0\* |
| GABA Analog (Yes/no) | 1.9 | (0.2) | 0.6 | (0.3-1.6) | 0.9 |
| GABA Analog (Times prescribed) | -- | -- | 0.6 | (0.3-1.2) | 2.1 |
| Antidepressants (Yes/no) | 12.4 | (0.5) | 1.8 | (1.4-2.3) | 21.6\* |
| Antidepressants (Times prescribed) | -- | -- | 1.2 | (1.1-1.4) | 13.7\* |
| MAOI SARI NaSSA NDRI or Other (Yes/no) | 2.3 | (0.2) | 2.4 | (1.6-3.7) | 16.1\* |
| MAOI SARI NaSSA NDRI or Other (Times prescribed) | -- | -- | 1.4 | (1.2-1.7) | 11.2\* |
| SNRI (Yes/no) | 1.1 | (0.2) | 2.5 | (1.4-4.5) | 8.9\* |
| SNRI (Times prescribed) | -- | -- | 1.4 | (1.1-1.9) | 8.2\* |
| SSRI (Yes/no) | 7.8 | (0.4) | 1.9 | (1.4-2.5) | 19.3\* |
| SSRI (Times prescribed) | -- | -- | 1.2 | (1.1-1.4) | 8.1\* |
| TCAs (Yes/no) | 2.6 | (0.2) | 0.4 | (0.1-1.0) | 3.6 |
| TCAs (Times prescribed) | -- | -- | 0.6 | (0.4-1.1) | 2.8 |
| Sedative-Hypnotic (Yes/no) | 6.9 | (0.4) | 1.9 | (1.4-2.6) | 17.3\* |
| Sedative-Hypnotic (Times prescribed) | -- | -- | 1.4 | (1.2-1.6) | 14.3\* |
| Benzodiazepines (Yes/no) | 0.4 | (0.1) | 3.2 | (1.3-7.7) | 6.5\* |
| Benzodiazepines (Times prescribed) | -- | -- | 1.9 | (1.2-3.1) | 7.0\* |
| Antidepressant Type (Yes/no) | 2.5 | (0.2) | 2.3 | (1.5-3.5) | 15.2\* |
| Antidepressant Type (Times prescribed) | -- | -- | 1.5 | (1.2-1.9) | 14.4\* |
| Others (Yes/no) | 6.6 | (0.4) | 1.7 | (1.3-2.4) | 11.7\* |
| Others (Times prescribed) | -- | -- | 1.3 | (1.1-1.6) | 10.4\* |
| CNS Stimulant - Armodafinil/Modafinil (Yes/no) | 0.1 | (0.1) | -- | -- | -- |
| CNS Stimulant - Armodafinil/Modafinil (Times prescribed) | -- | -- | -- | -- | -- |
| ADHD Therapy (Yes/no) | 0.6 | (0.1) | -- | -- | -- |
| ADHD Therapy (Times prescribed) | -- | -- | -- | -- | -- |
| Chemical Dependency |  |  |  |  |  |
| Narcotic or Alcohol Treatment Agents (Yes/no) | 0.1 | (0.1) | 4.2 | (1.0-16.8) | 4.0\* |
| Narcotic or Alcohol Treatment Agents (Times prescribed) | -- | -- | 1.7 | (1.0-2.7) | 4.6\* |
| Smoking Deterrents and Combinations (Yes/no) | 1.8 | (0.2) | 1.6 | (0.9-2.9) | 2.7 |
| Smoking Deterrents and Combinations (Times prescribed) | -- | -- | 1.1 | (0.8-1.5) | 0.4 |
| Migraine Therapy (Yes/no) | 7.3 | (0.4) | 0.7 | (0.5-1.1) | 2.0 |
| Migraine Therapy (Times prescribed) | -- | -- | 0.8 | (0.6-1.0) | 3.7 |
| Serotonin Agonists (Yes/no) | 4.8 | (0.3) | 0.6 | (0.3-1.1) | 2.9 |
| Serotonin Agonists (Times prescribed) | -- | -- | 0.7 | (0.5-1.0) | 3.9\* |
| All other (Yes/no) | 3.3 | (0.3) | 0.9 | (0.5-1.6) | 0.1 |
| All other (Times prescribed) | -- | -- | 0.9 | (0.6-1.4) | 0.1 |
| Anticonvulsant (Yes/no) | 1.7 | (0.2) | 0.9 | (0.4-2.0) | 0.1 |
| Anticonvulsant (Times prescribed) | -- | -- | 1.0 | (0.7-1.5) | 0.0 |
| Antipsychotics (Neuroleptics) (Yes/no) | 0.9 | (0.2) | 2.2 | (1.1-4.4) | 4.6\* |
| Antipsychotics (Neuroleptics) (Times prescribed) | -- | -- | 1.3 | (1.0-1.8) | 2.9 |
| Bipolar medication(Yes/no) | 2.4 | (0.2) | 1.5 | (0.9-2.6) | 2.2 |
| Bipolar medication (Times prescribed) | -- | -- | 1.2 | (1.0-1.6) | 3.4 |
| Bipolar Therapy Agents prescribed (Yes/no) | 0.3 | (0.1) | -- | -- | -- |
| Bipolar Therapy Agents prescribed (Times prescribed) | -- | -- | -- | -- | -- |
| Eating Disorder Therapy (Yes/no) | 0.0 | (0.0) | -- | -- | -- |
| Eating Disorder Therapy (Times prescribed) | -- | -- | -- | -- | -- |
| Cognitive Disorder Therapy (Yes/no) | -- | -- | -- | -- | -- |
| Cognitive Disorder Therapy (Times prescribed) | -- | -- | -- | -- | -- |
| PTSD Therapy - Prazosin (Yes/no) | 0.2 | (0.1) | 0.0 | -- | 0.0 |
| PTSD Therapy – Prazosin (Times prescribed) | -- | -- | 0.0 | -- | 0.0 |
| Antianxiety and Anticonvulsant Agent – Benzodiazepines (Yes/no) | 0.9 | (0.1) | 2.7 | (1.4-5.3) | 8.8\* |
| Antianxiety and Anticonvulsant Agent – Benzodiazepines (Times prescribed) | -- | -- | 1.8 | (1.4-2.4) | 17.3\* |
| Sedative-Hypnotic and Anticonvulsant Agent – Barbiturates (Yes/no) | 0.0 | (0.0) | -- | -- | -- |
| Sedative-Hypnotic and Anticonvulsant Agent – Barbiturates (Times prescribed) | -- | -- | -- | -- | -- |
| Dermatological - Isotretinoin (Yes/no) | 0.2 | (0.1) | -- | -- | -- |
| Dermatological – Isotretinoin (Times prescribed) | -- | -- | -- | -- | -- |
| ACE Inhibitors (Yes/no) | 1.3 | (0.2) | -- | -- | -- |
| ACE Inhibitors (Times prescribed) | -- | -- | -- | -- | - |
| Angiotensin II Receptor Blockers (Yes/no) | 0.3 | (0.1) | -- | -- | - |
| Angiotensin II Receptor Blockers (Times prescribed) | -- | -- | -- | -- | -- |
| Angiotensin II Receptor Blockers Combinations (Yes/no) | 0.2 | (0.1) | 1.2 | (0.2-8.6) | 0.0 |
| Angiotensin II Receptor Blockers Combinations (Times prescribed) | -- | -- | 1.1 | (0.5-2.6) | 0.0 |
| Migraine Therapy and Analgesic - Non-Narcotic - NSAID Analgesics (Yes/no) | -- | -- | -- | -- | -- |
| Migraine Therapy and Analgesic - Non-Narcotic - NSAID Analgesics (Times prescribed) | -- | -- | -- | -- | -- |
| Other Medication (Yes/no) | 87.5 | (0.5) | 1.4 | (1.0-2.0) | 3.8\* |
| Other Medication (Times prescribed) | -- | -- | 1.1 | (1.0-1.3) | 5.5\* |
| Any medication (Yes/no) | 90.7 | (0.5) | 1.6 | (1.1-2.5) | 5.3\* |
| Any medication (Times prescribed) | -- | -- | 1.2 | (1.0-1.3) | 5.5\* |
|  |  |  |  |  |  |

Abbreviations: NSAID, nonsteroidal anti-inflammatory drug; GABA, gamma-aminobutyric acid; MAOI, monoamine oxidase inhibitor; SARI, serotonin antagonist and reuptake inhibitor; NaSSA, noradrenergic and specific serotonergic antidepressants; NDRI, norepinephrine-dopamine reuptake inhibitor; SNRI, serotonin–norepinephrine reuptake inhibitor; SSRI, selective serotonin reuptake inhibitor; TCA, tricyclic antidepressant; CNS, central nervous system; ADHD, attention deficit-hyperactivity disorder; PTSD, posttraumatic stress disorder; ACE, angiotensin-converting-enzyme.

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

aBased on a series of multivariate discrete-time (person-month) survival models each examining the association of one medication variable controlling for the core variables in Appendix Table 15. If no odds ratio is provided for a particular independent variable, the independent variable was too rare to generate a stable estimate (i.e., less than 5 cases of the independent variable being associated with the outcome). Independent variables representing times prescribed were categorically coded 0-4 (0=None, 1=1-30, 2=31-60, 3=61-90, 4=91+). Due to space limitations, the distributions and standard errors of count variables are not presented. For a list of medications included in each of the above medication variables see Appendix Table 5.

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| --- | --- | --- | --- | --- | --- |
| **Appendix Table 21. Predicting first accusation of non-familial major physical violent crime perpetration among women with core and contextual factor variables)a** | | | | | |
|  | **%** | **(se)** | **OR** | **(95% CI)** | **2** |
| Number of months in current duty unit | -- | -- | 1.0 | (1.0-1.0) | 0.9 |
| Duty unit different than assigned unit (Yes/no) | 1.5 | (0.2) | 0.0 | -- | 0.0 |
| Number of months in the past 12 where duty unit differed from assigned unit2 | -- | -- | 0.5 | (0.3-0.9) | 6.1\* |
| In the past 12 months, duty unit differed from assigned unit (Yes/no) | 4.9 | (0.3) | 0.2 | (0.1-0.5) | 10.4\* |
| Number of different duty units over past 12 months | -- | -- | 1.3 | (1.2-1.4) | 27.7\* |
| Percentage of combat deaths for duty units over past 12 months | -- | -- | 0.9 | (0.1-5.5) | 0.0 |
| Percentage of suicidal deaths for duty units over past 12 months | -- | -- | 1.2 | (0.4-3.6) | 0.1 |
| Past 3 months current unit |  |  |  |  |  |
| Median months in the Army all NCOs (E5-9) in unit(s) | -- | -- | 1.0 | (1.0-1.0) | 21.9\* |
| Median months in the Army all officers (WO/CO) in unit(s) | -- | -- | 1.0 | (1.0-1.0) | 18.6\* |
| Median months ever deployed of all NCOs (E5-9) in unit(s) | -- | -- | 1.1 | (1.0-1.1) | 37.5\* |
| Median months ever deployed of all officers (WO/CO ) in unit(s) | -- | -- | 1.0 | (1.0-1.1) | 10.7\* |
| Median months all lower enlisted soldiers (E1-E4) have been on duty in this unit | -- | -- | 1.0 | (1.0-1.0) | 14.0\* |
| Median months all higher enlisted soldiers (E5-E9) have been on duty in this unit | -- | -- | 1.0 | (1.0-1.0) | 1.7 |
| Median months all officers (CO/WO) have been on duty in this unit | -- | -- | 1.0 | (1.0-1.0) | 2.3 |
| Past 12 months current unit |  |  |  |  |  |
| Median months in the Army all NCOs (E5-9) in unit(s) | -- | -- | 1.0 | (1.0-1.0) | 26.9\* |
| Median months in the Army all officers (WO/CO) in unit(s) | -- | -- | 1.0 | (1.0-1.0) | 21.5\* |
| Median months ever deployed of all NCOs (E5-9) in unit(s) | -- | -- | 1.1 | (1.0-1.1) | 46.9\* |
| Median months ever deployed of all officers (WO/CO ) in unit(s) | -- | -- | 1.0 | (1.0-1.1) | 17.6\* |
| Median months all lower enlisted soldiers (E1-E4) have been on duty in this unit | -- | -- | 1.0 | (1.0-1.1) | 28.6\* |
| Median months all higher enlisted soldiers (E5-E9) have been on duty in this unit | -- | -- | 1.0 | (1.0-1.0) | 0.9 |
| Median months all officers (CO/WO) have been on duty in this unit | -- | -- | 1.0 | (1.0-1.0) | 0.6 |
| Weapons registered in the last four years, not counting current month |  |  |  |  |  |
| All guns, including pistols, shotguns and rifles |  |  |  |  |  |
| Count | -- | -- | 1.2 | (0.9-1.7) | 1.8 |
| Yes/no | 0.7 | (0.1) | 2.6 | (1.3-5.6) | 6.5\* |
| All pistols |  |  |  |  |  |
| Count | -- | -- | 1.4 | (0.9-2.3) | 1.8 |
| Yes/no | 0.6 | (0.1) | 2.5 | (1.1-5.7) | 5.1\* |
| All rifles |  |  |  |  |  |
| Count | -- | -- | 2.7 | (1.1-6.8) | 4.7\* |
| Yes/no | 0.1 | (0.1) | 1.6 | (0.2-11.6) | 0.2 |
| All shotguns |  |  |  |  |  |
| Count | -- | -- | 1.1 | (0.3-3.6) | 0.0 |
| Yes/no | 0.1 | (0.0) | 2.6 | (0.4-18.8) | 0.9 |
| All knives |  |  |  |  |  |
| Count | -- | -- | -- | -- | -- |
| Yes/no | -- | -- | -- | -- | -- |
| All swords |  |  |  |  |  |
| Count | -- | -- | -- | -- | -- |
| Yes/no | -- | -- | -- | -- | -- |
| All bows |  |  |  |  |  |
| Count | -- | -- | 0.0 | -- | 0.0 |
| Yes/no | 0.0 | (0.0) | 0.0 | -- | 0.0 |
| All other weapons not in other weapon classes |  |  |  | -- |  |
| Count | -- | -- | 0.0 | -- | 0.0 |
| Yes/no | 0.0 | (0.0) | 0.0 | -- | 0.0 |
| All weapons |  |  |  |  |  |
| Count | -- | -- | 1.2 | (0.9-1.7) | 1.7 |
| Yes/no | 0.7 | (0.1) | 2.5 | (1.2-5.4) | 5.9 |
|  |  |  |  |  |  |

Abbreviations: NCO, non-commissioned officer; WO, warrant officer; CO, commissioned officer.

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

aBased on a series of multivariate discrete-time (person-month) survival models each examining the association of one contextual factor variable controlling for the core variables in Appendix Table 15. If no odds ratio is provided for a particular independent variable, the independent variable was too rare to generate a stable estimate (i.e., less than 5 cases of the independent variable being associated with the outcome). Due to space limitations, the distributions and standard errors of count variables are not presented.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Appendix Table 22. Classification accuracy and proportion of observed crimes committed by those in the top-ventile of predicted risk , all models** | | | | | | | |
|  | **Men** | | |  | **Women** | | |
|  | **Number of**  **variables** | **AUC** | **Proportion of observed crimes in top-ventile of predicted risk, %a** |  | **Number of**  **variables** | **AUC** | **Proportion of observed crimes in top-ventile of predicted risk, %a** |
|  |  |  |  |  |  |  |  |
| Stepwise logisticb |  |  |  |  |  |  |  |
| Unrestriced | 112 | .81 | 37.8 |  | 81 | .77 | 28.8 |
| Best restricted unpenalizedc | 24 | .81 | 36.2 |  | 15 | .82 | 33.1 |
| Best restricted penalizedd | 24 | .81 | 36.4 |  | 15 | .80 | 31.3 |
| Random forestse |  |  |  |  |  |  |  |
| Restricted stepwise predicted probability | 1 | .78 | 36.8 |  | 1 | .79 | 28.3 |
| Random forests predicted probability | 1 | .77 | 28.2 |  | 1 | .77 | 24.8 |
| Both predicted probabilities | 2 | .78 | 29.6 |  | 2 | .77 | 24.8 |
| Other Models |  |  |  |  |  |  |  |
| Unrestricted opposite-sex coefficientsf | 15 | .80 | 31.6 |  | 24 | .79 | 27.7 |
| Excluding race-ethnicityg | 24 | .80 | 35.1 |  | 15 | .78 | 35.9 |
| n1h | (5,375) | | |  | (396) | | |
| n2h | (31,721,734) | | |  | (5,181,659) | | |
|  |  |  |  |  |  |  |  |

Abbreviations: AUC, area under the receiver operating characteristics curve.

aThis column refers to the proportion of all observed accusations of major physical violent crime perpetrations that occurred among the 5% (top-ventile) of person-months classified by the model as having the highest risk of perpetration.

bForward selection stepwise logistic regression with a 0.05-level entry criterion was used to select independent variables. Ten-fold cross-validation was used, which involved dividing the sample into 10 equally-sized sub-samples and estimating the model 10 times, each time deleting one of the 10% sub-samples. Coefficients based on a given 90% subsample were used to generate predicted values of the outcome only in the remaining 10% hold-out sample. Model fit was evaluated by comparing the proportion of observed crimes committed by those in the top-ventile of predicted risk across models that differed in number of independent variables. The optimal number of independent variables was selected to maximize the proportion of observed crimes committed by those in the top-ventile of predicted risk.

cThe best restricted models were selected on the basis of the proportion of observed crimes committed by those in the top-ventile (5%) of predicted riskfrom the 10-fold cross-validated models. The final restricted models were then re-estimated in the total male sample and total female sample. The AUCs and proportions of observed crimes committed by soldiers in the in top-ventile of predicted risk presented here are based on these total sample models.

dElastic net penalized regression models were estimated using 10-fold cross-validation and various mixing parameters (MP=0.1; 0.3; 0.5; 0.7; 0.9; 0.99) with the optimal 24 independent variables for men and 15 independent variables for women. The AUC and proportion of observed crimes committed by those in the top-ventile of predicted risk presented here are from the optimal penalized model for men (MP=0.5) and women (MP=0.1).

eA search for interactions among the best restricted model independent variables in the total male sample and total female sample models was conducted by estimating 500 regression trees in bootstrap pseudo-samples. Incremental improvement in fit was then determined by estimating a series of 3 models separately for men and women using as independent variables (i) the composite measure of predicted probability generated from the cross-validated stepwise logistic model; (ii) the composite measure of predicted probability generated from the random forests model; and (iii) the predicted probabilities from both the cross-validated stepwise and RF models. As the proportion of observed crimes committed by those in the top-ventile of predicted risk did not improve when the RF predicted probabilities were added to the models, we excluded RF from all subsequent models.

fIn order to examine the importance of sex-specific best variables sets, AUC and the proportion of observed crimes committed by those in the top-ventile of predicted risk were re-calculated by applying the regression coefficients from the best restricted unpenalized model for men to the total female sample and vice versa.

gWe re-estimating in the total male sample a 24 variable stepwise model and in the total female sample a 15 variable stepwise model excluding all race-ethnicity variables, which allowed other variables to step in.

hThere were 5,771 person-months (5,375 male, 396 female) with an incident occurrence of first accusation of non-familial major physical violent crime perpetration out of a total of 36,903,393 person-months (31,721,734 male, 5,181,659 female) in the 2004-2009 Regular Army population. Rather than work with all these control observations, we randomly subsampled control person-months to generate a case-control analysis sample of 201,121 person-months (187,316 male; 13,805 female). The analysis sample included all 5,771 person-months with the outcome plus a probability sample of all other person-months in the population stratified by sex and marital status (195,350 control person-months). All records in the control sample were weighted by the inverse of the probability of selection.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Appendix Table 23. Incremental contribution of previous deployment and combat arms occupation in predicting first accusation of non-familial major physical violent crime perpetration among mena** | | | | | | | | | | | | | | | | | | | |
|  | **Model 1** | | | |  | **Model 2** | | | |  | **Model 3** | | | |  | **Model 4** | | | |
|  | **OR** | **(95% CI)** | **VIFd** | 21 |  | **OR** | **(95% CI)** | **VIFd** | 22 |  | **OR** | **(95% CI)** | **VIFd** | **22** |  | **OR** | **(95% CI)** | **VIFd** | 24 |
| Previously deployedb | 1.0 | (0.9-1.1) | 1.6 | 0.2 |  | 0.9 | (0.8-1.0) | 2.3 | 2.8 |  | -- | -- | -- | -- |  | -- | -- | -- | -- |
| Previously deployed in past 12 months | -- | -- | -- | -- |  | 1.1 | (1.0-1.2) | 1.8 |  | -- | -- | -- | -- |  | -- | -- | -- | -- |
| Previously deployedb & Combat Arms MOS | -- | -- | -- | -- |  | -- | -- | -- | -- |  | 1.0 | (1.0-1.1) | 1.5 | 5.0 |  | 1.0 | (0.9-1.2) | 2.7 | 7.7 |
| Previously deployedb & Non-Combat Arms MOS | -- | -- | -- | -- |  | -- | -- | -- | -- |  | 0.9 | (0.9-1.0) | 1.6 |  | 0.9 | (0.8-1.0) | 2.3 |
| Previously deployed in past 12 months & Combat Arms MOS | -- | -- | -- | -- |  | -- | -- | -- | -- |  | -- | -- | -- | -- |  | 1.0 | (0.9-1.2) | 2.3 |
| Previously deployed in past 12 & Non-Combat Arms MOS | -- | -- | -- | -- |  | -- | -- | -- | -- |  | -- | -- | -- | -- |  | 1.1 | (1.0-1.2) | 1.8 |
| Proportion of observed crimes in top-ventile predicted riskc |  | 36.1% |  |  |  |  | 36.2% |  |  |  |  | 36.4% |  |  |  |  | 36.4% |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Abbreviations MOS, military occupational specialty

aBased on a series of multivariate discrete-time (person-month) survival models controlling for the 24 independent variables from the final unpenalized model for men. Empty cells indicate that the row independent variable was not included in the column model.

bPreviously deployed indicates having a prior deployment but not currently being on deployment.

cThis refers to the proportion of all first accusation of non-familial major physical violent crime perpetrations that occurred among the 5% of person-months classified by the unpenalized model as having the highest risk of perpetration. The best unpenalized model for men accounted for 36.2% of observed crimes in the top-ventile of predicted risk.

dVariance Inflation Factor (VIF) for the coefficient associated with independent variable Xi in the above equation equals 1/(1-R2i), where R2i is the coefficient of determination of a regression equation in which Xi is the dependent variable and all the other independent variables in the model are included as independent variables of Xi. VIF ≥ 5.0 is typically considered an indicator of meaningful multicollinearity.46

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Appendix Table 24. Stability of bivariate associations between unit leader experience (time-in-service; time deployed) and first accusation of non-familial major physical violent crime perpetration** | | | | | | | | | | | | | | | | | | | |
|  |  | | | | | | | | |  |  | | | | | | | | | |
|  | **Men** | | | | | | | | |  | **Women** | | | | | | | | | |
|  | **2004-2006** | | | |  | **2007-2009** | | | |  | **2004-2006** | | | |  | **2007-2009** | | | |
|  | OR | (95% CI) | 21 | VIFb |  | OR | (95% CI) | 21 | VIFb |  | OR | (95% CI) | 21 | VIFb |  | OR | (95% CI) | 21 | VIFb |
| Median months in the Army |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| All officers (WO/CO) in unit(s)a | 0.1 | (0.0-0.1) | 337.1\* | 1.0 |  | 0.1 | (0.0-0.1) | 254.5\* | 1.0 |  | 0.1 | (0.0-0.2) | 10.2\* | 1.0 |  | 0.1 | (0.0-0.2) | 8.9\* | 1.0 |
| All NCOs (E5-9) in unit(s)a | 0.1 | (0.0-0.1) | 298.7\* | 1.0 |  | 0.1 | (0.0-0.1) | 198.2\* | 1.0 |  | 0.1 | (0.0-0.2) | 8.5\* | 1.0 |  | 0.1 | (0.0-0.1) | 12.6\* | 1.0 |
| Median months ever deployed |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| All officers (WO/CO) in unit(s)a | 3.7 | (2.4-5.8) | 32.0\* | 1.0 |  | 1.2 | (0.7-2.1) | 0.4 | 1.1 |  | 15.8 | (1.3-192.5) | 4.7\* | 1.0 |  | 53.4 | (2.6-1,116.8) | 6.6\* | 1.1 |
| All NCOs (E5-9) in unit(s)a | 35.5 | (21.9-57.7) | 208.5\* | 1.1 |  | 44.5 | (24.8-79.6) | 162.9\* | 1.1 |  | 110.1 | (8.6-1,406.8) | 13.1\* | 1.1 |  | 3,119.1 | (131.2-74,175.1) | 24.8\* | 1.2 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Abbreviations: OR, odds ration; 95% CI, 95% confidence interval; WO, warrant officer; CO, commissioned officer; NCO, non-commissioned officer.

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

aPooled across all units and their officers/NCOs over the past 3 months. All variables were standardized to have a mean of 0 and standard deviation of 1

bVariance Inflation Factor (VIF) for the coefficient associated with independent variable Xi in the above equation equals 1/(1-R2i), where R2i is the coefficient of determination of a regression equation in which Xi is the dependent variable and all the other independent variables in the model are included as independent variables of Xi. VIF ≥ 5.0 is typically considered an indicator of meaningful multicollinearity.46

Abbreviations: AUC, area under the receiver operating characteristic curve

aCross-validated forward selection stepwise logistic regression and cross-validated elastic net penalized regressions were used to select the final number of independent variables and mixing parameter penalty (MP) to use in the final models presented here. The male models included 24 independent variables and elastic net MPP was set to 0.5. The female models included 15 independent variables and the elastic net MPP was set to 0.1.