

COMMANDERS' RISK MITIGATION DASHBOARD

User Training 2025

User Training Agenda

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 - $\,\circ\,$ Section 2: User Access
 - $\,\circ\,$ Section 3: CRMD Overview
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Commanders' Risk Mitigation Dashboard Summary



Navy Cohort: 424k Sailors

17M+ rows of data (Oct 2016 to present)

Current Stats





destructive behavior events

6.000+





Current Outcomes Definitions (6):

- Drug and Alcohol Incidents: Instances where a Sailor violated the Navy's zero-tolerance of drug or alcohol abuse, including positive urinalysis results and DUI/DWI, as captured in the Navy's Alcohol and Drug Management Information System (ADMITS)
- **Suicide:** Includes instances of self-harm, suicidal ideation, suicide attempt, or suicide completion as recorded in the Department of Defense Suicide Event Report (DoDSER)
- Sexual Assault Victim and Subject: Incident where an active duty or activated Navy Reservist was either the victim or perpetrator of a sexual assault (SA), as identified from the Defense Sexual Assault Incident Database (DSAID)
- Sexual Harassment: Instance of a sexual harassment case as recorded in the Navy's Sexual Harassment/Equal Opportunity system (SH/EO)



- Administratively collected data related to demographics, service history, and medical and health data are leveraged to generate over 150 possible predictors
- Over 6,000 destructive behavior events are used to train 6 predictive models
- Pooled logistic regression is used to predict the probability of each outcome occurring for a given Sailor and month. These predicted probabilities are aggregated to the UIC level
- Quarterly predicted risk scores and colorcoding comparisons to Navy-wide and peer group averages, respectively, are displayed on the dashboard for commanders to better understand the relative risk for their unit
- **Risk scores** are provided for the current quarter, three historic quarters, and one future quarter



- ROC AUC: Receiver operator characteristic (ROC) curve is a plot of the true positive rate versus false positive rate at all classification thresholds. The area under the curve (AUC) has values between 0 and 1, where values close to 1 indicate better discernment between classes. Standard: 0.7 or above, depending on use case
- **Balanced Accuracy:** Average of the true positive rate (sensitivity) and true negative rate (specificity)

Sprint 101, Model Performance Metrics

Outcome	ROC AUC	Balanced Accuracy
ALCOHOL	0.771	0.703
DRUG	0.815	0.744
SA SUBJECT	0.752	0.699
SA VICTIM	0.888	0.822
SUICIDE	0.776	0.713
SEX HARR	0.759	0.694

CRMD provides commanders with improved situational awareness and insights into their unit's risk for six destructive behaviors. CRMD is operated out of the PMW 240 program office and is included as part of COE 2.0.



Data Native to the ADE



As of 8 FEB 2024

CRMD Tables	Data in Schema	Periodicity
AQD_DATA_VW	CY11-Current	Monthly snapshots 2011-19; Daily snapshots starting Jan 20
ASVAB_DATA_VW	CY11-Current	Monthly snapshots 2011-19; Daily snapshots starting Jan 20
EDUCATION_DATA_VW	CY11-Current	Monthly snapshots 2011-19; Daily snapshots starting Jan 20
EVAL_DATA_VW	CY11-Current	Monthly snapshots 2011-19; Daily snapshots starting Jan 20
LIMDU_DATA_VW	CY11-Current	Monthly snapshots 2011-19; Daily snapshots starting Jan 20
MRRS_DEPLOYMENT_FLAG_VW	CY11-Current	Monthly snapshots 2011-19; Daily snapshots starting Jan 20
OFFICER_DESIGNATOR_DATA_VW	CY11-Current	Monthly snapshots 2011-19; Daily snapshots starting Jan 20
PERSON_DATA_VW	CY11-Current	Monthly snapshots 2011-19; Daily snapshots starting Jan 20
PFA_DATA_VW	CY11-Current	Monthly snapshots 2011-19; Daily snapshots starting Jan 20
RANK_DATA_VW	CY11-Current	Monthly snapshots 2011-19; Daily snapshots starting Jan 20
SERVICE_DATA_VW	CY11-Current	Monthly snapshots 2011-19; Daily snapshots starting Jan 20
UIC_INFO_VW	CY11-Current	Monthly snapshots 2011-19; Daily snapshots starting Jan 20
WAIVER_DATA_VW	FY17-Current	Daily snapshots starting Jan 17
DEPLOYMENT_DATA_MRRS_VW	FY17-Current	Start/end dates from FY17; Daily snapshots Jun 21-Current

Data to be viewed directly from SSOT - Current data status is based on periodicity of SSOT sources



Shows Data from MyNavy HR



Data External to the ADE



As of 8 FEB 2024

CRMD Tables	Data in Schema	Periodicity
PERIODIC HEALTH ASSESSMENT	FY17-February24	Monthly
DEPT OF DEFENSE SUICIDE EVENT REPORT	FY17-December23	Monthly
PHARMACY DETAIL TRANSACTION SERVICE	FY17-December23	Monthly
STANDARD INPATIENT DATA RECORD	FY17-December23	Monthly
TRICARE ENCOUNTER DATA INSTITUTIONAL	FY17-December23	Monthly
TRICARE ENCOUNTER DATA – NON-INSTITUTIONAL	FY17-December23	Monthly
MEDICAL DATA REPOSITORY CLINICAL DATA REPOSITORY VITALS (DHA)	FY17-December23	Monthly
COMPREHENSIVE AMBULATORY/PROFESSIONAL ENCOUNTER RECORD	FY17-December23	Monthly
THEATER MEDICAL DATA STORE	FY17-December23	Monthly
NAVY ALCOHOL DRUG MISUSE PREVENTION CONTROL SYSTEM	2005-January24	As Required
DEFENSE CASUALTY INCIDENT PERSONNEL SYSTEM	FY17-December23	Monthly
DEFENSE SEXUAL ASSAULT INCIDENT DATABASE CASE	FY17-December23	Monthly
DEFENSE SEXUAL ASSAULT INCIDENT DATABASE SUBJECT DATA	FY17-December23	Monthly
DEFENSE SEXUAL ASSAULT INCIDENT DATABASE VICTIM	FY17-December23	Monthly
SEXUAL HARASSMENT EQUAL OPPORTUNITY	FY17-December23	Monthly
MEDICAL HEALTH SYSTEM GENESIS ENCOUNTER	FY17-December23	Monthly
MEDICAL HEALTH SYSTEM GENESIS ADMISSIONS	FY17-December23	Monthly
HEALTH OF THE FORCE	FY21	Annually

Legend

Sources received o/a midmonth and due to ATO requirement to convert to Test Data (de-identified) before ingestion; schema updates take 1-2 weeks after data receipt







Prototype Phase (Feb 2018 – 2020)



Figure 1: CRMD Initial Working Prototype Main Screen

Overview

- Working prototype developed with simulated data (May 2018)
- Navy data and UIC hierarchy implemented in prototype (July 2019)
- 7 command visits
- 17 sessions with Navy staff from various commands, departments, and divisions (all echelons, including active command triads)
- 4 briefings and demos with Navy senior leadership

Feedback Topics (Ongoing Discussions)

- Appropriate use of dashboard information
- Training on interpreting data and graphics
- Data quality and timeliness, and confidence in model results
- Connectivity issues while deployed
- Inclusion of community-specific and command-specific data
- Balancing microclimate understanding vs. risk of inadvertent ID
- How/when risk turns to resiliency with proper treatment
- Known correlations (e.g., effects of CO/XO changes, current job experience, command-specific experiences, length of time in unit)
- Impacts of pre-Navy trauma and in-service trauma
- Dashboard too complex/difficult to understand



RDT&E Pilot Phase (Jan-Oct 2021)



Figure 2: CRMD RDT&E Pilot Phase Main Screen

Overview

- 6 six-week pilot rounds, 28 training sessions facilitated
- 96 participants (5 echelons; 36 command types; 65 units; 27 roles)

Feedback Summary

Approved of:

• Dashboard navigation, heat maps, and graphs showing data and risk-score trends over time and rank group breakdowns

Recommended:

- Include data sources, data accuracy, and self-report data details
- Add definitions for physical conditions and mental health data
- Add DEOCS, Non-Judicial Punishments (NJPs), and other criminal events, plus manning data (e.g., fit/fill, OPTEMPO, or duty type)
- Add drill-down capability to specific contributing factors
- Streamline design (too complex as is)
- Add risk scores calculations and calibrations, and Navy averages
- Remove deployment screen, glossary screen, and FITREP data
- Improve labeling, formatting, and the tooltip features

Concerned About:

 Potential for punitive use, need user and leadership training, need commanders' playbook w/intervention strategies, the UIC hierarchy structure being used, upper echelon display needs, ability to meet rapid operational changes that affect crew morale

OT&E Pilot Phase (Jun-Oct 2022)



Figure 3: CRMD OT&E Pilot Phase Main Screen

Overview

- Vertical Component: The 15 UICs of CTF-70, PACFLT
- Horizontal Component: 10 UICs from USFF (variety of command platforms and types)
- Plus, 5 commands from previous RDT&E pilot invited
- 109 total user accounts created
- 9 training sessions + recorded training session available to all

Feedback Summary

- Improve bandwidth utilization; this issue delayed loading of the dashboard screens and caused issues for deployed units
- Make displays at the Immediate Superior in Command (ISIC) and Selected Reserve (SELRES) levels available
- Continue to improve interpretability of the contributing factors
- Explain why a specific factor affects risk
- Provide insights into risk increases, and more actionable risk factors
- Add recommendations based on the risk determinations
- Provide insights on subpopulations at risk
- Provide ISICs and command COs with comparative assessments to like units
- Add ability to view multiple (or all) units on a single display
- Flag the unit(s) at greater risk in "red" across any given task force





Dashboard Demonstration







User Guide Review







WELCOME

The dashboard is hosted in the Navy's Authoritative Data Environment (ADE).

Designated users can access the dashboard via CAC authentication to review their UIC's risk scores and contributing factors information.

ACCESS SUPPORT

CRMD access issues can be directed to:

ADEHelpDesk@us.navy.mil

Please make the subject line, "CRMD Access: <your first and last name>, <Date you are submitting your request>." This will help us verify your access in a timely manner.





CRMD User Guide Review - Section 1 – Introduction





CURRENT STATE NOTES

- The current release of the CRMD is the **initial set of features** suitable to be fielded to an operational environment that provides value to the end user.
- The dashboard is still **evolving**, and we encourage users to provide feedback and recommendations for improvements on all aspects.
- Data is updated quarterly. Additional data information is available on the CRMD Data Dictionary screen.
- Although individual information is not displayed on the dashboard, units with 10 or fewer members will not display predictive metrics in the dashboard. This is to protect the privacy of individual members in a unit.







NOTES FOR COMMAND LEADERS

- CRMD provides unit-level risk of destructive behaviors; it is NOT to be used for punitive purposes.
- The majority (over 90%) of factors contributing to risk cannot be influenced by the command (e.g., age, time onboard, sex, marital status).
- It is not a negative reflection on command leadership to be a higher risk unit. Moving from higher to lower risk is not something commands can do by simply following a checklist.
 - Regardless, commands should be aware of when they have elevated risk and take the actions included in the related Action Plan to mitigate that risk.
- **Commands may designate additional appointees to have access to their CRMD**. For individual units, this endorsement must come from the CO or XO. For Echelon II-IV, Chief of Staff-level endorsement (or equivalent) is required.
 - An email template to designate this access is available for download under the quick links section of the CRMD home page and shown in Section 2. Information required to grant full access includes full name, government email address, DoD ID, and UIC(s).



CRMD User Guide Review - Section 2: User Access



SECTION 2: USER ACCESS



- Personnel identified as members of an active command triad will be granted access automatically based on their assigned role.
- To designate additional appointees to have access to the CRMD please use the following email template:







SECTION 2: USER ACCESS (CONT.)



- Note that the email template is provided as an example and is not required.
 - As long as all required information (i.e., full name, email, DoD ID, and UIC) is included, please feel free to provide in any format that best suits your needs.
 - Also, your DoD ID number is the 10-digit number located on the back of your Common Access Card (CAC).
- Once your access is enabled, the dashboard can be reached via this URL: <u>https://crmd.portalprod.ade.cloud.navy.mil.</u>







OBJECTIVES



- Address **counter-productive workplace (CWB) and destructive behaviors** that harm Sailors, impact mission effectiveness, contribute to unplanned losses, and increase administrative burden.
- Use existing Navy and DoD data to assess risk regarding CWB and destructive behaviors at a unit-level:
 - Leaders can easily view and track these areas of risk.
 - \circ $\;$ Determine where additional resources, training, and support is needed.
- Utilize a **unit-level decision support tool** (not for punitive use).
- Provide leaders with information and insights to **specific stressors.**
- Aid in **communication and planning** with their Command Resiliency Teams (CRTs) and upper echelon leadership.







What data is used for the CRMD?

Many data sources were initially acquired and analyzed to determine indicators and contributing factors for risk of destructive behaviors and events.

• The following data sources are currently used in the risk models for the CRMD:

MyNavy HR - AQD_DATA	Pharmacy Detail Transaction Service
MyNavy HR - ASVAB_DATA	Standard Inpatient Data Record
MyNavy HR - EDUCATION_DATA	Tricare Encounter Data Institutional
MyNavy HR - EVAL_DATA	Tricare Encounter Data Non-Institutional
MyNavy HR - LIMDU_DATA	Medical Data Repository Clinical Data Reporsitory Vitals (DHA)
MyNavy HR - MRRS_DEPLOYMENT_FLAG	Comprehensive Ambulatory/Professional Encounter Record
MyNavy HR - OFFICER_DESIGNATOR_DATA	Theater Medical Data Store
MyNavy HR - PERSON_DATA	Navy Alcohol Drug Misuse Prevention Control System
MyNavy HR - PFA_DATA	Defense Casualty Incident Personnel System
MyNavy HR - RANK_DATA	Defense Sexual Assault Incident Database Case
MyNavy HR - SERVICE_DATA	Defense Sexual Assault Incident Database Subject Data
MyNavy HR - UIC_INFO	Defense Sexual Assault Incident Database Victim Data
MyNavy HR - WAIVER_DATA	Sexual Harassment Equal Opportunity
MyNavy HR - DEPLOYMENT_DATA_MRRS	Medical Health System Genesis Encounter
Periodic Health Assessment	Medical Health System Genesis Admissions
DoD Suicide Event Report	Health of the Force







DATA (CONT.)



How often is the data refreshed?

- Data changes can vary widely depending on the unique data source.
- Data sources feeding the models are updated quarterly.

If you have any questions about the data, its origins, or the analytics methodology, please reach out to the CRMD team via email at <u>CRMD@navy.mil</u>.



CRMD User Guide Review - Section 3: Overview



WHAT IS DISPLAYED IN THE CRMD?



- Displays an **overall risk score** and **category risk scores** for an individual unit on the main screen with the ability to drill down into the different categories to access information on the contributing factors to those risk categories.
- Navy peer group and Navy overall risk scores are also provided for comparison purposes.

WHAT IS THE RISK SCORE?



- Measures the risk of a **destructive behavior/event in the next quarter** based on individuals' current contributing factors.
- The score is generated from **predictive models** that use machine learning and then are transformed and converted into z-scores to estimate individual risk of a destructive behavior/event. These individual risks are then aggregated at the unit level to produce a UIC-level risk score. Risk scores are calibrated so that the Navy average is close to 3, and high-/low-risk UICs are identified comparatively.
- The risk score is also back-dropped with the stoplight color theme of red, amber, or green to highlight the risk level.



Peer group assignments inform these color backdrops.



RISK SCORE DETAILS



What is the overall risk score?

• Average of the risk category scores for the six destructive behaviors/events for the unit.

What are the category risk scores?

- Risk of six destructive behaviors/events categories is examined in the CRMD:
 - 1) Alcohol Abuse Probability of a flag for an alcohol event (e.g., DUI).
 - 2) Drug Use Probability of a positive drug test.
 - 3) Suicide Probability of suicidal thought, attempt, or completion.
 - 4) Sexual Harassment Probability of sexual harassment occurring in the unit.
 - 5) Sexual Assault Victim Probability of having a sexual assault case where the individual is listed as the assault victim.
 - 6) Sexual Assault Subject Probability of having a sexual assault case where the individual is listed as the assault subject.







WHAT ARE THE NAVY PEER GROUP RISK SCORES?

- Peer groups defined provide a more comprehensive view of relative risk, as some ship types/sizes are inherently at higher risk than others.
- Each unit is assigned to a peer group based on whether it is an afloat or shore command, the platform type, and the number of sailors currently aligned and are as follows:

AFLOAT:

- Extra Small (10-49 sailors)
- Small (50-149 sailors)
- Medium (150-299 sailors)
- Large (300-799 sailors)
- Extra Large (800-1199 sailors)
- Extra Extra Large (1200-3200+ sailors)

SHORE:

- Small (10-49 sailors)
- Medium (50-149 sailors)
- Large (150-3200+ sailors)







NAVY RISK SCORES

What are the Navy peer group risk scores? (cont.)

- In addition, the dynamic coloring has been adjusted so that it is relative to the mean risk score for the unit's specific peer group:
 - **Green** = Commands that fall at or below the mean risk score for their peer group.
 - Amber = Commands that fall within one standard deviation above the mean for their peer group.
 - **Red** = Commands that fall above one standard deviation above the mean for their peer group.

What are the Navy-wide average risk scores?

- These provide visibility to the average risk Navy-wide and includes all units of every type and size and is calculated on the individual sailor-level.
- All unit-level risk scores and peer group risk scores have been calibrated to reflect the level of risk relative to the overall Navy average.







WHAT ARE THE CONTRIBUTING FACTORS FOR THE RISK CATEGORIES?

- This is a **quarter-by-quarter display of demographic, service-related, or health-related factors** that most contribute to the predicted probability of destructive behaviors/events occurring within the individual unit.
 - The lists also include aggregated factor constructs such as "Mental Health Diagnoses" as opposed to individual factors like "Diagnosed With PTSD".
- Specific factors/factor constructs for each quarter can be viewed by selecting the tile above each quarter's risk score. The selected quarter tile will display a black background with white font. This will show a bar graph of the top 5 risk factors/factor constructs that either increase or decrease risk for that quarter along with their specific Shapley value.
- **Shapley values** are used to measure the impact of a feature on the model output.
 - They provide insight on both the magnitude (how important a feature is in predicting risk) as well as direction (does the presence of this feature increase or decrease risk).
 - Shapley values take into account how the model is weighting each feature to predict risk, as well as the number of Sailors in the command presenting this feature.







WHAT ARE THE CONTRIBUTING FACTORS FOR THE RISK CATEGORIES? (cont.)

- These factors are relevant to the **individual unit**, relative to the unit's peer group, and specific to the risk category selected.
- The **past and future factors** may allow for a better understanding of which contributing factors changed for the individual unit and unit risk increases or decreases over time.
- The present quarter may include **predictive elements**, as users may be accessing the dashboard at periods other than the beginning or end of the month.







WHAT ARE THE ACTION PLANS?



- Action Plans provide Navy-approved recommendations to address and reduce the risk associated with the category's destructive behavior or event.
- Each Action Plan includes links to other information and resources available to commands to support their crew members in these areas.
- Action Plans are accessed by clicking on the dark grey "Action Plan" button on the right side each risk category screen which will open a PDF in a separate browser window.

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WHAT IS THE DATA DICTIONARY?

- The CRMD Data Dictionary screen consists of **four tabs** each providing a different type of information related to the data used to generate risk scores and populate the dashboard.
- Please note that this screen is a living page and will be updated as new data is added to the dashboard and machine learning models.
- The information provided by each tab includes:
 - **1. Data Constructs** Identifies the compilations of individual features used in model training combined for dashboard display to improve interpretability.
 - 2. Individual Features Identifies standalone data elements used for model training.
 - **3.** Features Controlled For Identifies features that were controlled for in the models but do not appear in dashboard display.
 - **4. Data Sources** Identifies a list of data sources utilized to train the models along with the date range of the data source and the data refresh periodicity.



CRMD User Guide Review - Section 3: Overview



HOW DOES LEADERSHIP USE THE INFORMATION IN THE DASHBOARD?

- A unit's risk factors can vary based on the type of unit, the mission assigned, the region the unit is based or deployed in, and other unit-specific details; however, the CRMD risk scores for a unit are a good starting place for leaders to begin to identify data-based areas of contributing factors that lead to risk for their unit.
- Leaders view the dashboard screens for risk scores, trends, and contributing factors to identify areas of concern or escalation, and to compare to the Navy peer group and Navy average risk scores.
- The risk assessment information provided by the CRMD can be used in combination with additional insights and personal observations from CRT members and khaki leadership to help determine intervention strategies and to plan future support and training efforts.









FEEDBACK OPPORTUNITIES



- As mentioned earlier, the dashboard is still **evolving**, and we encourage users to provide feedback and recommendations for improvements on all aspects.
- Please share what your command's thoughts about any of the following aspects by emailing the CRMD team directly at <u>CRMD@navy.mil</u>
 - $\circ~$ The features and format of each of the screens
 - $\circ~$ The general design of the data displays and screens
 - $\circ~$ The usefulness of the data provided
 - $\circ~$ The interpretability of the risk scores and data
 - $\circ~$ Suggestions for future options







WHAT TO DO IF YOU HAVE TROUBLE ACCESSING THE CRMD:

- If you are experiencing any issues accessing the dashboard, please follow the steps below to troubleshoot.
 - Ensure you are only using Google Chrome to access the Dashboard.
 - Clear your Cache and cookies following the steps below:
 - On your computer, open Google Chrome.
 - At the top right, click More.
 - Click More tools > Clear browsing data.
 - At the top, choose a time range. To delete everything, select All time.
 - Next to "Cookies and other site data" and "Cached images and files," check the boxes.
 - Click Clear data.
 - Change your proxy/VPN if you are connected via NMCI.
- If you are still experiencing issues after performing the steps provided, please contact the ADE Help Desk at <u>ADEHelpDesk@us.navy.mil</u>.
- Please make the subject line, "CRMD Access: <your first and last name>, <Date you are submitting your request>".
 Additionally, any details you can provide, i.e., screenshots, error messages, etc. would be greatly appreciated in order for us to assist as seamlessly as possible.







Questions?





















CRMD User Guide Review - Section 4: Navigation





UIC AVERAGE RISK SCORE



PEER RISK SCORE

2.65

NAVY OVERALL RISK

2.93

Unit Complement

JUNIOR ENLISTED: 1,375

SENIOR ENLISTED: 1,100

OFFICERS: 275

TOTAL: 2,750

 ALCOHOL RISK	DRUG RISK
3.16 UIC Risk Score	1.00 UIC Risk Score
SUICIDE RISK	SEXUAL HARASSMENT
2.35 UIC Risk Score	3.35 UIC Risk Score
SEXUAL ASSAULT VICTIM	SEXUAL ASSAULT SUBJECT
3.56 UIC Risk Score	3.60 UIC Risk Score



Risk Category Scores for UIC 99995:

CRMD currently evaluates risk for six categories of destructive behavior events: drug use, alcohol abuse, suicidal behaviors, sexual harassment, and sexual assault (both victim and subject). The risk scores reflect unit-level risk of the destructive outcomes in the next quarter. (CLICK THE TILES BELOW TO EXPLORE MORE)

The Main Screen provides the following information relevant to an individual unit:

- Overall risk scores for the unit, Navy peer group, and Navy-wide average
- Unit complement breakdown
- Unit-level risk category scores for Alcohol Abuse Risk, Drug Use Risk, Suicide Risk, Sexual Harassment Risk, Sexual Assault Victim Risk, and Sexual Assault Subject Risk
- Drilldown capability to additional insights for each risk category by clicking on the risk category score tile





/IvNAVYHIE

CRMD User Guide Review - Section 4: Navigation





Risk Category Drilldown View:

- Each risk category has a distinct, unitspecific drilldown view available. To access this view, click on the risk category score tile on the Main Screen
- There are separate screens for each of these risk categories: Alcohol Abuse Risk, Drug Use Risk, Suicide Risk, Sexual Harassment Risk, Sexual Assault Victim Risk, and Sexual Assault Subject Risk
- Each risk category view features the following category-specific information for the unit:
 - o Unit-level Risk Score
 - Navy Peer Group Risk Score
 - Navy Average Risk Score
 - Contributing Factors lists with Shapley values for past and predicted quarters
 - o Link to Action Plans





Home	Overview	Suicide	Alcohol	Drugs	SH	SA Victim	SA Subject	Data Dictionary

Data Dictionary

Please utilize the buttons below to select your dictionary of interest. The **Data Constructs** dictionary identifies the compilations of individual features used in model training, combined for dashboard display to improve interpretability. Please note that this is a **living page** and will be updated as new data is added to the dashboard and machine learning models.

Last Updated: September 14, 2023

Data Constru	s Individual Features Features Controlled For Data Sources									
Behavioral Health Concerns	Sailor has documented struggle with alcohol- and/or substance-related illness(es); a health provider documented one or more medical concerns in the most recent PHA completed by the Sailor; Sailor self-reported drinking alcohol more than 14 times a week; Sailor's depression score on the PHQ-8 Depression Assessment Scale is over 10; one or more behavioral health concern(s) were reported by the Sailor in the most recent completed PHA; Sailor was a sexual or nonsexual harassment vi									
Completed Destructive Behavior Trainings	Sailor has completed and passed trainings related to destructive behaviors									
Less Crew Experience	Sailor has been in active service for 60 months or less; is rank E1-E5; has served in less than 2 UICs; or has served in their current UIC for 12 months or less									
Medical Referrals	A healthcare provider recommended one or more medical referral(s) for the Sailor in the most recent PHA completed									
Mental Health Medical Encounters	Number of medical encounters for a mental health condition since October 2016									
More Crew Experience	Sailor has been in active service for over 60 months; is rank E6+, CWO, or O; has served in 2 or more UICs; has served in their current UIC for over 12 months; or has completed leadership training courses									
Off-Track Career Progression	Sailor has an individual performance trait average of 1 or 2; or has received a disciplinary waiver or a negative promotion or retention recommendation									
On-Track Career Progression	Sailor has an individual performance trait average of 3 or above; has not received a disciplinary waiver or a negative promotion or retention recommendation									
Other Medical Indicators	ailor has a high number of medical visits; the average amount of physical pain experience by the Sailor in the most recent completed PHA is higher than a 7; Sailor as a medical waiver; Sailor has urgent or routine medical encounters while deployed; Sailor contracted a disease or sustained an injury while deployed									
Prescription Drug Use	ailor has a history of being prescribed one or more medication(s) to address health concerns since October 2016									

Data Dictionary Screen:

- The CRMD Data Dictionary screen consists of **four tabs** each providing a different type of information related to the data used to generate risk scores and populate the dashboard.
- The **Data Constructs** tab identifies the compilations of individual features used in model training combined for dashboard display to improve interpretability.







Home O	Verview	Suicide	Alcohol	Druç	js 🛛	SH	SA Victin	n [SA Subject	Data Dictionary
Data Diction Please utilize the buttons Please note that this is a	TATY s below to select a living page and	your dictionary o will be updated	of interest. The Inc as new data is ad	lividual Fe Ided to the	atures di dashboar	ctionary identifies d and machine le	s standalone da arning models	ata eler	nents used for m	odel training.
ast Updated: Septembe	er 14, 2023 ructs	Indivi	dual Features	;	Feat	ures Control	led For		Data So	urces
Active Duty	Sailor is cleare	ed for active duty	based on evaluation	n records						
Age	Sailor's current age (Less Than 21, 21 to 23, 24 to 26, 27 to 30, 31 to 36, or Greater Than 36)									
Alcohol Use (Medical Record: Self Report)	Sailor's typical	alcohol consump	tion as self-reporte	d to a health	icare provi	der during a medic	cal encounter			
ASVAB AFQT Score	Sailor's Armeo High: Scores o	I Services Vocation of 70 or higher	nal Aptitude Batter	y Armed For	rces Qualif	ication test score.	Low: Scores be	elow 35;	Medium: Scores	between 35 and 70;
Marital Status, Depende	nts Sailor's marita dependent info	I status (Single, N ormation may be e	larried, Divorced, W excluded from the fe	/idowed) an eature name	d whether for cases	they have depend in which this data	ents (Has Depe was missing or	ndents, unavaila	No Dependents). able for the Sailor.	Marital status or
Sex	Sex of the Sai	lor (M/F) based or	n personnel records							
Tobacco Use (Medical Record: Self Report)	Sailor's tobacc	co usage (yes/no)	as self-reported to	a healthcare	e provider	during a medical e	ncounter			

Data Dictionary Screen:

 The Individual Features tab identifies standalone data elements used for model training.







Home	Overview	Suicide	Alcohol	Drugs	SH	SA Victim	SA Subject	Data Dictionary		
Data Dict lease utilize the b o not appear in da ast Updated: Sep	tionary buttons below to sel ashboard display. F stember 14, 2023	ect your dictionary lease note that thi	of interest. The Fe a s is a living page a	atures Controlle nd will be update	d For dictionary ic d as new data is a	lentifies features th Idded to the dashb	at were controlled fo pard and machine le	or in the models but arning models.		
Data C	onstructs	Indiv	vidual Features	Fe	atures Contro	olled For	Data So	ources		
Currently in Involu	Intary Extension	Sailor is current	in involutary extension	n of service						
Months Since Firs Encounter - N/A Months Since Firs Medical Encounter Months Since Last Months Since Last Months Since Last Incident - N/A	t/Last Alcohol Medi t/Last Substance Us r - N/A t Harassment Incide t Suicide-Related	cal Number of mont the Sailor. Positi se Number of mont Sailor. Positive v ent - Number of mont is no record of th Number of mont behavior for the	Number of months past since the first or most recent alcohol-related medical encounter. An N/A value means there is no record of this behavior for the Sailor. Positive values are included in the Behavioral Health Concerns construct. Number of months past since the first or most recent drug related medical encounter. An N/A value means there is no record of this behavior for the Sailor. Positive values are included in the Behavioral Health Concerns construct. • Number of months elapsed since the last harassment (sexual or nonsexual) incident recorded in the Sailor's current UIC. An N/A value means there is no record of this behavior for the command. Positive values are included in the Behavioral Health Concerns construct. • Number of months elapsed since the suicide-related incident recorded in the Behavioral Health Concerns construct. • Number of months elapsed since the suicide-related incident recorded in the Sailor's current UIC. An N/A value means there is no record of this behavior for the command. Positive values are included in the Behavioral Health Concerns construct.							
Months To EAOS		Number of mont	Number of months until end of active obligated service date (Less Than 7, 7 to 12, 13 to 24, 25 to 36, 37 to 48, 49 to 60, Greater Than 60)							
Occupation Code		Sailor's Navy oc	cupational career categ	ory						
Recent Drug/Alcol (ADMITS)	hol Incident Record	ed Sailor was recen	Sailor was recently involved in at least one alcohol or drug abuse event as recorded in ADMITS							
Recent Sexual Ass (DSAID, Subject)	sault Recorded	Sailor was recen	Sailor was recently involved in at least one sexual assault perpetration event as recorded in DSAID							
Recent Sexual Ass (DSAID, Victim)	sault Recorded	Sailor was recen	Sailor was recently involved in at least one sexual assault victimization event as recorded in DSAID							
Recent Sexual Har Recorded (SH/EO)	rassment Incident	Sailor was recen	Sailor was recently involved in at least one sexual harassment event as recorded in SH/EO							
Recent Suicidal Be	ehavior Recorded	Sailor was recen	tly involved in at least o	one suicidal behavior	event as recorded in	DODSER				
Shore/Afloat Com	mand	Whether the UIC	the Sailor is currently	serving in is primarily	a Shore or Afloat co	mmand based on assi	gnment codes			
Fotal Number of M Medium)	ledical Visits (Low/	Total number of Medium classes	medical encounters (e. are not displayed in the	g., visits, inpatient st a dashboard; howeve	ays, battle injury, non er, the High class is c	-battle injury) a Sailor aptured within the Oth	has had in the past year er Medical Indicators co	. The Low and nstruct.		
Total UIC Harassm	nent Incidents - N/A	Number of haras behavior for the	sment (sexual or non-s command. Positive valu	exual) complaints or ues are included in the	record for the Sailor e Behavioral Health	's current UIC. An N/A Concerns construct.	value means there is no	o record of this		
Total UIC Suicide	Related Incidents -	N/A Number of suicion Positive values a	e-related incidents on re included in the Beha	record for the Sailor's avioral Health Conce	s current UIC. An N/A	value means there is	no record of this behavi	or for the command.		
UIC Size		Number of sailor	s in UIC the Sailor is se	erving in						
Weight (lbs), Heigh	ht (inches)	Sailor's weight ir	pounds, height in inch	es based on their mo	st recent vitals recor	ds				

Data Dictionary Screen:

 The Features Controlled For tab identifies features that were controlled for in the models but do not appear in dashboard display.







 Home
 Overview
 Suicide
 Alcohol
 Drugs
 SH
 SA Victim
 SA Subject
 Data Dictionary

Data Dictionary

Please utilize the buttons below to select your dictionary of interest. The **Data Sources** dictionary identifies a list of data sources utilized to train the models. Please note that this is a **living page** and will be updated as new data is added to the dashboard and machine learning models.

Last Updated: September 14, 2023

Data Construct	Individual Features	Features Co	ontrolled For	Data Sources
(ADE) NAVYY_MEMBER_ASSIGNMENTS_V	/IEW	CY11-Current	Monthly snapshots	2011-19; Daily snapshots starting Jan 29
(ADE) NAVYY_MEMBER_ASVAB_VIEW		CY11-Current	Monthly snapshots	2011-19; Daily snapshots starting Jan 20
(ADE) NAVYY_MEMBER_DESIGNATOR_VI	EW	CY11-Current	Monthly snapshots	2011-19; Daily snapshots starting Jan 23
(ADE) NAVYY_MEMBER_EVALS_VIEW		CY11-Current	Monthly snapshots	2011-19; Daily snapshots starting Jan 21
(ADE) NAVYY_MEMBER_INJURY_VIEW		CY11-Current	Monthly snapshots	2011-19; Daily snapshots starting Jan 22
(ADE) NAVYY_MEMBER_PERSON_VIEW		CY11-Current	Monthly snapshots	2011-19; Daily snapshots starting Jan 24
(ADE) NAVYY_MEMBER_RANK_VIEW		CY11-Current	Monthly snapshots	2011-19; Daily snapshots starting Jan 25
(ADE) NAVYY_MEMBER_SERVICE_VIEW		CY11-Current	Monthly snapshots	2011-19; Daily snapshots starting Jan 26
(ADE) NAVYY_MEMBER_WAIVERS_VIEW		FY17-Current	Daily snapshots st	arting Jan 17
(ADE) NAVYY_PERSON_TRAINING_VIEW		CY11-Current	Monthly snapshots	2011-19; Daily snapshots starting Jan 28
(External) COMPREHENSIVE AMBULATOR	Y/PROFESSIONAL ENCOUNTER RECO	FY17-July 23	Monthly	
(External) DEFENSE SEXUAL ASSAULT IN	CIDENT DATABASE CASE	FY17-August 23	Monthly	
(External) DEFENSE SEXUAL ASSAULT IN	CIDENT DATABASE SUBJECT DATA	FY17-August 23	Monthly	
(External) DEFENSE SEXUAL ASSAULT IN	CIDENT DATABASE VICTIM	FY17-August 23	Monthly	
(External) DEPT OF DEFENSE SUICIDE EVI	ENT REPORT	FY17-July 23	Monthly	
(External) MEDICAL DATA REPOSITORY C	LINICAL DATA REPOSITORY VITALS (D	FY17-June 23	Monthly	
(External) MEDICAL HEALTH SYSTEM GEN	IESIS ADMISSIONS	FY17-July 23	Monthly	
(External) MEDICAL HEALTH SYSTEM GEN	IESIS ENCOUNTER	FY17-July 23	Monthly	
(External) NAVY ALCOHOL DRUG MISUSE	PREVENTION CONTROL SYSTEM	FY17-August 22	As Required	
(External) PERIODIC HEALTH ASSESSMEN	ІТ	FY17-July 23	Monthly	
(External) PHARMACY DETAIL TRANSACT	ION SERVICE	FY17-July 23	Monthly	
(External) SEXUAL HARASSMENT EQUAL	OPPORTUNITY	FY17-July 23	Monthly	
(External) STANDARD INPATIENT DATA RE	ECORD	FY17-March 23	Monthly	
(External) THEATER MEDICAL DATA STOR	E	FY17-June 23	Monthly	
(External) TRICARE ENCOUNTER DATA - N	ION INSTITUTIONAL	FY17-June 23	Monthly	
(External) TRICARE ENCOUNTER DATA IN	STITUTIONAL	FY17-June 23	Monthly	

Data Dictionary Screen:

 The Data Sources tab identifies a list of data sources utilized to train the models along with the date range of the data source and the data refresh periodicity.

