

Commanders' Risk Mitigation Dashboard (CRMD)

Quick Start Guide

Section 1: Introduction

CRMD is an operational tool for unit-level prediction of destructive behaviors in the Navy. Identifying these risk factors early arms Commanders with the tools and knowledge to implement measures that may help avoid destructive behaviors in their commands. CRMD is not intended to be used punitively. Data is updated quarterly.

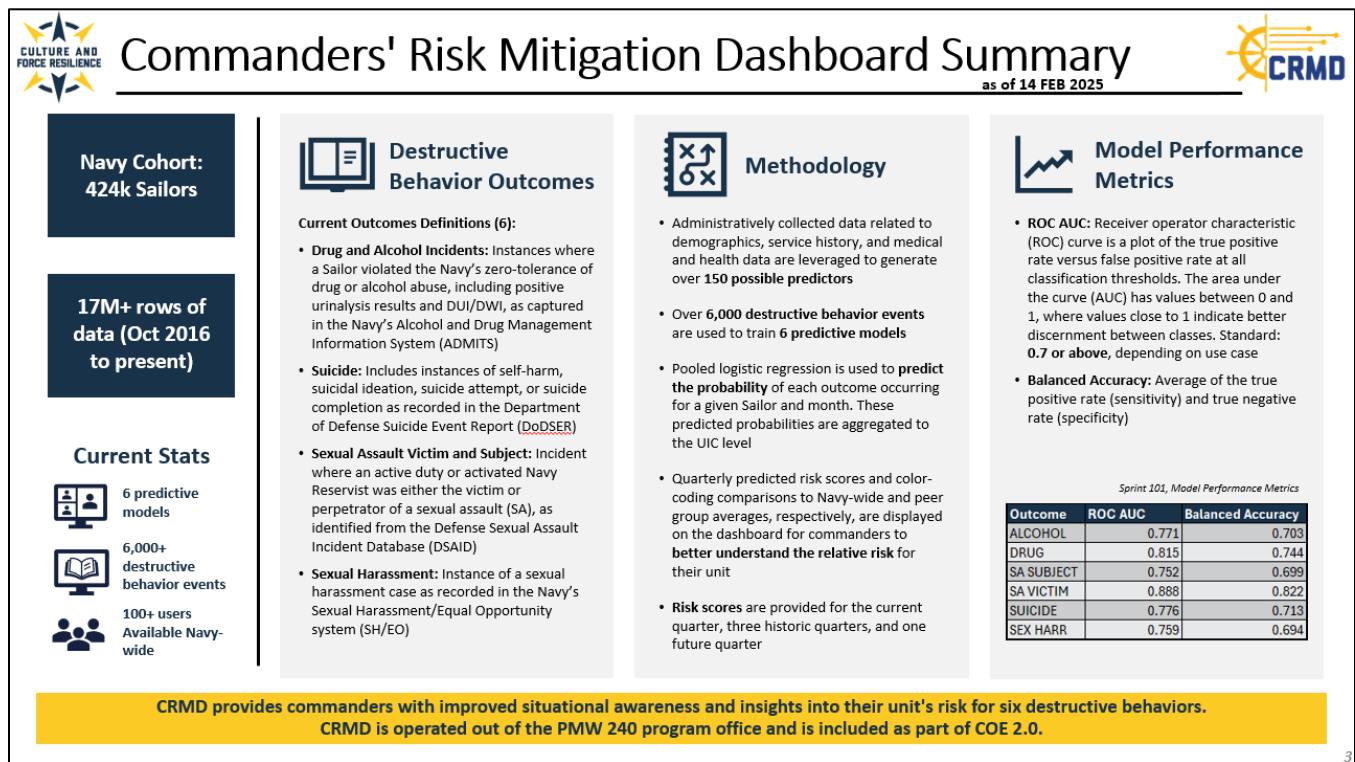


Figure 1: CRMD Summary Slide

Section 2: User Access / Help Desk

Personnel identified as members of an active command triad will be granted access automatically based on their assigned role.

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. Endorsement can be a brief email from the appropriate authority approving access to **CRMD@navy.mil** or **ADEHelpDesk@us.navy.mil**. An email template is available for download under the quick links section of the CRMD home page.

Once access is configured, the dashboard can be reached via this URL:

<https://crmd.portalprod.ade.cloud.navy.mil>

If you need any help accessing CRMD, please email the ADE Help Desk at **ADEHelpDesk@us.navy.mil**.

Section 3: CRMD Overview

Data Sources

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
Periodic Health Reassessment	Health of the Force
DoD Suicide Event Report	

Table 1: Current CRMD Data Sources

Data Displays

CRMD displays an overall risk score and six different 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. In addition, Navy peer group and Navy overall risk scores are also provided for comparison purposes. CRMD's risk scores measure the risk of a destructive behavior/event in the next quarter based on individuals' current contributing factors.

Contributing Factors to Risk

Along with the overall and category risk scores, there is also 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. These factors are relevant to the individual unit, relative to the unit's peer group, and specific to the risk category selected.

The view on the Risk Category screens can be changed to display the top 5 risk factors/factor constructs that contribute to increases or decreases in risk of experiencing a destructive behavior/event for each calendar quarter by clicking on the quarter tile about each quarters' score. The factors/factor constructs are displayed on a bar graph along with their Shapley values below the quarterly scores.

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 the Data Dictionary 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:

- **Data Constructs** – The compilations of individual features used in model training combined for dashboard display to improve interpretability
- **Individual Features** – Standalone data elements used for model training
- **Features Controlled For** – Features controlled for in the models but do not appear in dashboard display
- **Data Sources** – List of data sources utilized to train the models along with the date range of the data source and the data refresh periodicity

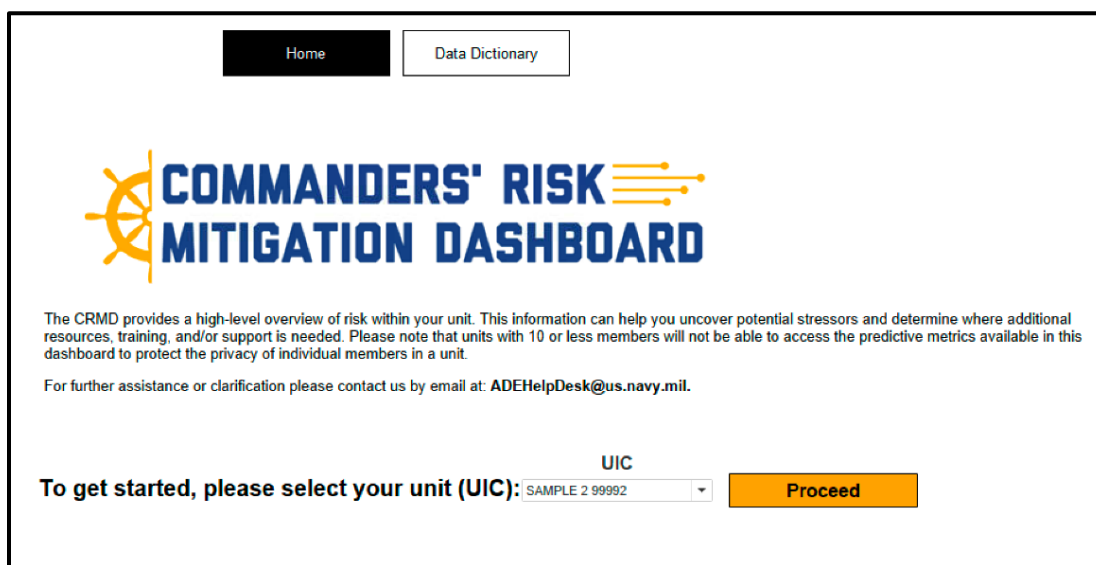
Additional Details

For additional information and detail on the displays, risk score calculations, contributing factors, peer group definitions, and color backdrops please refer to the complete CRMD User Guide.

Section 4: CRMD Navigation

Home Screen:

Provides a brief overview of CRMD, the Helpdesk email address, and a dropdown menu to select your unit for viewing.



The screenshot shows the CRMD Home Screen. At the top, there are two buttons: "Home" (highlighted in black) and "Data Dictionary". Below these is the CRMD logo, which consists of a yellow ship's wheel icon and the text "COMMANDERS' RISK MITIGATION DASHBOARD" in blue. Under the logo, there is a paragraph of text explaining the dashboard's purpose and a note about privacy. Below this, there is a line of text providing the helpdesk email address: "ADEHelpDesk@us.navy.mil". At the bottom, there is a section titled "To get started, please select your unit (UIC):" followed by a dropdown menu showing "SAMPLE 2 99992" and a yellow "Proceed" button.

Figure 2: CRMD Home Screen

Main Screen:

Displays all risk scores for the unit, the Navy peer group, and Navy-wide average, as well as a unit complement breakdown, and drilldown capability to the contributing factors for each of the risk categories.

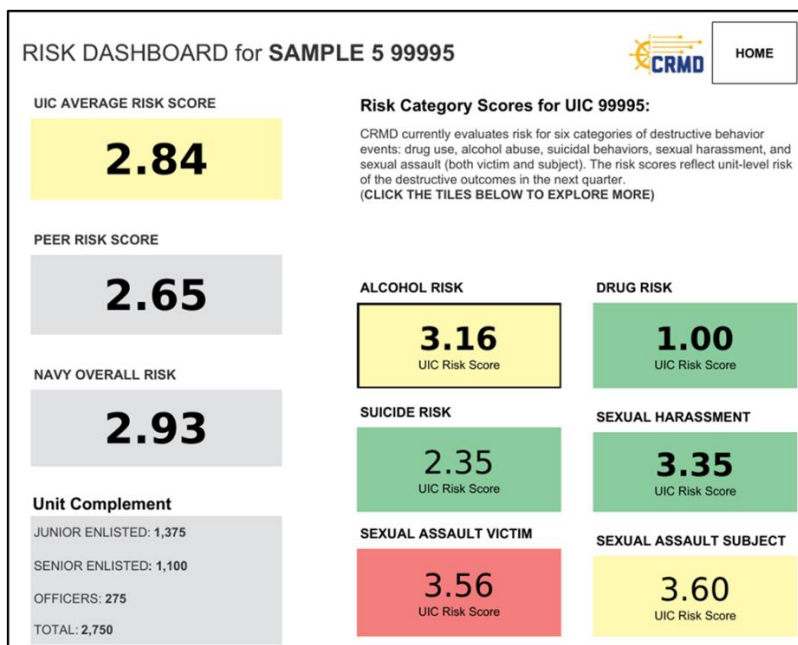


Figure 3: CRMD Main Screen

Risk Category Drilldown View:

Each risk category has a unique drilldown view that displays a unit-level Risk Score, the Navy Peer Group Risk Score, the Navy Average Risk Score, and Contributing Factors lists which is accessed by clicking on the risk category score tile on the Main Screen.

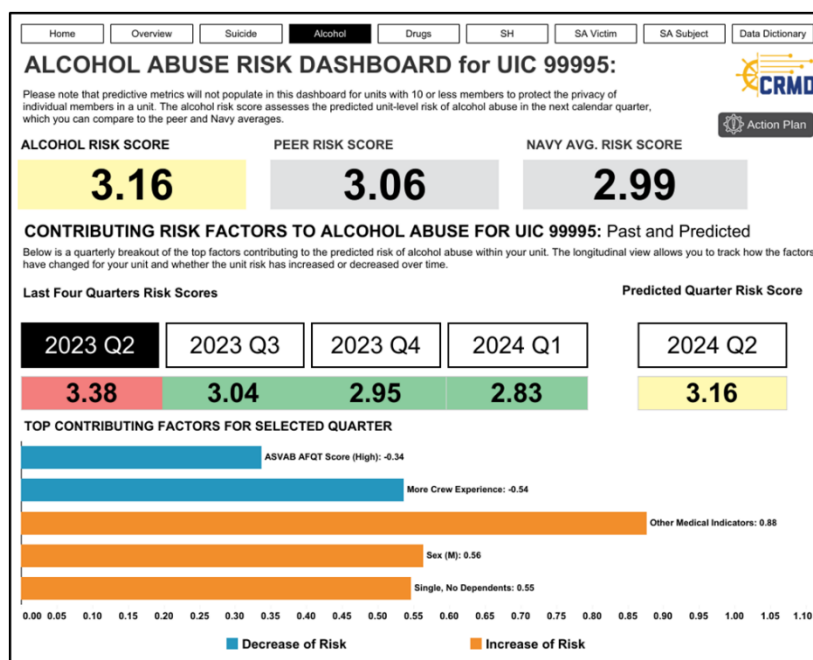


Figure 4: CRMD Risk Category Screen

Data Dictionary Screen:

Consists of **four tabs**, each explaining the data used to generate risk scores and populate the dashboard.

1) Data Constructs Tab:

Home	Overview	Suicide	Alcohol	Drugs	SH	SA Victim	SA Subject	Data Dictionary
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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 Constructs	Individual Features
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	Sailor 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 has 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	Sailor has a history of being prescribed one or more medication(s) to address health concerns since October 2016

Figure 5: CRMD Data Constructs Screen

2) Individual Features Tab:

Home	Overview	Suicide	Alcohol	Drugs	SH	SA Victim	SA Subject	Data Dictionary
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Data Dictionary	
Please utilize the buttons below to select your dictionary of interest. The Individual Features dictionary identifies standalone data elements used for model training. 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 Constructs	Individual Features
Active Duty	Sailor is cleared for active duty based on evaluation 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 consumption as self-reported to a healthcare provider during a medical encounter
ASVAB AFQT Score	Sailor's Armed Services Vocational Aptitude Battery Armed Forces Qualification test score. Low: Scores below 35; Medium: Scores between 35 and 70; High: Scores of 70 or higher
Marital Status, Dependents	Sailor's marital status (Single, Married, Divorced, Widowed) and whether they have dependents (Has Dependents, No Dependents). Marital status or dependent information may be excluded from the feature name for cases in which this data was missing or unavailable for the Sailor.
Sex	Sex of the Sailor (M/F) based on personnel records
Tobacco Use (Medical Record: Self Report)	Sailor's tobacco usage (yes/no) as self-reported to a healthcare provider during a medical encounter

Figure 6: CRMD Individual Features Screen

3) Features Controlled For Tab:

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

Please utilize the buttons below to select your dictionary of interest. The **Features Controlled For** dictionary identifies features that were controlled for in the models but do not appear in dashboard display. 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 Constructs	Individual Features	Features Controlled For	Data Sources
Currently in Involuntary Extension			
Months Since First/Last Alcohol Medical Encounter - N/A	Sailor is currently in involuntary extension of service		
Months Since First/Last Substance Use Medical Encounter - N/A	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.		
Months Since Last Harassment Incident - N/A	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.		
Months Since Last Suicide-Related Incident - N/A	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.		
Months To EAOS	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.		
Occupation Code	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)		
Recent Drug/Alcohol Incident Recorded (ADMTS)	Sailor's Navy occupational career category		
Recent Sexual Assault Recorded (DSAD, Subject)	Sailor was recently involved in at least one alcohol or drug abuse event as recorded in ADMTS		
Recent Sexual Assault Recorded (DSAD, Victim)	Sailor was recently involved in at least one sexual assault perpetration event as recorded in DSAD		
Recent Sexual Harassment Incident Recorded (SHED)	Sailor was recently involved in at least one sexual assault victimization event as recorded in DSAD		
Recent Suicidal Behavior Recorded (DODSER)	Sailor was recently involved in at least one sexual harassment event as recorded in SHED		
Shore/Afloat Command	Sailor was recently involved in at least one suicidal behavior event as recorded in DODSER		
Total Number of Medical Visits (Low/Medium)	Whether the UIC the Sailor is currently serving in is primarily a Shore or Afloat command based on assignment codes		
Total UIC Harassment Incidents - N/A	Total number of medical encounters (e.g., visits, inpatient stays, battle injury, non-battle injury) a Sailor has had in the past year. The Low and Medium classes are not displayed in the dashboard; however, the High class is captured within the Other Medical Indicators construct.		
Total UIC Suicide Related Incidents - N/A	Number of harassment (sexual or non-sexual) complaints on record for 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.		
UIC Size	Number of suicide-related incidents on record for 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.		
Weight (lbs), Height (inches)	Number of sailors in UIC the Sailor is serving in		
	Sailor's weight in pounds, height in inches based on their most recent vitals records		

Figure 7: CRMD Features Controlled For Screen

4) Data Sources Tab:

Home	Overview	Suicide	Alcohol	Drugs	SH	SA Victim	SA Subject	Data Dictionary
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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 Controlled For	Data Sources
(ADE) NAVY MEMBER ASSIGNMENTS_VIEW		CY11-Current	Monthly snapshots 2011-19; Daily snapshots starting Jan 29
(ADE) NAVY MEMBER ASVAB_VIEW		CY11-Current	Monthly snapshots 2011-19; Daily snapshots starting Jan 20
(ADE) NAVY MEMBER DESIGNATOR_VIEW		CY11-Current	Monthly snapshots 2011-19; Daily snapshots starting Jan 23
(ADE) NAVY MEMBER EVALS_VIEW		CY11-Current	Monthly snapshots 2011-19; Daily snapshots starting Jan 21
(ADE) NAVY MEMBER INJURY_VIEW		CY11-Current	Monthly snapshots 2011-19; Daily snapshots starting Jan 22
(ADE) NAVY MEMBER PERSON_VIEW		CY11-Current	Monthly snapshots 2011-19; Daily snapshots starting Jan 24
(ADE) NAVY MEMBER RANK_VIEW		CY11-Current	Monthly snapshots 2011-19; Daily snapshots starting Jan 25
(ADE) NAVY MEMBER SERVICE_VIEW		CY11-Current	Monthly snapshots 2011-19; Daily snapshots starting Jan 26
(ADE) NAVY MEMBER WAIVERS_VIEW		FY17-Current	Daily snapshots starting Jan 17
(ADE) NAVY PERSON TRAINING_VIEW		CY11-Current	Monthly snapshots 2011-19; Daily snapshots starting Jan 28
(External) COMPREHENSIVE AMBULATORY/PROFESSIONAL ENCOUNTER RECO.		FY17-July 23	Monthly
(External) DEFENSE SEXUAL ASSAULT INCIDENT DATABASE CASE		FY17-August 23	Monthly
(External) DEFENSE SEXUAL ASSAULT INCIDENT DATABASE SUBJECT DATA		FY17-August 23	Monthly
(External) DEFENSE SEXUAL ASSAULT INCIDENT DATABASE VICTIM		FY17-August 23	Monthly
(External) DEPT OF DEFENSE SUICIDE EVENT REPORT		FY17-July 23	Monthly
(External) MEDICAL DATA REPOSITORY CLINICAL DATA REPOSITORY VITALS (D.		FY17-June 23	Monthly
(External) MEDICAL HEALTH SYSTEM GENESIS ADMISSIONS		FY17-July 23	Monthly
(External) MEDICAL HEALTH SYSTEM GENESIS ENCOUNTER		FY17-July 23	Monthly
(External) NAVY ALCOHOL DRUG MISUSE PREVENTION CONTROL SYSTEM		FY17-August 22	As Required
(External) PERIODIC HEALTH ASSESSMENT		FY17-July 23	Monthly
(External) PHARMACY DETAIL TRANSACTION SERVICE		FY17-July 23	Monthly
(External) SEXUAL HARASSMENT EQUAL OPPORTUNITY		FY17-July 23	Monthly
(External) STANDARD INPATIENT DATA RECORD		FY17-March 23	Monthly
(External) THEATER MEDICAL DATA STORE		FY17-June 23	Monthly
(External) TRICARE ENCOUNTER DATA - NON INSTITUTIONAL		FY17-June 23	Monthly
(External) TRICARE ENCOUNTER DATA INSTITUTIONAL		FY17-June 23	Monthly

Figure 8: CRMD Data Sources Screen