Disability Evaluation Systems Analysis and Research

Annual Report 2017

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Material has been reviewed by the Walter Reed Army Institute of Research. There is no objection to its publication. The opinions or assertions contained herein are the private views of the authors, and are not to be construed as official, or as reflecting true views of the Department of the Army or the Department of Defense. The investigators have adhered to the policies for protection of human subjects as prescribed in AR 70–25.

Table of Contents

Executive Summary 1

Introduction to the Disability Evaluation System 3

Methods 8

Study Population 8

Variables 8

Demographic Characteristics 9

MEB variables 10

PEB variables 10

Combat Variables 11

Other Data Sources 11

Descriptive Statistics for All Disability Evaluations 13

History of Medical Disqualification, Pre-existing Conditions, Accession Medical Waiver, and Hospitalization among Service Members Evaluated for Disability 36

Medical disqualification and pre-existing conditions among enlisted service members evaluated for disability 37

History of accession medical waiver among enlisted service members evaluated for disability 50

History of hospitalization among active duty service members evaluated for disability 58

Database Limitations 66

Data Quality and Standardization Recommendations 67

Publications 68

References 70

Index of Figures

Figure 1: Key Variables Collected at Each Stage of Disability Evaluation 5

Figure 1a: Example of Disability Evaluation Process in the Army 5

Figure 2: Disability Evaluation Process in the Army 6

Figure 3: Disability Evaluation Process in the Navy and Marine Corps 6

Figure 4: Disability Evaluation in the Air Force 7

Index of Tables

Table 1: DES database characteristics by service 8

Table 2: DES Key variables 9

Table 3: Characteristics of DES evaluations: FY 2011-2016 14

Table 4: Total DES Evaluations by service and fiscal year: FY 2011-2016 14

Table 5: Rate of DES evaluation per 1,000 service members (total service population) by demographic characteristics and service: FY 2011-2015 vs. FY 2016 16

Table 6: Demographic characteristics of service members evaluated for disability: FY 2011-2015 vs. FY 2016 18

Table 7A: Distribution of unfitting conditions by body system category in individuals with a disability discharge: Army, FY 2011-2015 vs. FY 2016 20

Table 7B: Distribution of unfitting conditions by body system category in individuals with a disability discharge: Navy, FY 2011-2015 vs. FY 2016 20

Table 7C: Distribution of unfitting conditions by body system category in individuals with a disability discharge: Marine Corps, FY 2011-2015 vs. FY 2016 21

Table 7D: Distribution of unfitting conditions by body system category in individuals with a disability discharge: Air force, FY 2011-2015 vs. FY 2016 21

Table 8A: Most prevalent conditions within leading body system categories among individuals with a disability discharge: Army, FY 2011-2015 vs. FY 2016 23

Table 8B: Most prevalent conditions within leading body system categories among individuals with a disability discharge: Navy, FY 2011-2015 vs. FY 2016..... 23

Table 8D: Most prevalent conditions within leading body system categories among individuals with a disability discharge: Air Force, FY 2011-2015 vs. FY 2016..... 24

Table 9A: Ten most common VASRD categories in individuals with a disability discharge: Army, FY 2011-2015 vs. FY 2016 26

Table 9B: Ten most common VASRD categories in individuals with a disability discharge: Navy, FY 2011-2015 vs. FY 2016..... 26

Table 9C: Ten most common VASRD categories in individuals with a disability discharge: Marine Corps, FY 2011-2015 vs. FY 2016 27

Table 9D: Ten most common VASRD categories in individuals with a disability discharge: Air Force, FY 2011-2015 vs. FY 2016 27

Table 10A: Most recent disposition by service for all individuals evaluated for disability discharge: FY 2011-2015 vs FY 2016 29

Table 10B: Rate of disposition type per 10,000 service members by service for all individuals evaluated for disability discharge: FY 2011-2015 vs FY 2016 31

Table 11A: Most recent percent rating by service for all individuals evaluated for disability discharge: FY 2011-2015 vs FY 2016 33

Table 11B: Rate of percent disability rating per 10,000 service members by service for all individuals evaluated for disability discharge: FY 2011-2015 vs FY 2016 35

Table 14A: Medical qualification status among enlisted individuals who were evaluated for disability with MEPS examination record: Army, FY 2011-2015 vs. FY 2016..... 39

Table 14B: Medical qualification status among enlisted individuals who were evaluated for disability with MEPS examination record: Navy, FY 2011-2015 vs. FY 2016 39

Table 14C: Medical qualification status among enlisted individuals who were evaluated for disability with MEPS examination record: Marine Corps, FY 2011-2015 vs. FY 2016..... 39

Table 14D: Medical qualification status among enlisted individuals who were evaluated for disability with MEPS examination record: Air Force, FY 2011-2015 vs. FY 2016 39

Table 15A: Five most common ICD-9 diagnosis codes appearing in MEPS medical examination records of service members evaluated for disability: Army, FY 2011-2015 vs. FY 2016 41

Table 15B: Five most common ICD-9 diagnosis codes appearing in MEPS medical examination records of service members evaluated for disability: Navy, FY 2011-2015 vs. FY 2016..... 42

Table 15C: Five most common ICD-9 diagnosis codes appearing in MEPS medical examination records of service members evaluated for disability: Marine Corps, FY 2011-2015 vs. FY 2016 43

Table 15D: Five most common ICD-9 diagnosis codes appearing in MEPS medical examination records of service members evaluated for disability: Air Force, FY 2011-2015 vs. FY 2016..... 44

Table 16A: Most prevalent disqualification types at MEPS medical examination within leading disability body system categories: Army, FY 2011-2015 vs. FY 2016..... 46

Table 16B: Most prevalent disqualification types at MEPS medical examination within leading disability body system categories: Navy, FY 2011-2015 vs. FY 2016 47

Table 16D: Most prevalent disqualification types at MEPS medical examination within leading disability body system categories: Air Force, FY 2011-2015 vs. FY 2016..... 49

Table 17: History of accession medical waiver Applications among enlisted service members evaluated for disability by year of disability evaluation: FY 2011-2016 50

Table 18A: Five most common ICD-9 diagnosis codes for accession medical waivers considered among enlisted individuals evaluated for disability: Army, FY 2011-2015 vs. FY 2016..... 51

Table 18B: Five most common ICD-9 diagnosis codes for accession medical waivers considered among enlisted individuals evaluated for disability: Navy, FY 2011-2015 vs. FY 2016..... 51

Table 18D: Five most common ICD-9 diagnosis codes for accession medical waivers considered among enlisted individuals evaluated for disability: Air Force, FY 2011-2015 vs. FY 2016..... 52

Table 19A: Most prevalent accession medical waiver types within leading disability body system categories: Army, FY 2011-2015 vs. FY 2016..... 54

Table 19B: Most prevalent accession medical waiver types within leading disability body system categories: Navy, FY 2011-2015 vs. FY 2016 55

Table 19C: Most prevalent accession medical waiver types within leading disability body system categories: Marine Corps, FY 2011-2015 vs. FY 2016..... 56

Table 19D: Most prevalent accession medical waiver types within leading disability body system categories: Air Force, FY 2011-2015 vs. FY 2016..... 57

Table 20: History of hospitalization by year of disability evaluation: FY 2011-2016 58

Table 21A: Five most common ICD-9 primary diagnosis codes for hospitalizations among active duty disability evaluations: Army, FY 2011-2015 vs. FY 2016..... 59

Table 21B: Five most common ICD-9 primary diagnosis codes for hospitalizations among active duty disability evaluations: Navy, FY 2011-2015 vs. FY 2016 59

Table 21D: Five most common ICD-9 primary diagnosis codes for hospitalizations among active duty disability evaluations: Air Force, FY 2011-2015 vs. FY 2016..... 60

Table 22A: Most prevalent hospitalization ICD-9 categories within leading disability body system categories: Army, FY 2011-2015 vs. FY 2016..... 62

Table 22B: Most prevalent hospitalization ICD-9 categories within leading disability body system categories: Navy, FY 2011-2015 vs. FY 2016 63

Table 22C: Most prevalent hospitalization ICD-9 categories within leading disability body system categories: Marine Corps, FY 2011-2015 vs. FY 2016..... 64

Data Quality and Standardization Recommendations 67

Executive Summary

The Accession Medical Standards Analysis and Research Activity (AMSARA) has provided the Department of Defense (DoD) with evidence-based evaluations of accession medical standards since 1996. As part of this ongoing research activity, data are collected from each service's Disability Evaluation System (DES). Disability evaluation is administered at the service level with each branch of service responsible for the evaluation of disability in its members. Variability exists in the type of disability data available among AMSARA databases for each service as a result of service level data collection on disability evaluations. In fiscal year (FY) 2009, AMSARA's mission was expanded to include audits and studies of existing DES per the request of the Office of Assistant Secretary of Defense, Health Affairs. This report describes analyses conducted in FY 2017 of existing DES data collected for accessions and disability research through the end of FY 2016. Key findings are as follows:

Characteristics of Disability Evaluations and Individuals

From FY 2011 to FY 2016, data were collected on about 210,000 disability evaluations on over 175,000 service members. The vast majority of disability evaluations were completed on enlisted active duty service members. The predominant demographics among personnel who undergo disability evaluation are male, white, and 20-29 years old at the time of disability evaluation. In FY 2016, there was a decrease in the number of disability evaluations in all services. Prior to this decrease, the number of disability evaluations had been generally increasing over time in the Army, Navy and Marine Corps.

Leading Disability Body System Categories and Conditions

In FY 2016, more than half of the discharged service members were evaluated for a musculoskeletal condition in the Army, Marine Corps and Air Force. In the Navy, psychiatric disorders continued to be more prevalent (42%) than musculoskeletal conditions (34%) in FY 2016. Psychiatric conditions continued to increase in prevalence in 2016 relative to the previous five year period in the Navy, Marine Corps, and Air Force. Neurological conditions were the third most common disability types for all services.

The specific condition types associated with each body system category vary by service. Dorsopathies, arthritis, and limitation of motion were the most common musculoskeletal conditions in all services. Posttraumatic stress disorder (PTSD) was the most commonly diagnosed psychiatric disorder in all services in FY 2016, accounting for more than 70% of individuals with a psychiatric disorder in the Army and Marine Corps. Traumatic brain injury (TBI) was the most common neurological condition among Marine Corps service members; paralysis was the most common type of neurological condition in the Army and Air Force.

Dispositions and Ratings

The most common dispositions associated with disability evaluation (e.g., retirement or separation) in FY 2016 varied by service. In the Army and Air Force, permanent disability retirement (PDRL) was the most common disposition; whereas, being placed on the temporary disability retirement list in the Navy and separated with severance in the Marine Corps was the most common disposition. Placement on the TDRL increased in 2016 in all services, with a

doubling in the Air Force (12% vs 25%), while PDRL decreased in all services. In FY 2016, 10% was the most commonly assigned combined disability rating in the Army and Marine Corps, 30% was the most commonly assigned disability ratings in the Air Force, and Unrated was the most commonly assigned rating in the Navy. Similar to previous years, disability ratings greater than or equal to 30% (disability retirement) accounted for about 60% of Marine Corps disability ratings, and about 70% of ratings in the Army, Navy, and Air Force in 2016.

Accession Medical Disqualifications and Waivers

The history of permanent medical disqualification prior to accession in service members evaluated for disability ranged from 8% (Air Force) to 11% (Army). The most common medical conditions at Military Entrance Processing Station (MEPS) medical examination in the disability population were similar to that of the military population as a whole. Exceeding weight and body fat standards (i.e. overweight or obesity) was the most common condition listed in MEPS examination records in both the disability evaluated population and the accessed population. Conditions listed in accession medical waiver applications among those evaluated for disability were also similar to those observed in the general applicant population, with disorders of refraction and accommodation being the most common waiver in all services in 2016.

Hospitalizations

Hospitalization among service members evaluated for disability was most commonly associated with a psychiatric diagnosis. This is in contrast to hospitalizations among the general active duty population wherein injuries and fractures are more commonly associated with hospitalization.

Programmatic Recommendations

Based on the data presented in this report and the variability observed in service disability evaluation system data, we present the following programmatic recommendations:

1. Include Medical Evaluation Board (MEB) International Classification of Disease 10th Revision (ICD-10) diagnoses in all disability evaluation records, allowing for more in-depth analyses of the specific medical conditions that result in disability evaluation, separation, and retirement.

2. Include laboratory and diagnostic information on the medical condition or injury that precipitated the disability evaluation so that severity of disability conditions can be objectively assessed.

3. Record each service member's Military Occupational Specialty (MOS) at the time of disability evaluation.

4. Include variables to indicate date of onset of symptoms or injury and date of initial diagnosis in service members evaluated for disability.

5. Expand the Veterans Affairs Schedule for Rating Disabilities (VASRD) codes, particularly musculoskeletal codes, to reduce the utilization of analogous codes and provide more complete information on the disability condition.

Introduction to the Disability Evaluation System

The Disability Evaluation System (DES) process follows guidelines laid out by the Department of Defense (DoD) and public law. The disability evaluation is administered at the service level with each branch of service responsible for the specific evaluation. While inter-service differences exist, the disability evaluation process for all services includes two main components: an evaluation by the Medical Evaluation Board (MEB) to determine if a service member meets medical standards, and a determination by the Physical Evaluation Board (PEB) of a service member's ability to perform his/her military duties [1,2].

The disability evaluation process is described in Department of Defense Instruction (DoDI) 1332.18 and serves as the basis for each service's disability evaluation [3]. The process of disability evaluation begins when a service member is diagnosed with a condition or injury at a Military Treatment Facility (MTF). If the condition or injury is considered potentially disqualifying or significantly interferes with the service member's ability to carry out the duties of his/her office, grade, or rank, the case is referred to the MEB. Service members who meet medical standards or deemed capable of carrying out their duties are returned to duty [1-2,4-6]. Those unable to perform assigned duties are forwarded to an Informal Physical Evaluation Board (IPEB) for a medical record review, where a determination regarding a service member's fitness for continued military service is made. Members deemed fit are returned to duty, while those deemed unfit are discharged or placed on limited duty. In the event a service member is dissatisfied with the determination made by the IPEB, he/she can appeal to the Formal PEB (FPEB) and eventually to the final review authority (which varies by service, as detailed below) if the case is not resolved to the service member's satisfaction.

Key variables collected at each stage of disability evaluation are shown in Figure 1. At the MEB, each case is diagnosed and it is determined whether the service member is able to perform assigned duties [4-6]. Cases are forwarded to the IPEB if it is determined that the member cannot perform his/her assigned duties or that the member does not meet medical retention standards [4-6]. The IPEB panel must determine the member's fitness, disability rating using the appropriate Veterans Affairs Schedule for Rating Disabilities (VASRD) code for the disabling condition, the appropriate disposition for the case and whether the condition is combat related [1]. If a service member does not agree with the determination of the IPEB, the decision can be appealed to the FPEB, and eventually to the final reviewing authority (Service Secretary), where the determination of the FPEB is reviewed. The FPEB is an independent board from the IPEB and the decision may be different from that of the IPEB. The final reviewing authority can either concur with the FPEB or revise the determination.

Figure 2 and Figure 3 describe the Army and Navy/Marine Corps disability evaluation processes, respectively. Those who meet medical retention standards at the MEB or are able to continue military duties are returned to duty, while cases that do not meet medical retention standards, in the Army, or are not able to perform military duties, in the Navy and Marine Corps (no medical retention standards), are forwarded to the IPEB for further review. The IPEB makes a fit/unfit determination and the service member is either returned to duty (deemed fit) or medically discharged (deemed unfit) and assigned a disposition and rating. Dispositions assigned include

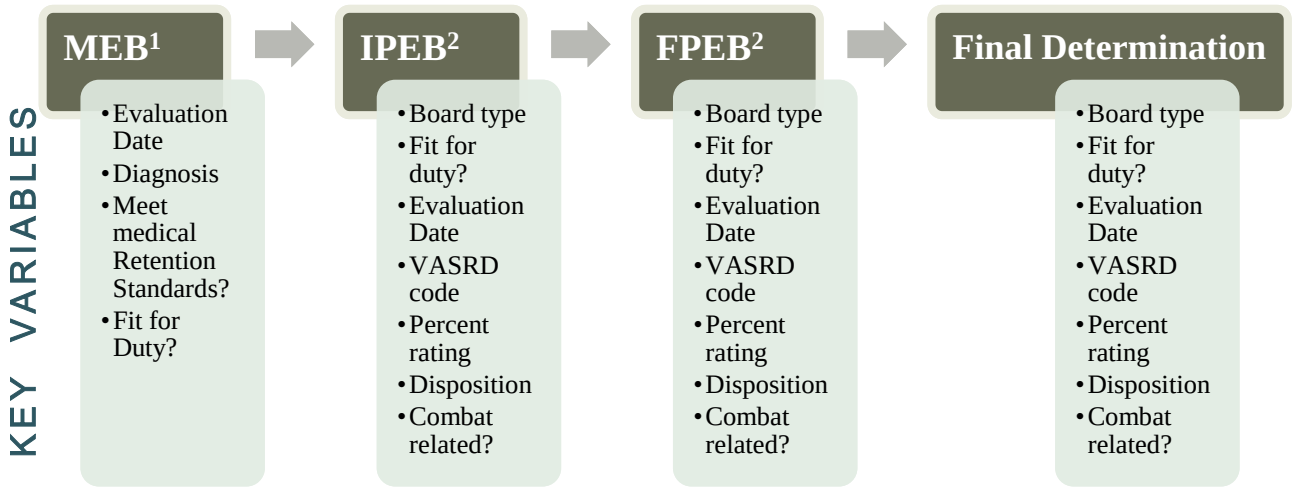
fit, separated without benefits, separated with severance pay, Permanent Disability Retirement list (PDRL), or Temporary Disability Retirement list (TDRL).

Ratings vary from 0-100% disability. Those assigned a disposition of separated without benefits are either unrated or rated 0%. Separated with severance pay carries a rating varying from 0% to 20%; while permanent and temporary disability retirement carry ratings of 30% or higher. The service member can appeal the IPEB determinations of disposition and rating, though appeals to the FPEB may be denied if a service member is deemed fit by the IPEB. Following service member appeal of the IPEB, the case is reviewed by the FPEB or reconsidered by the IPEB, again determining the fitness of the service member. An Army service member can appeal the FPEB determination to the United States Army Physical Disability Authority (USAPDA); the USAPDA is the final appeal authority before separation or retirement. A Navy or Marine Corps service member can appeal an FPEB determination to the Secretary of the Navy; the Secretary of the Navy is also a final appeal authority before separation or retirement from service. In the Navy and Marine Corps, all discharge recommendations are forwarded to the Service Headquarters where the recommendation for discharge can be accepted or denied (Figure 3). Both Services (Army and Navy) have a Board for Correction of Military Records which can be petitioned once a service member has left military service.

The Air Force disability evaluation process is described in Figure 4. This process is generally similar to that of the other services; disability evaluation begins with the MEB where cases are evaluated against medical retention standards and those not meeting retention standards are referred to the IPEB [4]. If a service member disagrees with the decision of the IPEB, it can be appealed to the FPEB, and eventually to the Secretary of the Air Force. However, in contrast to other services, MEB cases not forwarded to the IPEB can be appealed through the Air Force Surgeon General to determine if a case should be forwarded to the FPEB.

The objective of this report is to summarize the content of existing databases, to provide a basis for studies of the prevalence of disability in the U.S. military and studies of risk factors for disability evaluation, separation, and retirement, overall and for specific disability condition types. Though the general process for evaluating service members for disability discharge is similar across services, each service completes disability evaluations and collects and maintains disability evaluation data independent of one another. Small variations are present in the disability evaluation process across services and in the types of data collected across services.

Figure 1: Key Variables Collected at Each Stage of Disability Evaluation



1. Medical Evaluation Board (MEB): An informal board of no less than two military physicians.

2. Informal Physical Evaluation Board (IPEB)/ Formal Physical Evaluation Board (FPEB): A three person administrative panel consisting of a presiding officer, personnel management officer and a medical member.

Figure 1a: Example of Disability Evaluation Process in the Army

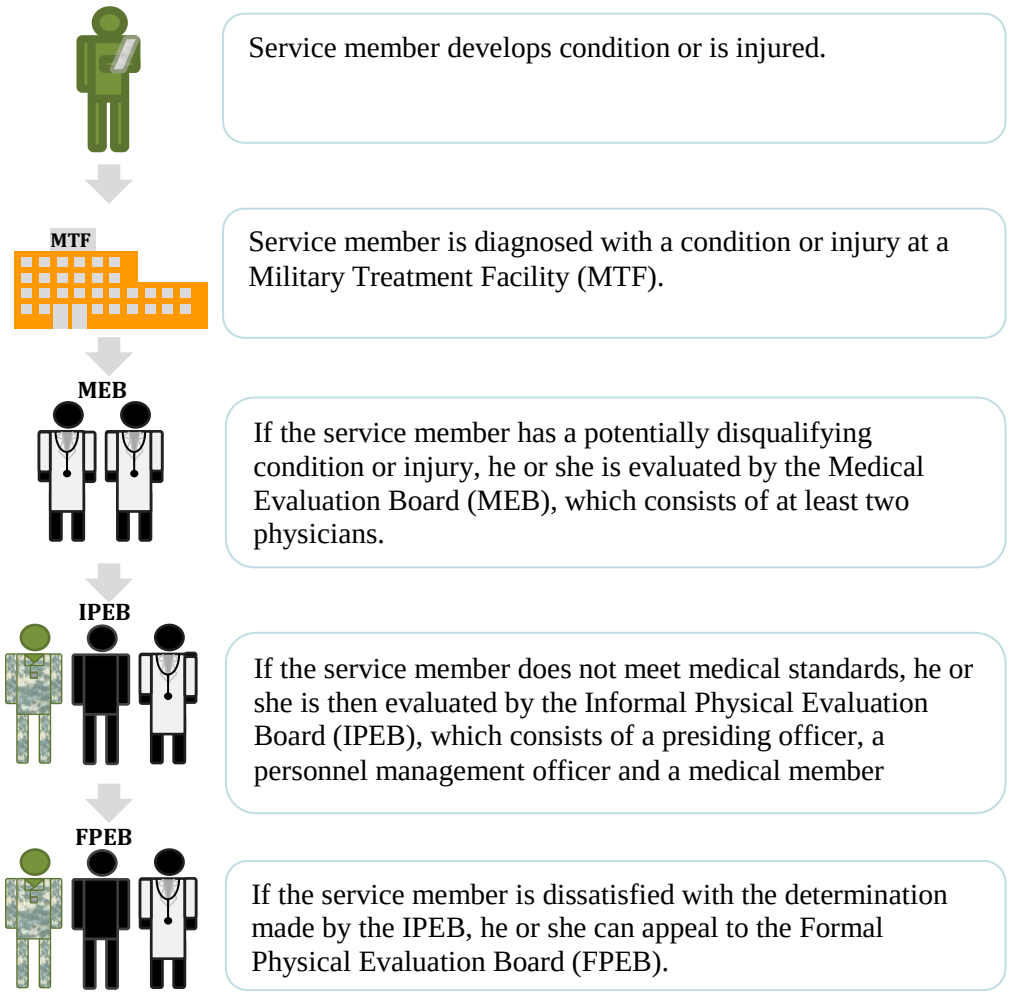
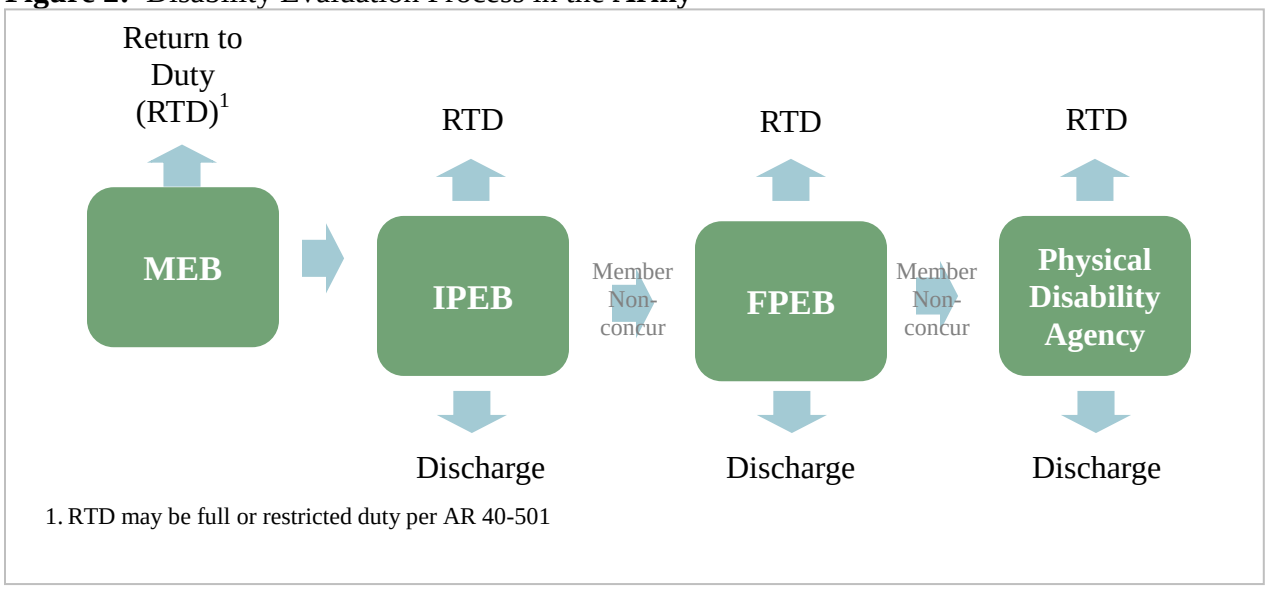
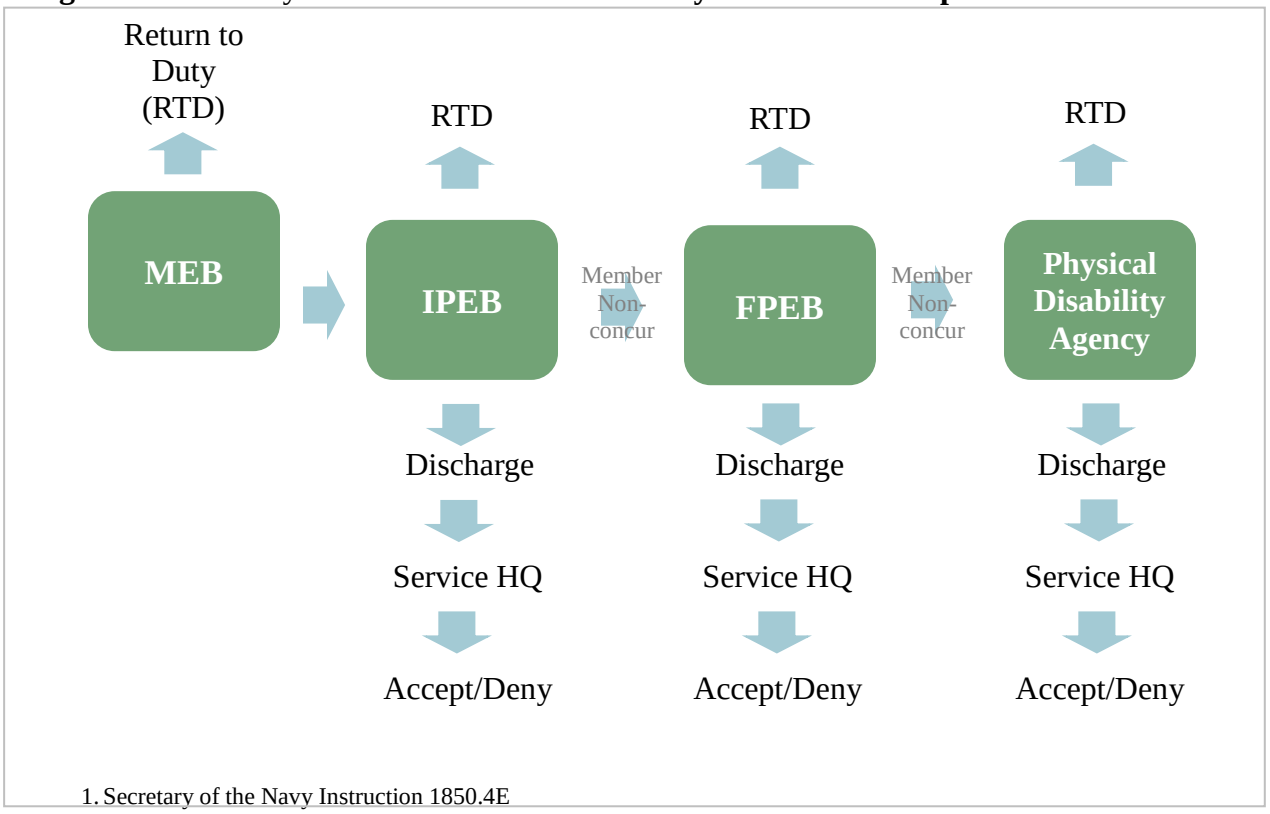


Figure 2: Disability Evaluation Process in the **Army**



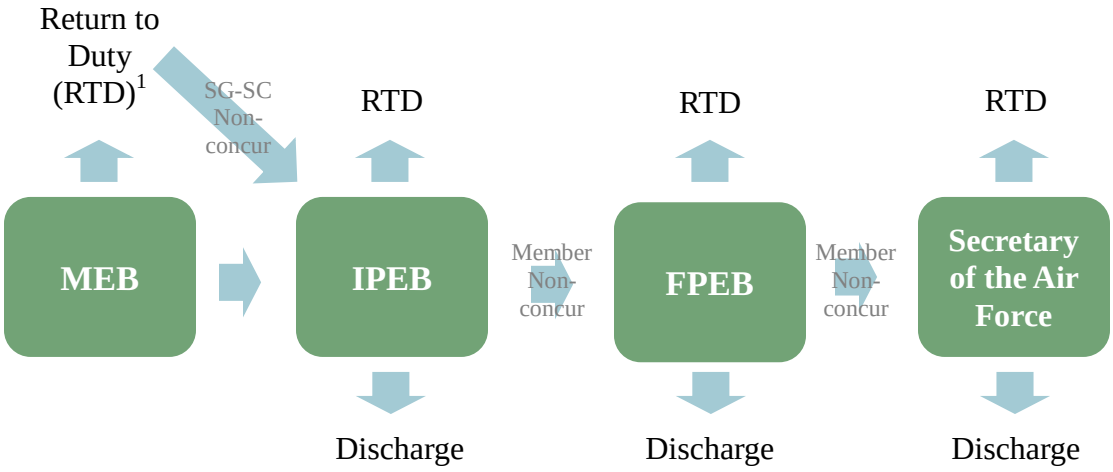
1. RTD may be full or restricted duty per AR 40-501

Figure 3: Disability Evaluation Process in the **Navy and Marine Corps**[1]



1. Secretary of the Navy Instruction 1850.4E

Figure 4: Disability Evaluation in the **Air Force**



1. RTD may be full or restricted duty per Air Force instruction 48-123

Methods

Study Population

Table 1 shows the characteristics of the Disability Evaluation System (DES) datasets by service. Databases maintained by the services may contain information not sent to AMSARA. Disability evaluation data were available for all services for enlisted and officers as well as active duty and reserve components. However, the types of records received from each service varied. All Physical Evaluation Board (PEB) evaluations for separately unfitting conditions in the Army, Navy, and Marine Corps were transmitted to AMSARA for all years in which data are available. Air Force disability data only includes disability retirements and separations starting in FY 2007. In addition, while Army and Navy/Marine Corps send AMSARA multiple disability evaluations for individuals for all years in which data are available, multiple disability evaluations for the Air Force are not available.

TABLE 1: DES DATABASE CHARACTERISTICS BY SERVICE

	Army	Navy/Marine Corps	Air Force
Years received	1990-2016	2001-2016	2007-2016
Type of evaluations included	All PEB	All PEB	All but TDRL Re-evaluations
Ranks included	Enlisted, Officer	Enlisted, Officer	Enlisted, Officer
Components included	Active Duty, Reserve	Active Duty, Reserve	Active Duty, Reserve
Multiple evaluations per individual?	Yes	Yes	One evaluation per year

TDRL: Temporary Disability Retirement List

To create analytic files for this report, service-specific databases were restricted to unique records with a final disposition date between October 1, 2010 and September 30, 2016. All ranks and components were included in these analyses. Multiple records were available at the individual level, defined using Social Security Number (SSN), for all services. When *individuals* were the unit of analysis, the last record per SSN was retained; when *evaluations* were the unit of analysis, multiple records were used per SSN. Unique evaluations were defined by SSN and date of final disposition. Therefore, an individual may appear more than once in the source population when evaluations are the unit of analysis.

Variables

Table 2 shows the key variables included in each DES dataset received by AMSARA. Additional variables are included in each service's database, but not presented in this report.

TABLE 2: DES KEY VARIABLES

Variables	Army	Navy/Marine Corps	Air Force
Demographic Characteristics[1]			
Age/Date of Birth	Y	Y	N
Sex	Y	Y	FY 2014-16
Race	Y	Y	N
Education	N	N	N
Rank	Y	Y	Y
Component	Y	Y	Y
MOS	Y	FY 2010-16	N
MEB			
Date of MEB Evaluation	FY 1990-2012, 2014-16	Y	Y
MEB diagnosis	N	Y	N
PEB			
Board type	N	Y	Y
Date of PEB Evaluation	Y	Y	Y
VASRD	Y	Y	Y
VASRD Analog	Y	Y	Y
Percent Rating	Y	Y	Y
Disposition	Y	Y	Y
Disposition Date	Y	Y	Y
Combat			
Combat Related	Y	Y	FY 2010-16
Armed Conflict	Y	Y	FY 2010-16
Instrumentality of War	FY 1990-2012	N	FY 2010-16

MOS: Military Occupational Specialty; MEB: Medical Evaluation Board; PEB: Physical Examination Board; VASRD: Veterans Affairs Schedule for Rating Disabilities
1. Demographic characteristics at time of disability evaluation.

Demographic Characteristics

Demographic variables (age, date of birth, sex, race, rank, and component) are available in all databases except Air Force databases. Education was not available in any DES database and Military Occupation Specialty (MOS) was available only for Army data. AMSARA utilizes demographic variables from other sources, such as Defense Manpower Data Center (DMDC) personnel records and Military Entrance Processing Station (MEPS) application records, in the analysis of demographic variables. These sources can be used in combination with disability databases to obtain information on certain constant demographic characteristics (i.e. date of birth, race, sex) for individuals who have personnel and application records in AMSARA

databases. All demographic characteristics of individuals evaluated for disability in the Air Force are obtained using DMDC and MEPS records. Characteristics which can vary over time, such as education, rank, component, and MOS, are most valuable when collected at the time of disability evaluation.

MEB variables

Date of Medical Evaluation Board (MEB) evaluations is present in all disability databases prior to FY 2013. Army disability data do not contain MEB dates for FY 2013, the first year of data collected under a new data reporting system, but were available again starting in FY 2014 for the Army. MEB diagnosis is only available for Navy/Marine Corps disability evaluations. For Navy/Marine Corps evaluations, the MEB diagnosis is recorded as a text field rather than as a code. Recoding of this field into ICD-9 codes by a nosologist will be necessary before further analysis of this field can be conducted.

PEB variables

All AMSARA datasets contain several key variables regarding the PEB evaluation including: board type, date of PEB, Veterans Affairs Schedule for Rating Disabilities (VASRD) and analogous codes, percent rating, disposition, and disposition date. VASRD codes, specific for the unfitting condition, and analogous coding (VASRD code that best approximates the functional impairment rendered by a medical condition for which there is no specific VASRD code) are used to define unfitting medical conditions that prompted the disability evaluation. These codes are not diagnostic codes, but are derived from the MEB diagnosis, and specify criteria associated with disability ratings and determine disability compensation. The number of VASRD codes assigned to each diagnosis varies by service. Prior to FY 2013, Army evaluations allowed for each condition to have one VASRD code and one analogous code with up to four conditions included per evaluation. Starting in FY 2013, up to five VASRD codes can be assigned to an unfitting condition and the number of conditions an individual can be rated for is not restricted. Up to three VASRD codes may be used for the same condition in the Air Force with no limit on the number of conditions per evaluation. In the Navy and Marine Corps, the number of VASRD codes per condition is unlimited and there is no limit to the number of conditions that can be assigned to an evaluation.

There are two general disposition types for members determined unfit for duty:

1. Separation: Can be further classified as separated with severance pay and separated without benefits.
    - Severance pay is given when a service member's condition is found to be unfitting and assigned a disability rating between 0 and 20 percent.
    - Separation without benefits occurs when a service member is found unfit for duty, but the condition is determined to have occurred as a result of misconduct, negligence, or if the service member has less than eight years of service and the condition is the result of a medical condition that existed prior to service.

2. Disability retirements: Can be classified as either permanent disability retirement or temporary disability retirement.
    - Permanent disability is assigned when the service member is found unfit, and either has a length of service greater than 20 years or has a disability rating that is

30 percent or higher, and the condition is considered unlikely to improve or likely to worsen.

- Temporary disability is assigned when a service member is deemed unfit for continued service and either has a length of service greater than 20 years or has a disability percent rating of 30 percent or higher. Service members placed on the temporary disability retirement list (TDRL) are re-evaluated every 6-18 months, for up to five years following initial placement on the TDRL. Once the unfitting condition is considered stable for purposes of rating by the PEB, the case is assigned a final disposition and percent rating. Therefore, a re-evaluation may result in a service member returning to duty or converting to another disposition, though most on the TDRL eventually convert to permanent disability retired [1].

Combat Variables

Data received by AMSARA from the Army, Navy, and Marine Corps include variables regarding combat (Table 2); the values of which are described in the DoDI 1332.18 [6]. Though the Air Force data includes similar variables, these variables are not well populated and are unreliable for research purposes. Combat variables are used as a part of the percent rating determination taking into account if the disability was caused by, exacerbated by, or had no relation to combat experiences.

Combat related is the standard that covers those injuries and diseases attributable to the special dangers associated with armed conflict or the preparation or training for armed conflict [6,7].

Armed conflict is described as the physical disability being a disease or injury incurred in the line of duty as a direct result of armed conflict. There must be a definite causal relationship between the armed conflict and the resulting unfitting disability. Armed conflict includes a war, expedition, occupation of an area or territory, battle, skirmish, raid, invasion, rebellion, insurrection, guerrilla action, riot, or any other action in which service members are engaged with a hostile or belligerent nation, faction, force, or terrorists. Armed conflict may also include such situations as related to prisoner of war or detained status [6,7].

Instrumentality of war is described as a vehicle, vessel, or device designed primarily for military service and intended for use in such service at the time of the occurrence of the injury. There must be a direct causal relationship between the use of the instrumentality of war and the disability, and the disability must be incurred incident to a hazard or risk of the service [6,7].

Other Data Sources

Applications for Military Service

AMSARA receives data on all applicants who undergo an accession medical examination at any of the 65 MEPS sites. These data, provided by US Military Entrance Processing Command (USMEPCOM) Headquarters (North Chicago, IL), contains several hundred demographic, medical, and administrative elements on enlisted applicants for each applicable component (regular, reserve, National Guard) of each service (Air Force, Army, Marine Corps, and Navy). It also includes records on a relatively small number of officer recruit applicants and other non-applicants receiving periodic physical examinations.

Accession Medical Waivers

AMSARA receives records on all recruits considered for an accession medical waiver, i.e. those who received a permanent medical disqualification at the MEPS and sought a waiver for that disqualification. Each service is responsible for its own waiver decisions about applicants, and information on these decisions is generated and provided to AMSARA by each service waiver authority. Specifically, AMSARA receives medical waiver data annually from Air Education Training Command (Lackland AFB, TX) for the Air Force; US Army Recruiting Command (USAREC, Fort Knox, KY) for the Army; US Navy Bureau of Medicine and Surgery (BUMED, Washington, DC) for the Marine Corps; the Office of the Commander, US Navy Recruiting Command (Millington, TN) for the Navy.

Accession and Discharge Records

The DMDC provides data on individuals entering military service and on individuals discharged from military service. Data are provided to AMSARA annually for all accessions into service and discharges from military service.

Hospitalizations

AMSARA receives Military Health System (MHS) direct care hospitalization data annually from the MHS data repository. Information includes admissions of active duty officers and enlisted personnel as well as medically eligible reserve component personnel to any military hospital.

Descriptive Statistics for All Disability Evaluations

Service-specific characteristics of DES records are shown in Table 3. For the purpose of these analyses and throughout this report, records are defined as units of a dataset (i.e. lines of data) and evaluations represent an individual's unique encounter with the Physical Evaluation Board (PEB), defined using SSN and date of final disposition. Therefore each individual in this report may have more than one evaluation if they had multiple encounters for disability evaluation.

Key Findings:

- Service members have, on average, 1.0 to 1.5 evaluations for disability until a final disposition is assigned.
- The average number of Veterans Affairs Schedule for Rating Disabilities (VASRD) codes assigned, per evaluation, is highest in the Army (2.8) and lower in the three other services (1.6-1.9).
- The Navy (3.1) and Marine Corps (3.6) have the highest number of records per evaluation.

Discussion:

Observed differences in the number of records, individuals, and evaluations can be partially accounted for by the differences in the manner records are received by AMSARA from each service. Disability records from the Army and Air Force contain multiple conditions per individual; in Navy and Marine Corps data, the number of records is representative of the number of conditions adjudicated, resulting in a higher average number of records per evaluation. The TDRL re-evaluations are not included in the Air Force data which causes average evaluations per individual to be underestimated. While the Army sends data only on those who were evaluated by the PEB, Navy/Marine Corps sends data on any individual evaluated by the MEB and PEB and includes those without any unfitting conditions. The inclusion of all evaluations contributes a larger proportion of individuals without VASRD codes in the Navy/Marine Corps, and thus a lower average number of VASRDs per evaluation.

Changes to the data collection system used by the US Army Physical Disability Agency (USAPDA), which administers disability evaluations in the Army, were made during 2013 which resulted in an increase in the number of records sent to AMSARA. In years prior to and after 2013, Army disability evaluation records contained multiple conditions for each evaluation. In 2013, each Army disability evaluation record represented one condition

TABLE 3: CHARACTERISTICS OF DES EVALUATIONS: FY 2011-2016

	Army	Navy	Marine Corps	Air Force
Total records	180,758	66,125	97,103	23,846
Total individuals	118,050	18,282	21,233	21,786
Total evaluations	139,149	21,547	26,647	23,537
Average records/evaluation	1.3	3.1	3.6	1.0
Average evaluations/individual	1.2	1.0	1.5	1.1
Non-TDRL	1.2	1.0	1.0	-
TDRL	1.2	1.5	1.7	-
Average VASRD/evaluation	2.8	1.6	1.8	1.9

Total DES evaluations are shown by service and FY in Table 4. Individuals may be counted more than once in this table due to TDRL re-evaluations.

Key Findings:

- In 2016, there was a decrease in the number of disability evaluations for all services.
  - Prior to the decrease, the number of disability evaluations had been generally increasing in the Army, Navy and Marine Corps.
- In the Air Force, there was an increase in the number of evaluations from 2014-2015; in 2016, the number was similar to rates from 2011-2013.

TABLE 4: TOTAL DES EVALUATIONS BY SERVICE AND FISCAL YEAR: FY 2011-2016

	Army		Navy		Marine Corps		Air Force	
	n	%	n	%	n	%	n	%
2011	14,123	10.1	2,826	13.1	3,764	14.1	3,814	16.2
2012	15,860	11.4	4,078	18.9	5,485	20.6	3,516	14.9
2013	23,942	17.2	3,357	15.6	4,173	15.7	3,626	15.4
2014	27,166	19.5	3,895	18.1	4,460	16.7	4,379	18.6
2015	33,958	24.4	4,296	19.9	4,592	17.2	4,577	19.4
2016	24,100	17.3	3,095	14.4	4,173	15.7	3,625	15.4
Total	**139,149**		**21,547**		**26,647**		**23,537**	

Estimates of the rate of disability evaluation per total military population from 2011 to 2016 are shown in Table 5 by service and demographic characteristics. Rates from 2016 are compared to the previous five years in aggregate. Because demographic information on Air Force disability evaluation is collected from application, accession, and loss files, and not available for all disability evaluations, the rates of evaluation by demographic characteristics may be underestimated in the Air Force.

Key Findings:

- The overall rate of disability evaluation per 1,000 service members was highest in the Army and Marine Corps during both time periods.
    - Army and Marine Corps saw an increase in 2016, while the Navy and Marine Corps remained stable.
- Rates are highest among females, other race, enlisted and active duty service members for all services and time periods.
- Rates increase as age increases in the Army. For the other services, rates were highest in the 25-29 and 30-34 age groups.

TABLE 5: RATE OF DES EVALUATION PER 1,000 SERVICE MEMBERS (TOTAL SERVICE POPULATION) BY DEMOGRAPHIC CHARACTERISTICS AND SERVICE: FY 2011-2015 VS. FY 2016[1]

	2011-2015								2016							
	Army		Navy		Marine Corps		Air Force[2]		Army		Navy		Marine Corps		Air Force[2]	
	n	Rate	n	Rate	n	Rate	n	Rate	n	Rate	n	Rate	n	Rate	n	Rate
Sex																
Male	84,878	18.7	11,132	7.1	15,190	14.0	12,381	6.2	13,293	15.7	2,124	6.9	3,633	16.2	2,577	7.0
Female	16,860	19.5	4,080	11.9	1,905	24.2	5,571	11.2	2,972	17.1	930	12.5	495	27.8	1,048	11.0
Age																
<20	539	1.5	138	1.5	478	3.2	335	3.9	56	0.5	34	1.2	103	2.3	27	1.0
20-24	15,170	10.3	3,445	6.4	6,415	12.2	4,041	7.2	2,709	9.3	740	6.4	1,462	13.0	742	6.6
25-29	26,229	21.6	4,357	9.5	5,910	24.5	4,518	7.8	3,949	17.7	886	9.9	1,287	31.3	1,027	9.4
30-34	21,293	25.3	3,072	9.8	2,552	22.1	3,263	7.2	3,368	22.6	653	11.2	772	38.0	765	9.1
35-39	13,568	23.2	2,001	8.5	1,069	14.4	2,151	6.6	2,379	23.8	368	8.7	319	25.4	420	7.1
≥ 40	24,810	26.4	2,138	8.0	596	9.7	2,587	5.5	3,795	25.9	347	7.7	167	15.9	371	5.1
Race																
White	69,510	17.9	9,204	7.8	11,444	12.4	13,358	7.2	8,076	11.2	1,661	6.3	2,518	14.5	2,654	7.9
Black	16,872	16.3	2,427	7.4	1,266	10.6	2,693	8.1	2,528	14.6	459	7.3	313	8.1	528	7.4
Other	14,719	53.3	3,152	9.1	3,961	60.1	1,650	9.0	5,476	63.6	822	21.4	1,148	53.0	410	10.3
Rank																
Enlisted	95,751	21.2	14,144	9.0	16,592	16.0	16,679	8.3	14,992	17.2	2,836	8.9	3,997	18.5	3,352	8.8
Officer	6,018	6.8	1,040	3.1	435	3.4	1,455	3.1	1,271	8.5	217	3.4	105	4.1	194	2.3
Component																
Active Duty	77,185	29.4	14,350	9.0	16,224	16.8	15,201	9.5	12,676	25.8	2,928	9.0	3,979	19.8	3,286	10.8
Reserves/NG	24,527	8.8	872	2.8	879	4.5	2,949	3.3	2,464	4.6	132	2.4	151	3.7	339	2.1
Total Individuals	**101,785**	**18.8**	**15,222**	**8.0**	**17,103**	**14.7**	**18,161**	**7.3**	**16,265**	**15.9**	**3,060**	**8.0**	**4,130**	**17.1**	**3,625**	**7.8**

1. Data on total service population was generated using data from Defense Manpower Data Center (DMDC) queries and represents the total number of service members with each demographic as of 30 September of the fiscal year in question. This data does not include the number of service members who have missing demographic data.
2. Demographic information is not provided for Air Force disability evaluations and is appended using accession and applicant databases. Because applicant and accession data are not available for a large percentage of Air Force disability evaluations rates presented by age, sex, and race are likely underestimated and should not be compared with the corresponding rates in other services.

Characteristics of individuals who underwent disability evaluation from 2011 to 2016 are shown in Table 6, comparing 2016 evaluations to 2011 through 2015 in aggregate.

Key Findings:

- Most disability evaluations are performed on enlisted, active component personnel, regardless of service.
- Army and Air Force had higher percentages of reserve component disability evaluations, likely due to the inclusion of National Guard service members not present in the Navy and Marine Corps reserve component.
- Most individuals evaluated for disability were male, aged 20-34 at the time of disability evaluation, or white, in all four services.
- No substantial changes in the demographic composition of the disability evaluated population were observed in any service, with the exception of a large increase in the proportion of other race in the Army in 2016 (33.7%) compared to the previous five year period (14.8%).

TABLE 6: DEMOGRAPHIC CHARACTERISTICS OF SERVICE MEMBERS EVALUATED FOR DISABILITY: FY 2011-2015 VS. FY 2016[1]

	2011-2015								2016							
	Army		Navy		Marine Corps		Air Force		Army		Navy		Marine Corps		Air Force	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Sex																
Male	84,878	83.4	11,132	73.1	15,190	88.8	12,381	68.2	13,293	81.7	2,124	69.4	3,633	88.0	2,577	71.1
Female	16,860	16.6	4,080	26.8	1,905	11.1	5,571	30.7	2,972	18.3	930	30.4	495	12.0	1,048	28.9
Missing	47	<0.1	10	0.1	8	<0.1	209	1.2	0	-	6	0.2	2	<0.1	0	-
Age																
<20	539	0.5	138	0.9	478	2.8	335	1.8	56	0.3	34	1.1	103	2.5	27	0.7
20-24	15,170	14.9	3,445	22.6	6,415	37.5	4,041	22.3	2,709	16.7	740	24.2	1,462	35.4	742	20.5
25-29	26,229	25.8	4,357	28.6	5,910	34.6	4,518	24.9	3,949	24.3	886	29.0	1,287	31.2	1,027	28.3
30-34	21,293	20.9	3,072	20.2	2,552	14.9	3,263	18.0	3,368	20.7	653	21.3	772	18.7	765	21.1
35-39	13,568	13.3	2,001	13.1	1,069	6.3	2,151	11.8	2,379	14.6	368	12.0	319	7.7	420	11.6
≥ 40	24,810	24.4	2,138	14.0	596	3.5	2,587	14.2	3,795	23.3	347	11.3	167	4.0	371	10.2
Missing	176	0.2	71	0.5	83	0.5	1,266	7.0	9	0.1	32	1.0	20	0.5	273	7.5
Race																
White	69,510	68.3	9,204	60.5	11,444	66.9	13,358	73.6	8,076	49.7	1,661	54.3	2,518	61.0	2,654	73.2
Black	16,872	16.6	2,427	15.9	1,266	7.4	2,693	14.8	2,528	15.5	459	15.0	313	7.6	528	14.6
Other	14,719	14.5	3,152	20.7	3,961	23.2	1,650	9.1	5,476	33.7	822	26.9	1,148	27.8	410	11.3
Missing	684	0.7	439	2.9	432	2.5	460	2.5	185	1.1	118	3.9	151	3.7	33	0.9
Rank																
Enlisted	95,751	94.1	14,144	92.9	16,592	97.0	16,679	91.8	14,992	92.2	2,836	92.7	3,997	96.8	3,352	92.5
Officer	6,018	5.9	1,040	6.8	435	2.5	1,455	8.0	1,271	7.8	217	7.1	105	2.5	194	5.4
Missing	16	<0.1	38	0.2	76	0.4	27	0.1	2	<0.1	7	0.2	28	0.7	79	2.2
Component																
Active Duty	77,185	75.8	14,350	94.3	16,224	94.9	15,201	83.7	12,676	77.9	2,928	95.7	3,979	96.3	3,286	90.6
Reserves/NG	24,527	24.1	872	5.7	879	5.1	2,949	16.2	2,464	15.1	132	4.3	151	3.7	339	9.4
Missing	73	0.1	0	-	0	-	11	0.1	1,125	6.9	0	-	0	-	0	-
Total Individuals	**101,785**		**15,222**		**17,103**		**18,161**		**16,265**		**3,060**		**4,130**		**3,625**	

1. Service members missing on demographic characteristics are included in the total.

The distribution of unfitting conditions, in individuals discharged with a service connected disability, by disability body system for each service, is shown in Tables 7A through 7D. Classification of an individual's unfitting conditions into body system categories is not mutually exclusive and individuals may be included in more than one body system category, if an individual was evaluated for more than one condition. Counts presented in each table represent the number of individuals evaluated for one or more conditions in a given body system. Percentages represent the percent of individuals that had a disability in a given body system among all individuals discharged with a service connected disability and may exceed 100% as individuals may have conditions in multiple body systems.

Key Findings:

- In the Army, Marine Corps and Air Force, more than half of the discharged service members were evaluated for a musculoskeletal condition.
- In the Navy, psychiatric conditions surpassed musculoskeletal conditions as the leading cause of disability in 2015 and continued to be the leading cause in 2016.
- In the Navy and Marine Corps, large increases in the proportion of individuals with a psychiatric-related disability discharge in 2016, compared to the previous 5-year period.
    - The proportions of individuals evaluated for disability discharge related to all other body system categories were similar between the two time periods for all services.

TABLE 7A: DISTRIBUTION OF UNFITTING CONDITIONS BY BODY SYSTEM CATEGORY IN INDIVIDUALS WITH A DISABILITY DISCHARGE: **ARMY**, FY 2011-2015 VS. FY 2016

	2011-2015			2016		
Body System Category	**n**	**%[1]**	**Rate[2]**	**n**	**%[1]**	**Rate[2]**
Musculoskeletal	69,004	69.3	127.7	11,360	70.3	111.1
Psychiatric	40,532	40.7	75.0	5,601	34.7	54.8
Neurological	24,043	24.1	44.5	3,858	23.9	37.7
Respiratory	4,177	4.2	7.7	465	2.9	4.5
Digestive	2,430	2.4	4.5	412	2.5	4.0
Dermatologic	2,244	2.3	4.2	403	2.5	3.9
Cardiovascular	2,223	2.2	4.1	288	1.8	2.8
Endocrine	1,935	1.9	3.6	268	1.7	2.6
Genitourinary	1,525	1.5	2.8	221	1.4	2.2
Ears and Hearing	1,423	1.4	2.6	163	1.0	1.6
Eyes and Vision	994	1.0	1.8	157	1.0	1.5
Hemic and Lymphatic	473	0.5	0.9	72	0.4	0.7
Immune	351	0.4	0.6	62	0.4	0.6
Gynecologic	343	0.3	0.6	49	0.3	0.5
Dental and Oral	178	0.2	0.3	22	0.1	0.2
Other Sensory Disorders	40	<0.1	0.1	3	<0.1	<0.1
Total Individuals Discharged	**99,593**	**100**	**184.2**	**16,158**	**100**	**158.0**

1. Percent of individuals who have at least one condition within the specified body system category. Individuals may be included in more than one body system category, if an individual was evaluated for more than one condition.
2. Rate of disability discharge related to each body system per 10,000 service members.

TABLE 7B: DISTRIBUTION OF UNFITTING CONDITIONS BY BODY SYSTEM CATEGORY IN INDIVIDUALS WITH A DISABILITY DISCHARGE: **NAVY**, FY 2011-2015 VS. FY 2016

	2011-2015			2016		
Body System Category	**n**	**%[1]**	**Rate[2]**	**n**	**%[1]**	**Rate[2]**
Psychiatric	3,833	30.6	20.1	965	42.5	25.3
Musculoskeletal	5,312	42.5	27.8	775	34.1	20.4
Neurological	2,488	19.9	13.0	400	17.6	10.5
Digestive	804	6.4	4.2	113	5.0	3.0
Cardiovascular	332	2.7	1.7	50	2.2	1.3
Endocrine	338	2.7	1.8	47	2.1	1.2
Respiratory	355	2.8	1.9	44	1.9	1.2
Genitourinary	301	2.4	1.6	42	1.8	1.1
Dermatologic	197	1.6	1.0	30	1.3	0.8
Hemic/Lymphatic	159	1.3	0.8	24	1.1	0.6
Ears and Hearing	107	0.9	0.6	22	1.0	0.6
Eyes and Vision	200	1.6	1.0	22	1.0	0.6
Gynecologic	86	0.7	0.5	15	0.7	0.4
Infectious Disease	118	0.9	0.6	13	0.6	0.3
Dental and Oral	17	0.1	0.1	3	0.1	0.1
Other Sensory Disorders	2	<0.1	<0.1	0	-	-
Total Individuals Discharged	**12,509**	**100**	**65.6**	**2,272**	**100**	**59.7**

1. Percent of individuals who have at least one condition within the specified body system category. Individuals may be included in more than one body system category, if an individual was evaluated for more than one condition.
2. Rate of disability discharge related to each body system per 10,000 service members.

TABLE 7C: DISTRIBUTION OF UNFITTING CONDITIONS BY BODY SYSTEM CATEGORY IN INDIVIDUALS WITH A DISABILITY DISCHARGE: **MARINE CORPS**, FY 2011-2015 VS. FY 2016

	2011-2015			2016		
Body System Category	**n**	**%[1]**	**Rate[2]**	**n**	**%[1]**	**Rate[2]**
Musculoskeletal	9,304	59.2	79.9	1,901	52.8	78.6
Psychiatric	4,226	26.9	36.3	1,390	38.6	57.5
Neurological	3,299	21.0	28.3	657	18.2	27.2
Digestive	548	3.5	4.7	112	3.1	4.6
Respiratory	471	3.0	4.0	101	2.8	4.2
Cardiovascular	261	1.7	2.2	44	1.2	1.8
Genitourinary	297	1.9	2.6	43	1.2	1.8
Endocrine	163	1.0	1.4	41	1.1	1.7
Eyes and Vision	250	1.6	2.1	39	1.1	1.6
Dermatologic	262	1.7	2.3	36	1.0	1.5
Ears and Hearing	167	1.1	1.4	19	0.5	0.8
Hemic/Lymphatic	87	0.6	0.7	15	0.4	0.6
Infectious Disease	55	0.3	0.5	9	0.2	0.4
Gynecologic	28	0.2	0.2	4	0.1	0.2
Dental and Oral	29	0.2	0.2	1	<0.1	<0.1
Other Sensory Disorders	3	<0.1	<0.1	0	-	-
Total Individuals Discharged	**15,722**	**100**	**135.1**	**3,603**	**100**	**149.0**

1. Percent of individuals who have at least one condition within the specified body system category. Individuals may be included in more than one body system category, if an individual was evaluated for more than one condition.
2. Rate of disability discharge related to each body system per 10,000 service members.

TABLE 7D: DISTRIBUTION OF UNFITTING CONDITIONS BY BODY SYSTEM CATEGORY IN INDIVIDUALS WITH A DISABILITY DISCHARGE: **AIR FORCE**, FY 2011-2015 VS. FY 2016

	2011-2015			2016		
Body System Category	**n**	**%[1]**	**Rate[2]**	**n**	**%[1]**	**Rate[2]**
Musculoskeletal	8,331	51.1	33.5	1,795	52.4	38.7
Psychiatric	4,544	27.9	18.3	977	28.5	21.1
Neurological	3,416	21.0	13.7	629	18.3	13.6
Respiratory	1,650	10.1	6.6	282	8.2	6.1
Digestive	825	5.1	3.3	174	5.1	3.8
Cardiovascular	660	4.0	2.7	112	3.3	2.4
Dermatologic	293	1.8	1.2	78	2.3	1.7
Genitourinary	368	2.3	1.5	68	2.0	1.5
Endocrine	418	2.6	1.7	62	1.8	1.3
Eyes and Vision	216	1.3	0.9	32	0.9	0.7
Hemic/Lymphatic	162	1.0	0.7	32	0.9	0.7
Ears and Hearing	184	1.1	0.7	29	0.8	0.6
Infectious Disease	134	0.8	0.5	26	0.8	0.6
Dental and Oral	20	0.1	0.1	4	0.1	0.1
Immune	31	0.2	0.1	0	-	-
Gynecologic	13	0.1	0.1	0	-	-
Other Sensory	8	<0.1	<0.1	0	-	-
Total Individuals Discharged	**16,298**	**100**	**65.6**	**3,428**	**100**	**73.9**

1. Percent of individuals who have at least one condition within the specified body system category. Individuals may be included in more than one body system category, if an individual was evaluated for more than one condition.
2. Rate of disability discharge related to each body system per 10,000 service members.

The leading VASRD categories (excluding analogous codes) among disability discharges in the most common body system categories from 2011 to 2016 are shown in Tables 8A through 8D. Classification of an individual's conditions into body system categories is not mutually exclusive and individuals may be included in more than one body system category in cases of multiple conditions. Like the body system categories, VASRD categories within a body system are not mutually exclusive and an individual is represented in multiple VASRD categories if he/she has more than one code. Therefore, percentages associated with VASRD categories within each body system can be interpreted as the percent of individuals in a VASRD category among all individuals with a condition in the body system.

Key Findings:

- Musculoskeletal conditions:
  - Dorsopathies (i.e. vertebral fracture, sacroiliac injury, lumbosacral strain, degenerative arthritis) was the most common condition type in the Army and Air Force, while limitation of motion was the most common in the Navy and Marine Corps.
  - The prevalence of the leading musculoskeletal conditions in 2016 was similar to the previous five years in all services.
- Psychiatric disorders:
  - Posttraumatic stress disorder (PTSD) was the most commonly diagnosed psychiatric disorder in all services in 2016, accounting for more than 70% of those with a psychiatric disorder in the Army and Marine Corps.
    - Relative to previous years, the prevalence of PTSD increased in 2016 for the Navy and Air Force.
- Neurological conditions:
  - Paralysis was the most common type of neurological disability condition in 2016 in the Army and Air Force.
    - The rate of paralysis notably increased in the Army and Air Force in 2016 when compared to the previous time period, while the rate decreased in the Navy and Marine Corps.
  - Residuals of traumatic brain injury (TBI) is the leading condition in the Marine Corps and increased in prevalence in 2016.
  - The prevalence of epilepsy increased in 2016 in the Navy and became the leading neurological condition.

TABLE 8A: MOST PREVALENT CONDITIONS WITHIN LEADING BODY SYSTEM CATEGORIES AMONG INDIVIDUALS WITH A DISABILITY DISCHARGE: **ARMY**, FY 2011-2015 VS. FY 2016

2011-2015				2016			
	n	%[1]	Rate[2]		n	%[1]	Rate[2]
Musculoskeletal	**69,004**	**69.3**	**127.7**	**Musculoskeletal**	**11,360**	**70.3**	**111.1**
Dorsopathies	39,276	56.9	72.7	Dorsopathies	6,172	54.3	60.3
Limitation of motion	32,898	47.7	60.9	Limitation of motion	6,156	54.2	60.2
Arthritis	14,001	20.3	25.9	Arthritis	2,291	20.2	22.4
Psychiatric	**40,532**	**40.7**	**75.0**	**Psychiatric**	**5,601**	**34.7**	**54.8**
PTSD	29,369	72.5	54.3	PTSD	3,918	70.0	38.3
Mood disorder	8,615	21.3	15.9	Mood disorder	1,157	20.7	11.3
Anxiety disorder	3,457	8.5	6.4	Anxiety disorder	381	6.8	3.7
Neurological	**24,043**	**24.1**	**44.5**	**Neurological**	**3,858**	**23.9**	**37.7**
Paralysis	8,389	20.7	15.5	Paralysis	2,073	37.0	20.3
Migraine	6,272	15.5	11.6	Migraine	818	14.6	8.0
Residuals of TBI	6,213	15.3	11.5	Residuals of TBI	711	12.7	7.0
Total Individuals Discharged	**99,593**		**184.2**	**Total Individuals Discharged**	**16,158**		**158.0**

1. Percent includes individuals who have at least one condition within the specified body system/VASRD category. Individuals may be included in more than one body system/VASRD category if evaluated for more than one condition.
2. Rate of each type of disability discharge per 10,000 total service members.

TABLE 8B: MOST PREVALENT CONDITIONS WITHIN LEADING BODY SYSTEM CATEGORIES AMONG INDIVIDUALS WITH A DISABILITY DISCHARGE: **NAVY**, FY 2011-2015 VS. FY 2016

2011-2015				2016			
	n	%[1]	Rate[2]		n	%[1]	Rate[2]
Musculoskeletal	**5,312**	**42.5**	**27.8**	**Musculoskeletal**	**775**	**34.1**	**20.4**
Limitation of motion	2,404	45.3	12.6	Limitation of motion	389	50.2	10.2
Dorsopathies	1,964	37.0	10.3	Dorsopathies	266	34.3	7.0
Arthritis	1,094	20.6	5.7	Arthritis	141	18.2	3.7
Psychiatric	**3,833**	**30.6**	**20.1**	**Psychiatric**	**965**	**42.5**	**25.3**
Mood disorder	1,676	43.7	8.8	PTSD	391	40.5	10.3
PTSD	1,354	35.3	7.1	Mood disorder	386	40.0	10.1
Anxiety disorder	421	11.0	2.2	Anxiety disorder	115	11.9	3.0
Neurological	**2,488**	**19.9**	**13.0**	**Neurological**	**400**	**17.6**	**10.5**
Paralysis	598	24.0	3.1	Epilepsy	109	27.3	2.9
Epilepsy	517	20.8	2.7	Migraine	88	22.0	2.3
Migraine	413	16.6	2.2	Paralysis	83	20.8	2.2
Total Individuals Discharged	**12,509**		**65.6**	**Total Individuals Discharged**	**2,272**		**59.7**

1. Percent includes individuals who have at least one condition within the specified body system/VASRD category. Individuals may be included in more than one body system/VASRD category if evaluated for more than one condition.
2. Rate of each type of disability discharge per 10,000 total service members.

TABLE 8C: MOST PREVALENT CONDITIONS WITHIN LEADING BODY SYSTEM CATEGORIES AMONG INDIVIDUALS WITH A DISABILITY DISCHARGE: **MARINE CORPS**, FY 2011-2015 VS. FY 2016

2011-2015				2016			
	n	%[1]	Rate[2]		n	%[1]	Rate[2]
Musculoskeletal	**9,304**	**59.2**	**79.9**	**Musculoskeletal**	**1,901**	**52.8**	**78.6**
Limitation of motion	5,083	54.6	43.7	Limitation of motion	1,070	56.3	44.2
Dorsopathies	2,956	31.8	25.4	Dorsopathies	682	35.9	28.2
Arthritis	1,556	16.7	13.4	Joint disorders	272	14.3	11.2
Psychiatric	**4,226**	**26.9**	**36.3**	**Psychiatric**	**1,390**	**38.6**	**57.5**
PTSD	2,969	70.3	25.5	PTSD	982	70.6	40.6
Mood disorder	947	22.4	8.1	Mood disorder	321	23.1	13.3
Anxiety disorder	220	5.2	1.9	Anxiety disorder	86	6.2	3.6
Neurological	**3,299**	**21.0**	**28.3**	**Neurological**	**657**	**18.2**	**27.2**
Residuals of TBI	929	28.2	8.0	Residuals of TBI	220	33.5	9.1
Paralysis	898	27.2	7.7	Migraine	149	22.7	6.2
Migraine	495	15.0	4.3	Paralysis	129	19.6	5.3
Total Individuals Discharged	**15,722**		**135.1**	**Total Individuals Discharged**	**3,603**		**149.0**

1. Percent includes individuals who have at least one condition within the specified body system/VASRD category. Individuals may be included in more than one body system/VASRD category if evaluated for more than one condition.
2. Rate of each type of disability discharge per 10,000 total service members.

TABLE 8D: MOST PREVALENT CONDITIONS WITHIN LEADING BODY SYSTEM CATEGORIES AMONG INDIVIDUALS WITH A DISABILITY DISCHARGE: **AIR FORCE**, FY 2011-2015 VS. FY 2016

2011-2015				2016			
	n	%[1]	Rate[2]		n	%[1]	Rate[2]
Musculoskeletal	**8,331**	**51.1**	**33.5**	**Musculoskeletal**	**1,795**	**52.4**	**38.7**
Dorsopathies	4,640	55.7	18.7	Dorsopathies	1,029	57.3	22.2
Limitation of motion	2,786	33.4	11.2	Limitation of motion	659	36.7	14.2
Joint disorders	1,047	12.6	4.2	Joint disorders	215	12.0	4.6
Psychiatric	**4,544**	**27.9**	**18.3**	**Psychiatric**	**977**	**28.5**	**21.1**
PTSD	1,933	42.5	7.8	PTSD	460	47.1	9.9
Mood disorder	1,922	42.3	7.7	Mood disorder	369	37.8	8.0
Anxiety disorder	670	14.7	2.7	Anxiety disorder	95	9.7	2.0
Neurological	**3,416**	**21.0**	**13.7**	**Neurological**	**629**	**18.3**	**13.6**
Paralysis	966	28.3	3.9	Paralysis	253	40.2	5.5
Migraine	741	21.7	3.0	Migraine	143	22.7	3.1
Epilepsy	437	12.8	1.8	Epilepsy	92	14.6	2.0
Total Individuals Discharged	**16,298**		**65.6**	**Total Individuals Discharged**	**3,428**		**73.9**

1. Percent includes individuals who have at least one condition within the specified body system/VASRD category. Individuals may be included in more than one body system/VASRD category if evaluated for more than one condition.
2. Rate of each type of disability discharge per 10,000 total service members.

Tables 9A-9D show the top ten most common VASRD condition categories, regardless of body system category, present in service members discharged with a disability for 2011-2015 as compared to 2016.

Key Findings:

- When disregarding body system category, the ten most common VASRD categories are related to the musculoskeletal, psychiatric and neurological categories, with exception of non-infectious enteritis/colitis and asthma in the Navy and/or Air Force.
- In 2016, PTSD became the leading condition in both the Army and Navy. In the Marine Corps and Air Force, the proportion of PTSD increased in 2016 but remained the second and third most common VASRD, respectively.
    - Other notable increases in prevalence include paralysis in the Army (8% in 2011-2015 vs 13% in 2016), and mood disorders in the Navy (13% vs 17%) and Marine Corps (6% vs 9%).
    - A notable decrease was seen with arthritis in the Marine Corps (10% vs 6%) and the Air Force (10% vs 6%).

TABLE 9A: TEN MOST COMMON VASRD CATEGORIES IN INDIVIDUALS WITH A DISABILITY DISCHARGE: **ARMY**, FY 2011-2015 VS. FY 2016

2011-2015				2016			
	n	**%[1]**	**Rate[2]**		**n**	**%[1]**	**Rate[2]**
Dorsopathies	39,276	39.4	72.7	PTSD	6,172	38.2	60.3
Limitation of motion	32,898	33.0	60.9	Dorsopathies	6,156	38.1	60.2
PTSD	29,369	29.5	54.3	Limitation of motion	3,918	24.2	38.3
Arthritis	14,001	14.1	25.9	Arthritis	2,291	14.2	22.4
Mood Disorder	8,615	8.7	15.9	Paralysis	2,073	12.8	20.3
Paralysis	8,389	8.4	15.5	Joint disorders	1,353	8.4	13.2
Joint disorders	6,780	6.8	12.5	Mood disorder	1,157	7.2	11.3
Residuals of TBI	6,272	6.3	11.6	Skeletal and joint deformities	953	5.9	9.3
Migraine	6,313	6.3	11.7	Residuals of TBI	818	5.1	8.0
Skeletal and joint deformities	5,371	5.4	9.9	Migraine	711	4.4	7.0
Total Individuals Discharged	**99,593**	**100**	**184.2**	**Total Individuals Discharged**	**16,158**	**100**	**158.0**

1. Percent includes individuals who have at least one condition within the specified VASRD category. Individuals may be included in more than one VASRD category if evaluated for more than one condition.
2. Rate of each type of disability per 10,000 total service members.

TABLE 9B: TEN MOST COMMON VASRD CATEGORIES IN INDIVIDUALS WITH A DISABILITY DISCHARGE: **NAVY**, FY 2011-2015 VS. FY 2016

2011-2015				2016			
	n	**%[1]**	**Rate[2]**		**n**	**%[1]**	**Rate[2]**
Limitation of motion	2,404	19.2	12.6	PTSD	391	17.2	10.3
Dorsopathies	1,964	15.7	10.3	Limitation of motion	389	17.1	10.2
Mood disorder	1,676	13.4	8.8	Mood disorder	386	17.0	10.1
PTSD	1,354	10.8	7.1	Dorsopathies	266	11.7	7.0
Arthritis	1,094	8.7	5.7	Arthritis	141	6.2	3.7
Joint disorders	775	6.2	4.1	Joint disorders	120	5.3	3.2
Paralysis	598	4.8	3.1	Anxiety disorder	115	5.1	3.0
Noninfectious enteritis and colitis	545	4.4	2.9	Epilepsy	109	4.8	2.9
Epilepsy	517	4.1	2.7	Migraine	88	3.9	2.3
Anxiety disorder	421	3.4	2.2	Paralysis	83	3.7	2.2
Total Individuals Discharged	**12,509**	**100**	**65.6**	**Total Individuals Discharged**	**2,272**	**100**	**59.7**

1. Percent includes individuals who have at least one condition within the specified VASRD category. Individuals may be included in more than one VASRD category if evaluated for more than one condition.
2. Rate of each type of disability per 10,000 total service members.

TABLE 9C: TEN MOST COMMON VASRD CATEGORIES IN INDIVIDUALS WITH A DISABILITY DISCHARGE: **MARINE CORPS**, FY 2011-2015 VS. FY 2016

2011-2015				2016			
	n	**%[1]**	**Rate[2]**		**n**	**%[1]**	**Rate[2]**
Limitation of motion	5,083	32.3	43.7	Limitation of motion	1,070	29.7	44.2
PTSD	2,969	18.9	25.5	PTSD	982	27.3	40.6
Dorsopathies	2,956	18.8	25.4	Dorsopathies	682	18.9	28.2
Arthritis	1,556	9.9	13.4	Mood disorder	321	8.9	13.3
Joint disorders	1,034	6.6	8.9	Joint disorders	272	7.5	11.2
Mood disorder	947	6.0	8.1	Residuals of TBI	220	6.1	9.1
Residuals of TBI	929	5.9	8.0	Arthritis	212	5.9	8.8
Paralysis	899	5.7	7.7	Migraine	149	4.1	6.2
Amputations	518	3.3	4.4	Paralysis	129	3.6	5.3
Migraine	495	3.1	4.3	Skeletal and joint deformities	104	2.9	4.3
Total Individuals Discharged	**15,722**	**100**	**135.1**	**Total Individuals Discharged**	**3,603**	**100**	**149.0**

1. Percent includes individuals who have at least one condition within the specified VASRD category. Individuals may be included in more than one VASRD category if evaluated for more than one condition.
2. Rate of each type of disability per 10,000 total service members.

TABLE 9D: TEN MOST COMMON VASRD CATEGORIES IN INDIVIDUALS WITH A DISABILITY DISCHARGE: **AIR FORCE**, FY 2011-2015 VS. FY 2016

2011-2015				2016			
	n	**%[1]**	**Rate[2]**		**n**	**%[1]**	**Rate[2]**
Dorsopathies	4,640	28.5	18.7	Dorsopathies	1,029	30.0	22.2
Limitation of motion	2,786	17.1	11.2	Limitation of motion	659	19.2	14.2
PTSD	1,933	11.9	7.8	PTSD	460	13.4	9.9
Mood Disorder	1,922	11.8	7.7	Mood disorder	369	10.8	8.0
Arthritis	1,570	9.6	6.3	Paralysis	253	7.4	5.5
Asthma	1,122	6.9	4.5	Joint disorders	215	6.3	4.6
Joint disorders	1,047	6.4	4.2	Arthritis	195	5.7	4.2
Paralysis	966	5.9	3.9	Asthma	168	4.9	3.6
Migraine	741	4.5	3.0	Migraine	143	4.2	3.1
Anxiety Disorder	670	4.1	2.7	Noninfectious enteritis and colitis	118	3.4	2.5
Total Individuals Discharged	**16,298**	**100**	**65.6**	**Total Individuals Discharged**	**3,428**	**100**	**73.9**

1. Percent includes individuals who have at least one condition within the specified VASRD category. Individuals may be included in more than one VASRD category if evaluated for more than one condition.
2. Rate of each type of disability per 10,000 total service members.

Table 10A shows the distribution of the last disposition, by service, for all disability discharge evaluations comparing 2016 to 2011-2015, excluding periodic TDRL re-evaluations.

Key Findings:

- The most common disposition in the Army and Air Force was permanent disability retirement in the Army, while separated with severance pay was the most common in the Marine Corps. The most common disposition changed from PDR in 2011-2015 to placement on the temporary disability retirement list (TDRL) in 2016 in the Navy.
    - Placement on the TDRL increased in 2016 in all services, with a doubling in the Air Force (12% vs 25%).
- The proportion of those found fit decreased in 2016 in the Army and Air Force, but significantly increased for the Navy (14% vs. 22%) and Marine Corps (6% vs 9%).

TABLE 10A: MOST RECENT DISPOSITION BY SERVICE FOR ALL INDIVIDUALS EVALUATED FOR DISABILITY DISCHARGE: FY 2011-2015 VS FY 2016[1]

	2011-2015								2016							
	Army		Navy		Marine Corps		Air Force		Army		Navy		Marine Corps		Air Force	
	n	%[2]	n	%[2]	n	%[2]	n	%[2]	n	%[2]	n	%[2]	n	%[2]	n	%[2]
Permanent Disability Retired	38,358	41.3	5,015	33.5	5,846	34.7	8,857	48.8	6,746	41.6	632	21.7	1,185	30.9	1,590	43.9
Separated without Benefits	418	0.4	268	1.8	283	1.7	397	2.2	107	0.7	42	1.4	41	1.1	74	2.0
Separated with Severance	26,656	28.7	4,041	27.0	7,033	41.8	4,836	26.6	4,774	29.4	627	21.6	1,307	34.0	931	25.7
Fit	1,704	1.8	2,173	14.5	992	5.9	1,466	8.1	0	-	644	22.1	350	9.1	123	3.4
Placed on TDRL	23,200	25.0	2,512	16.8	2,116	12.6	2,199	12.1	4,135	25.5	777	26.7	685	17.8	902	24.9
Administrative Termination[3]	839	0.9	-	-	-	-	-	-	175	1.1	-	-	-	-	-	-
Other[4]	7	<0.1	978	6.5	567	3.4	405	2.2	290	1.8	186	6.4	273	7.1	5	0.1
Total Individuals	**92,939**		**14,987**		**16,837**		**18,161**		**16,235**		**2,908**		**3,841**		**3,625**	

1. Individuals with a 'Retained on the TDRL' disposition as their first disposition during the time period covered by this report are excluded from this table.
2. Percent of the total number of individuals by service and time period
3. The disposition 'administrative termination' is specific to the Army
4. Including, but not limited, individuals with dispositions of no action, limited duty, or administrative removal from TDRL.

Table 10B shows the rate of disability disposition per 10,000 service members, by service, for all disability discharge evaluations comparing 2016 to 2011-2015, excluding periodic TDRL re-evaluations.

Key Findings:

- Rates of permanent disability retirement decreased in 2016 for all services, most notably for the Navy (26 per 10,000 service members vs 17 per 10,000).
- Placement on the TDRL increased in all services except the Army.
- Rates of separated with severance pay decreased for all services except the Air Force, where rates remained stable.
- Rates for those found fit increased in Navy and Marine Corps but decreased in the Army and Air Force.

TABLE 10B: RATE OF DISPOSITION TYPE PER 10,000 SERVICE MEMBERS BY SERVICE FOR ALL INDIVIDUALS EVALUATED FOR DISABILITY DISCHARGE: FY 2011-2015 VS FY 2016[1]

	2011-2015								2016							
	Army		Navy		Marine Corps		Air Force		Army		Navy		Marine Corps		Air Force	
	n	Rate[2]	n	Rate[2]	n	Rate[2]	n	Rate[2]	n	Rate[2]	n	Rate[2]	n	Rate[2]	n	Rate[2]
Permanent Disability Retired	38,358	71.0	5,015	26.3	5,846	50.2	8,857	35.6	6,746	66.0	632	16.6	1,185	49.0	1,590	34.3
Separated without Benefit	418	0.8	268	1.4	283	2.4	397	1.6	107	1.0	42	1.1	41	1.7	74	1.6
Separated with Severance	26,656	49.3	4,041	21.2	7,033	60.4	4,836	19.5	4,774	46.7	627	16.5	1,307	54.0	931	20.1
Fit	1,704	3.2	2,179	11.4	992	8.5	1,466	5.9	-	-	644	16.9	350	14.5	123	2.7
Placed on TDRL	23,200	42.9	2,512	13.2	2,116	18.2	2,199	8.9	4,135	40.4	777	20.4	685	28.3	902	19.5
Administrative Termination[3]	839	1.6	-	-	-	-	-	-	175	1.7	-	-	-	-	-	-
Other[4]	7	<0.1	978	5.1	567	4.9	405	1.6	290	2.8	186	4.9	273	11.3	5	0.1

1. Individuals with a 'Retained on the TDRL' disposition as their first disposition during the time period covered by this report are excluded from this table.
2. Rate of disposition type per 10,000 service members.
3. The disposition 'administrative termination' is specific to the Army
4. Including, but not limited, individuals with dispositions of no action, limited duty, or administrative removal from TDRL.

Most recent percent rating among evaluations for disability discharge is shown, by service, for the period of 2016 as compared 2011-2015 in Table 11A.

Key Findings:

- In 2016, the most frequently assigned rating in the Army (10%), Marine Corps (10%) and Air Force (30%) were similar to the previous five year period. For the Navy, Unrated replaced 30% as the most frequently assigned rating.
- Similar to previous years, disability ratings greater than 30% accounted for about 60% of Marine Corps disability ratings, and about 70% of ratings in the Army, Navy, and Air Force in 2016.
- The proportion of disability ratings of 80% or higher decreased in 2016 in the Army, Navy and Marine Corps.
- In the Navy and Marine Corps, there was an increase in the proportion with unrated conditions and a decrease in the proportion rated 0%-20%.

TABLE 11A: MOST RECENT PERCENT RATING BY SERVICE FOR ALL INDIVIDUALS EVALUATED FOR DISABILITY DISCHARGE: FY 2011-2015 VS FY 2016[1]

	2011-2015												2016											
	Army			Navy			Marine Corps			Air Force			Army			Navy			Marine Corps			Air Force		
Rating	**n**	**%**	**CP**	**n**	**%**	**CP**	**n**	**%**	**CP**	**n**	**%**	**CP**	**n**	**%**	**CP**	**n**	**%**	**CP**	**n**	**%**	**CP**	**n**	**%**	**CP**
0	1,674	1.8	1.9	487	3.2	4.0	895	5.3	5.8	478	2.6	2.9	436	2.7	2.8	132	4.5	6.1	256	6.7	7.5	129	3.6	3.8
10	14,486	15.6	18.3	2,254	15.0	22.3	3,980	23.6	31.5	2,757	15.2	19.9	2,630	16.2	19.4	359	12.3	22.8	739	19.2	29.2	498	13.7	18.3
20	11,262	12.1	31.0	1,486	9.9	34.4	2,297	13.6	46.3	1,876	10.3	31.5	2,012	12.4	32.1	196	6.7	31.9	445	11.6	42.2	363	10.0	28.9
30	9,007	9.7	41.2	2,443	16.3	54.2	2,301	13.7	61.2	2,904	16.0	49.4	1,669	10.3	42.6	393	13.5	50.1	543	14.1	58.1	527	14.5	44.2
40	8,388	9.0	50.7	1,425	9.5	65.8	1,631	9.7	71.7	1,936	10.7	61.4	1,642	10.1	53.0	214	7.4	60.0	354	9.2	68.5	391	10.8	55.6
50	11,247	12.1	63.4	1,605	10.7	78.8	1,457	8.7	81.2	2,026	11.2	73.9	2,311	14.2	67.6	354	12.2	76.4	423	11.0	80.9	455	12.6	68.9
60	10,368	11.2	75.1	675	4.5	84.3	886	5.3	86.9	1,299	7.2	81.9	1,462	9.0	76.8	123	4.2	82.1	199	5.2	86.7	264	7.3	76.6
70	10,107	10.9	86.6	876	5.8	91.4	926	5.5	92.9	1,322	7.3	90.0	1,795	11.1	88.2	229	7.9	92.8	291	7.6	95.3	408	11.3	88.5
80	5,705	6.1	93.0	214	1.4	93.2	345	2.0	95.1	566	3.1	93.5	912	5.6	93.9	34	1.2	94.3	55	1.4	96.9	122	3.4	92.0
90	2,429	2.6	95.8	62	0.4	93.7	116	0.7	95.8	167	0.9	94.5	384	2.4	96.4	7	0.2	94.7	14	0.4	97.3	47	1.3	93.4
100	3,758	4.0	100	778	5.2	100	643	3.8	100	886	4.9	100	576	3.5	100	115	4.0	100	92	2.4	100	227	6.3	100
UR	2,643	2.8	N/A	2,434	16.2	N/A	1,275	7.6	N/A	1,877	10.3	N/A	109	0.7	N/A	686	23.6	N/A	391	10.2	N/A	193	5.3	N/A
Miss	1,849	2.0	N/A	248	1.7	N/A	85	0.5	N/A	67	0.4	N/A	297	1.8	N/A	66	2.3	N/A	39	1.0	N/A	1	<0.1	N/A
Total	**92,939**			**14,987**			**16,837**			**18,161**			**16,235**			**2,908**			**3,841**			**3,625**		

UR: Unrated, Miss: Missing, CP: Cumulative Percent, excluding missing and unrated

1. Individuals with a 'Retained on the TDRL' disposition as their first disposition during the time period covered by this report are excluded from this table.

Rates per 10,000 service members for the percent disability ratings is shown, by service, for individuals disability evaluated in 2016 as compared those evaluated between 2011-2015 in Table 11B.

Key Findings:

- Disability rating 10% had the highest rate in the Army and Marine Corps in both time periods. In the Navy, the Unrated replaced 30% as the disability rating with the highest rate. The disability ratings with highest rates in the Air Force were 30% and 10% in both time periods.
- In 2016, there was an increase in the rate with Unrated conditions in the Navy and Marine Corps, but a decrease in the Army and Air Force.

TABLE 11B: RATE OF PERCENT DISABILITY RATING PER 10,000 SERVICE MEMBERS BY SERVICE FOR ALL INDIVIDUALS EVALUATED FOR DISABILITY DISCHARGE: FY 2011-2015 VS FY 2016[1]

	2011-2015								2016							
	Army		Navy		Marine Corps		Air Force		Army		Navy		Marine Corps		Air Force	
Rating	n	Rate[2]	n	Rate[2]	n	Rate[2]	n	Rate[2]	n	Rate[2]	n	Rate[2]	n	Rate[2]	n	Rate[2]
0	1,674	3.1	487	2.6	895	7.7	478	1.9	436	4.3	132	3.5	256	10.6	129	2.8
10	14,486	26.8	2,254	11.8	3,980	34.2	2,757	11.1	2,630	25.7	359	9.4	739	30.6	498	10.7
20	11,262	20.8	1,486	7.8	2,297	19.7	1,876	7.6	2,012	19.7	196	5.1	445	18.4	363	7.8
30	9,007	16.7	2,443	12.8	2,301	19.8	2,904	11.7	1,669	16.3	393	10.3	543	22.5	527	11.4
40	8,388	15.5	1,425	7.5	1,631	14.0	1,936	7.8	1,642	16.1	214	5.6	354	14.6	391	8.4
50	11,247	20.8	1,605	8.4	1,457	12.5	2,026	8.2	2,311	22.6	354	9.3	423	17.5	455	9.8
60	10,368	19.2	675	3.5	886	7.6	1,299	5.2	1,462	14.3	123	3.2	199	8.2	264	5.7
70	10,107	18.7	876	4.6	926	8.0	1,322	5.3	1,795	17.5	229	6.0	291	12.0	408	8.8
80	5,705	10.6	214	1.1	345	3.0	566	2.3	912	8.9	34	0.9	55	2.3	122	2.6
90	2,429	4.5	62	0.3	116	1.0	167	0.7	384	3.8	7	0.2	14	0.6	47	1.0
100	3,758	7.0	778	4.1	643	5.5	886	3.6	576	5.6	115	3.0	92	3.8	227	4.9
UR	2,643	4.9	2,434	12.8	1,275	11.0	1,877	7.6	109	1.1	686	18.0	391	16.2	193	4.2

UR: Unrated
1. Individuals with a 'Retained on the TDRL' disposition as their first disposition during the time period covered by this report are excluded from this table
2. Rate of each percent disability rating per 10,000 service members.

History of Medical Disqualification, Pre-existing Conditions, Accession Medical Waiver, and Hospitalization among Service Members Evaluated for Disability

AMSARA receives data on service members throughout their military career, spanning from application to military service at MEPS to discharge. These data were merged with disability evaluation data in order to describe the medical history of the disability evaluated population. Applicant data, collected at MEPS, are available for enlisted service members from all components. Waiver data are for enlisted active duty and reserve service members only. Hospitalization data were only available for active duty and eligible reserves at the time these analyses were completed. Accession and discharge data were available for all ranks and components.

Table 12 shows the number and percentages of individuals in the DES records with records in other datasets received by AMSARA.

Key Findings:

- Applicant and accession records were available for more than 80% of the disability population in all services.
  - Missing applicant and accession data may represent applications or accessions prior to 1995, the first year complete data are available.
- The highest percentage with waiver records was found in the Army (8%); the lowest percentage was found in the Air Force (4%).
  - Most accession medical waivers were approved in this population.
  - The number of Marine Corps waiver records may be underestimated due to missing or incomplete records.
- Hospitalization at a military treatment facility in this population was most common in the Navy (46%) and least common in the Air Force (31%).

TABLE 12: INDIVIDUALS EVALUATED FOR DISABILITY WITH RECORDS IN OTHER AMSARA DATA SOURCES: FY 2011-2016

	Army		Navy		Marine Corps		Air Force	
	n	%	n	%	n	%	n	%
Applicant record[1] (1995-2016)	94,991	85.8	14,176	83.5	19,138	93.0	16,129	80.5
Accession medical waiver record[1] (1995-2016)	8,720	7.9	1,160	6.8	1,237	6.0	736	3.7
Approved	8,061	7.3	1,098	6.5	1,123	5.5	712	3.6
Denied	659	0.6	62	0.4	114	0.6	24	0.1
Accession record (1995-2016)	96,224	81.5	17,246	94.3	20,599	97.0	17,547	80.5
Hospitalization record[2] (1995-2016)	34,793	38.7	7,901	45.7	7,995	39.6	5,713	30.9
Discharge record (1995-2016)	68,677	58.2	13,182	72.1	17,321	81.6	19,243	88.3
Total Individuals	118,050		18,282		21,233		21,786	
Total Enlisted	110,743		16,980		20,589		20,031	
Total Active Duty	89,861		17,284		20,207		18,486	

1. Applicant and waiver datasets include only enlisted service members. Therefore, percent for applicants and waiver were calculated using the total number of enlisted service members as the denominator.
2. Hospitalization dataset (i.e. SIDR) includes active duty service members and qualified reserves. Therefore, percent was calculated using the total number of active duty service members as the denominator.

Medical disqualification and pre-existing conditions among enlisted service members evaluated for disability

Enlisted applicant records include data on medical examinations conducted at a Military Entrance Processing Station (MEPS) from 1995 to present. MEPS medical examinations dated after the MEB date were excluded from the analyses. When service members evaluated for disability had more than one MEPS medical examination record, only the most recent record preceding the disability evaluation was used.

Table 13 shows the history of medical examination and application for military service among service members evaluated for disability by year of disability evaluation and service.

Key Findings:

- The proportions of applicant records in the Army, Navy and Marine Corps increased over time, a trend which is expected given the longer time frame for which application records are available.
- The Marine Corps had the highest percentage of individuals with a MEPS medical examination record both overall and for every individual year.

TABLE 13: RECORD OF MEDICAL EXAMINATION AT MEPS AMONG ENLISTED SERVICE MEMBERS EVALUATED FOR DISABILITY BY YEAR OF DISABILITY EVALUATION: FY 2011-2016

	Army			Navy			Marine Corps			Air Force		
	App	**Total**	**%**	**App**	**Total**	**%**	**App**	**Total**	**%**	**App**	**Total**	**%**
2011	10,056	13,078	76.9	1,477	2,020	73.1	2,322	2,607	89.1	2,463	2,848	86.5
2012	11,292	14,536	77.7	2,071	2,673	77.5	3,234	3,501	92.4	2,423	2,764	87.7
2013	17,953	21,996	81.6	2,080	2,490	83.5	2,676	2,882	92.9	2,312	3,005	76.9
2014	19,034	23,629	80.6	2,660	3,134	84.9	3,221	3,484	92.5	2,883	3,871	74.5
2015	18,480	22,512	82.1	3,345	3,827	87.4	3,891	4,118	94.5	3,116	4,191	74.3
2016	12,821	14,992	85.5	2,543	2,836	89.7	3,794	3,997	94.9	2,932	3,352	87.5
Total	**89,636**	**110,743**	**80.9**	**14,176**	**16,980**	**83.5**	**19,138**	**20,589**	**93.0**	**16,129**	**20,031**	**80.5**

App: Applicants with MEPS medical examination record, Total: Enlisted individuals evaluated for a disability

Medical qualification status at time of application for enlisted service members who underwent disability evaluation are shown in Tables 14A-14D comparing service members evaluated for disability in 2016 to those evaluated for disability in the previous five years.

Key Findings:

- Rates of permanent medical disqualification remained relatively stable between the two periods.
  - Between 8% (Air Force) and 11% (Army) of service members evaluated for disability had a history of permanent medical disqualification in 2016.
- Rates of temporary medical disqualification slightly decreased in 2016 in all services.
  - Between 3% (Air Force) and 7% (Army) of service members evaluated for disability had a history of temporary medical disqualification in 2016.

TABLE 14A: MEDICAL QUALIFICATION STATUS AMONG ENLISTED INDIVIDUALS WHO WERE EVALUATED FOR DISABILITY WITH MEPS EXAMINATION RECORD: **ARMY**, FY 2011-2015 VS. FY 2016

	2011-2015		2016	
	n	**%**	**n**	**%**
Fully Qualified	61,213	79.7	10,511	82.0
Permanently Disqualified	8,700	11.3	1,438	11.2
Temporarily Disqualified[1]	6,902	9.0	872	6.8
Total DES Cases with Medical Exam Record	76,815		12,821	

1. The majority of temporary disqualifications are due to failure to meet weight for height and body fat standards.

TABLE 14B: MEDICAL QUALIFICATION STATUS AMONG ENLISTED INDIVIDUALS WHO WERE EVALUATED FOR DISABILITY WITH MEPS EXAMINATION RECORD: **NAVY**, FY 2011-2015 VS. FY 2016

	2011-2015		2016	
	n	**%**	**n**	**%**
Fully Qualified	9,872	84.9	2,168	85.3
Permanently Disqualified	1,090	9.4	247	9.7
Temporarily Disqualified[1]	671	5.8	128	5.0
Total DES Cases with Medical Exam Record	**11,633**		**2,543**	

1. The majority of temporary disqualifications are due to failure to meet weight for height and body fat standards.

TABLE 14C: MEDICAL QUALIFICATION STATUS AMONG ENLISTED INDIVIDUALS WHO WERE EVALUATED FOR DISABILITY WITH MEPS EXAMINATION RECORD: **MARINE CORPS**, FY 2011-2015 VS. FY 2016

	2011-2015		2016	
	n	**%**	**n**	**%**
Fully Qualified	13,049	85.0	3,233	85.2
Permanently Disqualified	1,325	8.6	341	9.0
Temporarily Disqualified[1]	970	6.3	220	5.8
Total DES Cases with Medical Exam Record	**15,344**		**3,794**	

1. The majority of temporary disqualifications are due to failure to meet weight for height and body fat standards.

TABLE 14D: MEDICAL QUALIFICATION STATUS AMONG ENLISTED INDIVIDUALS WHO WERE EVALUATED FOR DISABILITY WITH MEPS EXAMINATION RECORD: **AIR FORCE**, FY 2011-2015 VS. FY 2016

	2011-2015		2016	
	n	**%**	**n**	**%**
Fully Qualified	11,742	89.0	2,593	88.4
Permanently Disqualified	914	6.9	244	8.3
Temporarily Disqualified[1]	541	4.1	95	3.2
Total DES Cases with Medical Exam Record	**13,197**		**2,932**	

1. The majority of temporary disqualifications are due to failure to meet weight for height and body fat standards.

The leading pre-existing conditions, defined by ICD-9 codes present in MEPS examination records, of enlisted service members by year of disability evaluation are shown in Tables 15A-15D. All ICD-9 diagnoses recorded in medical examination record that directly preceded disability evaluation were used in generating Table 15A-Table 15D.

Key Findings:

- In all services and time periods, the most common pre-existing conditions at application in service members who underwent disability are consistent with highly prevalent conditions in the general military applicant population [8].
- Overweight, obesity, and other hyperalimentation continued to be the most common pre-existing condition category in those disability evaluated in 2016.
- The proportion of those with disorders of refraction and accommodation increased in the 2016 cohort in all services.
- The proportion of those diagnosed with *Cannabis* abuse decreased in 2016 in the Army, Navy, and Marine Corps.

TABLE 15A: FIVE MOST COMMON ICD-9 DIAGNOSIS CODES APPEARING IN MEPS MEDICAL EXAMINATION RECORDS OF SERVICE MEMBERS EVALUATED FOR DISABILITY: **ARMY**, FY 2011-2015 VS. FY 2016

2011-2015				2016			
ICD-9 Diagnosis Code	**n**	**% of Cond[1]**	**% of App[2]**	**ICD-9 Diagnosis Code**	**n**	**% of Cond[1]**	**% of App[2]**
Overweight, obesity and other hyperalimentation	3,876	30.6	5.0	Overweight, obesity and other hyperalimentation	452	22.8	3.6
Disorders of lipoid metabolism	814	6.4	1.1	Disorders of refraction and accommodation	146	7.4	1.1
Hearing loss	774	6.1	1.0	Disorders of lipoid metabolism	121	6.1	0.9
Disorders of refraction and accommodation	583	4.6	0.8	Hearing loss	94	4.7	0.7
Cannabis abuse	567	4.5	0.7	Certain adverse effects, not specified	50	2.5	0.4
Total Applicants with Medical Conditions	**12,651**		**16.5**	**Total Applicants with Medical Conditions**	**1,980**		**15.4**
Total DES Cases with Medical Exam Record	**76,815**			**Total DES Cases with Medical Exam Record**	**12,821**		

1. Percent of applicants with each medical condition among all applicants with medical conditions.
2. Percent of applicants with each medical condition among all DES cases with a medical exam record.

TABLE 15B: FIVE MOST COMMON ICD-9 DIAGNOSIS CODES APPEARING IN MEPS MEDICAL EXAMINATION RECORDS OF SERVICE MEMBERS EVALUATED FOR DISABILITY: **NAVY**, FY 2011-2015 VS. FY 2016

2011-2015				2016			
ICD-9 Diagnosis Code	**N**	**% of Cond[1]**	**% of App[2]**	**ICD-9 Diagnosis Code**	**n**	**% of Cond[1]**	**% of App[2]**
Overweight, obesity and other hyperalimentation	317	19.5	2.7	Overweight, obesity and other hyperalimentation	78	20.3	3.1
Disorders of refraction and accommodation	99	6.1	0.9	Disorders of refraction and accommodation	30	7.8	1.2
Asthma	68	4.2	0.6	Abnormal loss of weight and underweight	15	3.9	0.6
Other and unspecified disorders of bone and cartilage	42	2.6	0.4	Other joint derangement	14	3.6	0.6
Cannabis abuse	41	2.5	0.4	Hearing loss	11	2.9	0.4
Total Applicants with Medical Conditions	**1,622**		**13.9**	**Total Applicants with Medical Conditions**	**385**		**15.1**
Total DES Cases with Medical Exam Record	**11,633**			**Total DES Cases with Medical Exam Record**	**2,543**		

1. Percent of applicants with each medical condition among all applicants with medical conditions.
2. Percent of applicants with each medical condition among all DES cases with a medical exam record.

TABLE 15C: FIVE MOST COMMON ICD-9 DIAGNOSIS CODES APPEARING IN MEPS MEDICAL EXAMINATION RECORDS OF SERVICE MEMBERS EVALUATED FOR DISABILITY: **MARINE CORPS**, FY 2011-2015 VS. FY 2016

2011-2015				2016			
ICD-9 Diagnosis Code	**N**	**% of Cond[1]**	**% of App[2]**	**ICD-9 Diagnosis Code**	**n**	**% of Cond[1]**	**% of App[2]**
Overweight, obesity and other hyperalimentation	458	20.1	3.0	Overweight, obesity and other hyperalimentation	101	21.0	2.7
Abnormal loss of weight and underweight	169	7.4	1.1	Abnormal loss of weight and underweight	65	7.4	1.7
Cannabis abuse	157	6.9	1.0	Disorders of refraction and accommodation	41	4.7	1.1
Disorders of refraction and accommodation	84	3.7	0.5	*Cannabis* abuse	32	4.0	0.8
Asthma	74	3.2	0.5	Asthma	21	3.0	0.6
Total Applicants with Medical Conditions	**2,280**		**14.9**	**Total Applicants with Medical Conditions**	**582**		**15.3**
Total DES Cases with Medical Exam Record	**15,344**			**Total DES Cases with Medical Exam Record**	**3,794**		

1. Percent of applicants with each medical condition among all applicants with medical conditions.
2. Percent of applicants with each medical condition among all DES cases with a medical exam record.

TABLE 15D: FIVE MOST COMMON ICD-9 DIAGNOSIS CODES APPEARING IN MEPS MEDICAL EXAMINATION RECORDS OF SERVICE MEMBERS EVALUATED FOR DISABILITY: **AIR FORCE**, FY 2011-2015 VS. FY 2016

2011-2015				2016			
ICD-9 Diagnosis Code	**N**	**% of Cond[1]**	**% of App[2]**	**ICD-9 Diagnosis Code**	**n**	**% of Cond[1]**	**% of App[2]**
Overweight, obesity and other hyperalimentation	196	13.4	1.5	Overweight, obesity and other hyperalimentation	41	12.1	1.4
Disorders of refraction and accommodation	73	5.0	0.6	Disorders of refraction and accommodation	33	9.7	1.1
Symptoms concerning nutrition, metabolism and development	57	3.9	0.4	Asthma	16	4.7	0.5
Other nonspecific abnormal findings	43	2.9	0.3	Symptoms concerning nutrition, metabolism and development	11	3.2	0.4
Asthma	42	2.9	0.2	Other nonspecific abnormal findings	11	3.2	0.4
Total Applicants with Medical Conditions	**1,462**		**11.1**	**Total Applicants with Medical Conditions**	**340**		**11.6**
Total DES Cases with Medical Exam Record	**13,197**			**Total DES Cases with Medical Exam Record**	**2,932**		

1. Percent of applicants with each medical condition among all applicants with medical conditions.
2. Percent of applicants with each medical condition among all DES cases with a medical exam record.

The most prevalent medical disqualification diagnoses at MEPS medical examinations are shown in Tables 16A-16D for each service within the 3 most common disability body systems (musculoskeletal, psychiatric and neurological). Only individuals who were discharged with a service connected disability were included in these tables (i.e. Fit and SWOB dispositions are excluded). Classification of an individual's disability conditions into body system categories is not mutually exclusive and individuals may be included in more than one body system category in cases of multiple disability conditions. Like the disability body system categories, ICD-9 diagnosis types at MEPS examination within a body system are not mutually exclusive and an individual is represented in multiple ICD-9 diagnosis categories if he/she has more than one type of medical disqualification. Therefore, percentages associated with ICD-9 diagnosis types at MEPS examination within each body system should be interpreted as the percent of individuals discharged with a specific disability type who had each specific disqualification type at MEPS.

Key Findings:

- Total rates of medical disqualification prior to accession among individuals disability discharged in 2016 varied from 10% in the Navy to 24% in the Air Force.
- Abnormal weight, musculoskeletal conditions, psychiatric disorders and abnormal vision were the most common pre-accession disqualifications regardless of service, type of disability, and time period.

TABLE 16A: MOST PREVALENT DISQUALIFICATION TYPES AT MEPS MEDICAL EXAMINATION WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: **ARMY**, FY 2011-2015 VS. FY 2016

2011-2015			2016		
	n	%[1]		n	%[1]
Total Disability Discharged	**90,003**		**Total Disability Discharged**	**23,665**	
Weight	3,870	4.3	Weight	766	3.2
Musculoskeletal	1,619	1.8	Musculoskeletal	479	2.0
Psychiatric	1,262	1.4	Psychiatric	294	1.2
Any DQ	15,592	17.3	Any DQ	3,610	15.3
Musculoskeletal Disability	**64,716**	**71.9**	**Musculoskeletal Disability**	**15,527**	**65.6**
Weight	2,853	4.4	Weight	501	3.2
Musculoskeletal	1,313	2.0	Musculoskeletal	338	2.2
Psychiatric	860	1.3	Vision	172	1.1
Any DQ	11,401	17.6	Any DQ	2,437	15.7
Psychiatric Disability	**33,074**	**36.7**	**Psychiatric Disability**	**12,993**	**54.9**
Weight	1,204	3.6	Weight	414	3.2
Psychiatric	488	1.5	Musculoskeletal	206	1.6
Musculoskeletal	419	1.3	Psychiatric	182	1.4
Any DQ	4,633	14.0	Any DQ	1,781	13.7
Neurological Disability	**21,644**	**24.0**	**Neurological Disability**	**5,756**	**24.3**
Weight	766	3.5	Weight	149	2.6
Musculoskeletal	328	1.5	Musculoskeletal	97	1.7
Psychiatric	279	1.3	Psychiatric	61	1.1
Neurological[2]	35	0.2	Neurological[2]	9	0.2
Any DQ	3,252	15.0	Any DQ	758	13.2

1. Percentages associated with ICD-9 diagnosis types at MEPS examination within each body system should be interpreted as the percent of individuals discharged with a specific disability type who had each specific disqualification type at MEPS.
2. The prevalence of neurological disqualifications is presented to show the relationship between history of neurological disqualification and disability. Neurological disqualifications are not among the leading reasons for disqualification among individuals with a neurological disability.

TABLE 16B: MOST PREVALENT DISQUALIFICATION TYPES AT MEPS MEDICAL EXAMINATION WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: **NAVY**, FY 2011-2015 VS. FY 2016

2011-2015			2016		
	n	**%[1]**		**n**	**%[1]**
Total Disability Discharged	**14,144**		**Total Disability Discharged**	**2,836**	
Weight	278	2.0	Musculoskeletal	55	1.9
Musculoskeletal	235	1.7	Weight	42	1.5
Vision	138	1.0	Vision	37	1.3
Any DQ	1,186	8.4	Any DQ	265	9.3
Musculoskeletal Disability	**5,090**	**36.0**	**Musculoskeletal Disability**	**750**	**26.4**
Musculoskeletal	139	2.7	Musculoskeletal	33	4.4
Weight	124	2.4	Weight	20	2.7
Vision	51	1.0	Vision	12	1.6
Any DQ	516	10.1	Any DQ	103	13.7
Psychiatric Disability	**3,580**	**25.3**	**Psychiatric Disability**	**906**	**31.9**
Weight	82	2.3	Vision	24	2.6
Vision	57	1.6	Weight	16	1.8
Musculoskeletal	55	1.5	Musculoskeletal	12	1.3
Psychiatric	38	1.1	Psychiatric	8	0.9
Any DQ	376	10.5	Any DQ	118	13.0
Neurological Disability	**2,312**	**16.3**	**Neurological Disability**	**374**	**13.2**
Weight	60	2.6	Musculoskeletal	7	1.9
Musculoskeletal	39	1.7	Vision	7	1.9
Psychiatric	21	0.9	Weight	5	1.3
Neurological[2]	8	0.3	Neurological[2]	3	0.8
Any DQ	233	10.1	Any DQ	36	9.6

1. Percentages associated with ICD-9 diagnosis types at MEPS examination within each body system should be interpreted as the percent of individuals discharged with a specific disability type who had each specific disqualification type at MEPS.
2. The prevalence of neurological disqualifications is presented to show the relationship between History of neurological disqualification and disability. Neurological disqualifications are not among the leading reasons for disqualification among individuals with a neurological disability.

TABLE 16C: MOST PREVALENT DISQUALIFICATION TYPES AT MEPS MEDICAL EXAMINATION WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES**: MARINE CORPS,** FY 2011-2015 VS. FY 2016

2011-2015			2016		
	n	**%[1]**		**n**	**%[1]**
Total Disability Discharged	**16,592**		**Total Disability Discharged**	**3,997**	
Weight	419	2.5	Weight	87	2.2
Musculoskeletal	307	1.9	Musculoskeletal	61	1.5
Psychiatric	282	1.7	Psychiatric	60	1.5
Any DQ	1,793	10.8	Any DQ	449	11.2
Musculoskeletal Disability	**9,066**	**54.6**	**Musculoskeletal Disability**	**1,866**	**46.7**
Weight	264	2.9	Weight	54	2.9
Musculoskeletal	218	2.4	Musculoskeletal	32	1.7
Psychiatric	162	1.8	Psychiatric	27	1.4
Any DQ	1,116	12.3	Any DQ	240	12.9
Psychiatric Disability	**4,121**	**24.8**	**Psychiatric Disability**	**1,358**	**34.0**
Weight	103	2.5	Weight	30	2.2
Psychiatric	83	2.0	Musculoskeletal	30	2.2
Musculoskeletal	63	1.5	Psychiatric	25	1.8
Any DQ	397	9.6	Any DQ	152	11.2
Neurological Disability	**3,191**	**19.2**	**Neurological Disability**	**637**	**15.9**
Weight	80	2.5	Weight	13	2.0
Musculoskeletal	62	1.9	Musculoskeletal	12	1.9
Psychiatric	51	1.6	Psychiatric	11	1.7
Neurological[2]	12	0.4	Neurological[2]	3	0.5
Any DQ	350	11.0	Any DQ	65	10.2

1. Percentages associated with ICD-9 diagnosis types at MEPS examination within each body system should be interpreted as the percent of individuals discharged with a specific disability type who had each specific disqualification type at MEPS.
2. The prevalence of neurological disqualifications is presented to show the relationship between History of neurological disqualification and disability. Neurological disqualifications are not among the leading reasons for disqualification among individuals with a neurological disability.

TABLE 16D: MOST PREVALENT DISQUALIFICATION TYPES AT MEPS MEDICAL EXAMINATION WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: **AIR FORCE**, FY 2011-2015 VS. FY 2016

2011-2015			2016		
	n	**%[1]**		**n**	**%[1]**
Total Disability Discharged	**15,067**		**Total Disability Discharged**	**3,247**	
Musculoskeletal	438	2.9	Musculoskeletal	103	3.2
Vision	223	2.9	Vision	96	3.0
Weight	223	1.5	Weight	50	1.5
Any DQ	2,880	19.1	Any DQ	784	24.1
Musculoskeletal Disability	**7,838**	**52.0**	**Musculoskeletal Disability**	**1,733**	**53.4**
Musculoskeletal	259	3.3	Musculoskeletal	62	3.6
Weight	126	1.6	Vision	54	3.1
Vision	91	1.2	Weight	27	1.6
Any DQ	1,499	19.1	Any DQ	431	24.9
Psychiatric Disability	**4,145**	**27.5**	**Psychiatric Disability**	**916**	**28.2**
Musculoskeletal	108	2.6	Musculoskeletal	38	4.1
Vision	81	2.0	Vision	26	2.8
Weight	58	1.4	Weight	19	2.1
Psychiatric	44	1.1	Psychiatric	11	1.2
Any DQ	817	19.7	Any DQ	226	24.7
Neurological Disability	**3,108**	**20.6**	**Neurological Disability**	**588**	**18.1**
Musculoskeletal	83	2.7	Musculoskeletal	19	3.2
Weight	46	1.5	Dermatological	8	1.4
Vision	28	0.9	Weight	8	1.4
Neurological	0	-	Neurological	0	-
Any DQ	518	16.7	Any DQ	128	21.8

1. Percentages associated with ICD-9 diagnosis types at MEPS examination within each body system should be interpreted as the percent of individuals discharged with a specific disability type who had each specific disqualification type at MEPS.
2. The prevalence of neurological disqualifications is presented to show the relationship between History of neurological disqualification and disability. Neurological disqualifications are not among the leading reasons for disqualification among individuals with a neurological disability.

History of accession medical waiver among enlisted service members evaluated for disability

Enlisted waiver records include data on medical waivers considered by each service's waiver authority from 1995 to present. Only waiver applications that occurred prior to the date of medical evaluation board were included in these analyses. In cases where more than one waiver record was available for an individual, only the most recent waiver record was included.

Table 17 shows the history of medical waiver application among enlisted service members evaluated for disability by year of disability evaluation and service.

Key Findings:

- The overall prevalence of an accession medical waiver application remained stable over time and was highest in the Army (8%) and lowest in the Air Force (3%).

TABLE 17: HISTORY OF ACCESSION MEDICAL WAIVER APPLICATIONS AMONG ENLISTED SERVICE MEMBERS EVALUATED FOR DISABILITY BY YEAR OF DISABILITY EVALUATION: FY 2011-2016

	Army			Navy			Marine Corps			Air Force		
	Waiver App	Total[1]	%[2]	Waiver App	Total[1]	%[2]	Waiver App	Total[1]	%[2]	Waiver App	Total[1]	%[2]
2011	983	13,078	7.5	118	2,020	5.8	180	2,607	6.9	102	2,848	3.6
2012	1,178	14,536	8.1	183	2,673	6.8	218	3,501	6.2	104	2,764	3.8
2013	1,812	21,996	8.2	152	2,490	6.1	179	2,882	6.2	104	3,005	3.5
2014	1,825	23,629	7.7	234	3,134	7.5	207	3,484	5.9	122	3,871	3.2
2015	1,734	22,512	7.7	262	3,827	6.8	239	4,118	5.8	135	4,191	3.2
2016	1,188	14,992	7.9	211	2,836	7.4	214	3,997	5.4	169	3,352	5.0
Total	**8,720**	**110,743**	**7.9**	**1,160**	**16,980**	**6.8**	**1,237**	**20,589**	**6.0**	**736**	**20,031**	**3.7**

1. Total enlisted individuals evaluated for disability
2. Percent of enlisted disability cases with a history of accession medical waiver application

The leading diagnosis codes listed in medical accession waiver application records of enlisted service members are shown in Tables 18A-18D. Results are shown by year of disability evaluation comparing 2016 disability evaluations to those occurring in the previous five years.

Key Findings:

- In 2016, the most common condition in pre-accession waiver considerations was disorders of refraction and accommodation for all services.
- The rate of waiver considerations for disorders of accommodation and refraction increased in all services, while asthma decreased.

TABLE 18A: FIVE MOST COMMON ICD-9 DIAGNOSIS CODES FOR ACCESSION MEDICAL WAIVERS CONSIDERED AMONG ENLISTED INDIVIDUALS EVALUATED FOR DISABILITY: **ARMY**, FY 2011-2015 VS. FY 2016

2011-2015			2016		
ICD-9 Diagnosis Code	**n**	**%**	**ICD-9 Diagnosis Code**	**n**	**%**
Hearing loss	753	10.0	Disorders of refraction and accommodation	142	12.0
Disorders of refraction and accommodation	617	8.2	Disorders of lipoid metabolism	89	7.5
Disorders of lipoid metabolism	574	7.6	Hearing loss	68	5.7
Elevated blood pressure reading without diagnosis of hypertension	389	5.2	Elevated blood pressure reading without diagnosis of hypertension	49	4.1
Asthma	319	4.2	Asthma	10	3.4
Total Waiver Applications	**7,532**		**Total Waiver Applications**	**1,188**	

TABLE 18B: FIVE MOST COMMON ICD-9 DIAGNOSIS CODES FOR ACCESSION MEDICAL WAIVERS CONSIDERED AMONG ENLISTED INDIVIDUALS EVALUATED FOR DISABILITY: **NAVY**, FY 2011-2015 VS. FY 2016

2011-2015			2016		
ICD-9 Diagnosis Code	**n**	**%**	**ICD-9 Diagnosis Code**	**n**	**%**
Disorders of refraction and accommodation	96	10.1	Disorders of refraction and accommodation	29	13.7
Asthma	68	7.2	Other anaphylactic shock	13	6.2
Other and unspecified disorders of bone and cartilage	59	6.2	Asthma	10	4.7
Hearing loss	54	5.7	Loose body in joint	10	4.7
Internal derangement of knee	43	4.5	Internal derangement of knee	8	3.8
Total Waiver Applications	**949**		**Total Waiver Applications**	**211**	

TABLE 18C: FIVE MOST COMMON ICD-9 DIAGNOSIS CODES FOR ACCESSION MEDICAL WAIVERS CONSIDERED AMONG ENLISTED INDIVIDUALS EVALUATED FOR DISABILITY: **MARINE CORPS**, FY 2011-2015 VS. FY 2016

2011-2015			2016		
ICD-9 Diagnosis Code	**n**	**%**	**ICD-9 Diagnosis Code**	**n**	**%**
Other nonspecific abnormal findings	124	12.1	Disorders of refraction and accommodation	27	12.6
Other and unspecified disorders of bone and cartilage	83	8.1	Asthma	16	7.5
Asthma	82	8.0	Other nonspecific abnormal findings	16	7.5
Disorders of refraction and accommodation	68	6.6	Hearing loss	13	6.1
Anxiety, dissociative and somatoform disorders	55	5.4	Other and unspecified disorders of bone and cartilage	12	5.6
Total Waiver Applications	**1,023**		**Total Waiver Applications**	**214**	

TABLE 18D: FIVE MOST COMMON ICD-9 DIAGNOSIS CODES FOR ACCESSION MEDICAL WAIVERS CONSIDERED AMONG ENLISTED INDIVIDUALS EVALUATED FOR DISABILITY: **AIR FORCE**, FY 2011-2015 VS. FY 2016

2011-2015			2016		
ICD-9 Diagnosis Code	**n**	**%**	**ICD-9 Diagnosis Code**	**n**	**%**
Disorders of refraction and accommodation	69	12.2	Disorders of refraction and accommodation	31	18.3
Hyperkinetic syndrome of childhood	38	6.7	Other derangement of joint	15	8.9
Asthma	36	6.3	Asthma	10	5.9
Affective psychoses	29	5.1	Episodic mood disorders	9	5.3
Other derangement of joint	28	4.9	Affective psychoses	7	4.1
Total Waiver Applications	567		**Total Waiver Applications**	169	

The most prevalent waiver approvals are shown in Tables 19A-19D for each service, by leading disability body systems. Only individuals discharged with a service connected disability were included in these tables (i.e. Fit and SWOB dispositions are excluded). Classification of an individual's disability conditions into body system categories is not mutually exclusive and individuals may be included in more than one body system category in cases of multiple disability conditions. Like the disability body system categories, ICD-9 diagnosis waiver types within each body system are not mutually exclusive and an individual is represented in multiple ICD-9 diagnosis categories if he/she has more than one type of medical waiver. Therefore, percentages associated with ICD-9 diagnosis waiver types within each body system should be interpreted as the percent of individuals discharged with that specific waiver type within that specific disability body system.

Key Findings:

- In 2016, the total rate of waivers among individuals disability discharged continued to be between 5% (Marine Corps, Air Force) and 9% (Army).
- Within each service, the overall waiver rate did not vary significantly by type of disability discharge.
- Musculoskeletal and vision waivers were the most common in all services.
    - Other common waivers were for respiratory conditions, psychiatric disorders and hearing.
- In all services, the leading reasons for waivers did not significantly vary based on the body system evaluated for disability.

TABLE 19A: MOST PREVALENT ACCESSION MEDICAL WAIVER TYPES WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: **ARMY**, FY 2011-2015 VS. FY 2016

2011-2015			2016		
	n	%[1]		n	%[1]
Total Disability Discharged	**90,007**		**Total Disability Discharged**	**23,665**	
Musculoskeletal	1,664	1.8	Musculoskeletal	481	2.0
Vision	863	1.0	Vision	171	0.7
Hearing	759	0.8	Psychiatric	181	0.8
Any Waiver	7,852	8.7	Any Waiver	2,049	8.7
Musculoskeletal Disability	**64,716**	**71.9**	**Musculoskeletal Disability**	**15,527**	**65.6**
Musculoskeletal	1,353	2.1	Musculoskeletal	359	2.3
Vision	608	0.9	Vision	179	1.2
Hearing	501	0.8	Psychiatric	102	0.7
Any Waiver	5,709	8.8	Any Waiver	1,396	9.0
Psychiatric Disability	**33,074**	**36.7**	**Psychiatric Disability**	**12,993**	**54.9**
Musculoskeletal	459	1.4	Musculoskeletal	215	1.7
Hearing	263	0.8	Psychiatric	114	0.9
Psychiatric	254	0.8	Vision	108	0.8
Any Waiver	2,328	7.0	Any Waiver	969	7.5
Neurological Disability	**21,644**	**24.0**	**Neurological Disability**	**5,756**	**24.3**
Musculoskeletal	343	1.6	Musculoskeletal	116	2.0
Hearing	187	0.9	Vision	46	0.8
Vision	161	0.7	Hearing	40	0.7
Neurological[2]	20	0.1	Neurological[2]	10	0.2
Any Waiver	1,677	7.7	Any Waiver	468	8.1

1. Percentages associated with ICD-9 diagnosis types at waiver within each body system should be interpreted as the percent of individuals discharged with a specific disability type who had each specific waiver type.
2. The prevalence of neurological waivers is presented to show the relationship between History of neurological waiver and disability. Neurological waivers are not among the leading reasons for waiver among individuals with a neurological disability.

TABLE 19B: MOST PREVALENT ACCESSION MEDICAL WAIVER TYPES WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: **NAVY**, FY 2011-2015 VS. FY 2016

2011-2015			2016		
	n	**%[1]**		**n**	**%[1]**
Total Disability Discharged	**11,909**		**Total Disability Discharged**	**2,194**	
Musculoskeletal	202	1.7	Musculoskeletal	46	2.1
Vision	118	1.0	Vision	33	1.5
Respiratory	63	0.5	Psychiatric	11	0.5
Any Waiver	780	6.5	Any Waiver	166	7.6
Musculoskeletal Disability	**5,089**	**42.7**	**Musculoskeletal Disability**	**750**	**34.2**
Musculoskeletal	124	2.4	Musculoskeletal	29	3.9
Vision	46	0.9	Vision	10	1.3
Respiratory	30	0.6	Hearing	3	0.4
Any Waiver	380	7.5	Any Waiver	62	8.3
Psychiatric Disability	**3,580**	**30.1**	**Psychiatric Disability**	**906**	**41.3**
Musculoskeletal	42	1.2	Vision	21	2.3
Vision	39	1.1	Musculoskeletal	11	1.2
Psychiatric	29	0.8	Psychiatric	4	0.4
Any Waiver	239	6.7	Any Waiver	77	8.5
Neurological Disability	**2,311**	**19.4**	**Neurological Disability**	**374**	**17.0**
Musculoskeletal	32	1.4	Vision	6	1.6
Vision	24	1.0	Musculoskeletal	5	1.3
Hearing	15	0.6	Psychiatric	3	0.8
Neurological[2]	3	0.1	Neurological[2]	0	-
Any Waiver	160	6.9	Any Waiver	28	7.5

1. Percentages associated with ICD-9 diagnosis types at waiver within each body system should be interpreted as the percent of individuals discharged with a specific disability type who had each specific waiver type.
2. The prevalence of neurological waivers is presented to show the relationship between History of neurological waiver and disability. Neurological waivers are not among the leading reasons for waiver among individuals with a neurological disability.

TABLE 19C: MOST PREVALENT ACCESSION MEDICAL WAIVER TYPES WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: **MARINE CORPS**, FY 2011-2015 VS. FY 2016

2011-2015			2016		
	n	%[1]		n	%[1]
Total Disability Discharged	**15,383**		**Total Disability Discharged**	**3,621**	
Musculoskeletal	220	1.4	Musculoskeletal	36	1.0
Vision	115	0.7	Psychiatric	31	0.9
Psychiatric	102	0.7	Respiratory	21	0.6
Any Waiver	842	5.5	Any Waiver	168	4.6
Musculoskeletal Disability	**9,065**	**58.9**	**Musculoskeletal Disability**	**1,866**	**51.5**
Musculoskeletal	143	1.6	Musculoskeletal	18	1.0
Psychiatric	70	0.8	Psychiatric	16	0.9
Vision	58	0.6	Respiratory	7	0.4
Any Waiver	608	6.7	Any Waiver	85	4.6
Psychiatric Disability	**4,120**	**26.8**	**Psychiatric Disability**	**1,358**	**37.5**
Musculoskeletal	56	1.4	Musculoskeletal	15	1.1
Psychiatric	31	0.8	Psychiatric	13	1.0
Vision	24	0.6	Respiratory	12	0.9
Any Waiver	219	5.3	Any Waiver	85	6.3
Neurological Disability	**3,191**	**20.7**	**Neurological Disability**	**637**	**17.6**
Musculoskeletal	52	1.6	Musculoskeletal	6	0.9
Vision	31	1.0	Respiratory	5	0.8
Psychiatric	23	0.7	Psychiatric	4	0.6
Neurological[2]	0	-	Neurological[2]	0	-
Any Waiver	207	6.5	Any Waiver	30	4.7

1. Percentages associated with ICD-9 diagnosis types at waiver within each body system should be interpreted as the percent of individuals discharged with a specific disability type who had each specific waiver type.
2. The prevalence of neurological disqualifications is presented to show the relationship between History of neurological disqualification and disability. Neurological disqualifications are not among the leading reasons for disqualification among individuals with a neurological disability.

TABLE 19D: MOST PREVALENT ACCESSION MEDICAL WAIVER TYPES WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: **AIR FORCE**, FY 2011-2015 VS. FY 2016

2011-2015			2016		
	n	%[1]		n	%[1]
Total Disability Discharged	**15,067**		**Total Disability Discharged**	**3,247**	
Musculoskeletal	118	0.8	Vision	37	1.1
Vision	83	0.6	Musculoskeletal	36	1.1
Psychiatric	83	0.6	Psychiatric	19	0.6
Any Waiver	553	3.7	Any Waiver	176	5.4
Musculoskeletal Disability	**7,838**	**52.0**	**Musculoskeletal Disability**	**1,733**	**53.4**
Musculoskeletal	72	0.9	Musculoskeletal	23	1.3
Psychiatric	36	0.5	Vision	20	1.2
Vision	33	0.4	Psychiatric	7	0.4
Any Waiver	278	3.5	Any Waiver	89	5.1
Psychiatric Disability	**4,145**	**27.5**	**Psychiatric Disability**	**916**	**28.2**
Vision	34	0.8	Vision	14	1.5
Psychiatric	30	0.7	Psychiatric	8	0.9
Musculoskeletal	27	0.7	Musculoskeletal	6	0.7
Any Waiver	161	3.9	Any Waiver	44	4.8
Neurological Disability	**3,108**	**20.6**	**Neurological Disability**	**588**	**18.1**
Musculoskeletal	21	0.7	Musculoskeletal	8	1.4
Psychiatric	11	0.4	Psychiatric	3	0.5
Vision	8	0.3	Vision	3	0.5
Neurological[2]	3	0.1	Neurological[2]	0	-
Any Waiver	98	3.2	Any Waiver	20	3.4

1. Percentages associated with ICD-9 diagnosis types at waiver within each body system should be interpreted as the percent of individuals discharged with a specific disability type who had each specific waiver type.
2. The prevalence of neurological disqualifications is presented to show the relationship between History of neurological disqualification and disability. Neurological disqualifications are not among the leading reasons for disqualification among individuals with a neurological disability.

History of hospitalization among active duty service members evaluated for disability

Hospitalization records received by AMSARA include data on direct care inpatient visits among active duty service members from 1995 to present. All hospitalizations that occurred prior to the MEB date were included in these analyses. Only the primary diagnoses listed in the hospitalization record were utilized in the creation of these tables.

Table 20 shows the history of hospitalization by year of disability evaluation and service.

Key Findings:

- Over time, the prevalence of hospitalization in the disability evaluated population has increased in the Army, remained stable in the Navy, and decreased in the Marine Corps and Air Force.
- Hospitalization rates were highest in the Navy and lowest in the Air Force.

TABLE 20: HISTORY OF HOSPITALIZATION BY YEAR OF DISABILITY EVALUATION: FY 2011-2016

	Army			Navy			Marines Corps			Air Force		
	Hosp	Total[1]	%[2]	Hosp	Total[1]	%[2]	Hosp	Total[1]	%[2]	Hosp	Total[1]	%[2]
2011	3,140	10,386	30.2	1,199	2,630	45.6	1,556	3,477	44.8	1,036	2,616	39.6
2012	3,703	11,657	31.8	1,706	3,628	47.0	2,089	4,643	45.0	893	2,598	34.4
2013	5,416	18,626	29.1	1,290	2,816	45.8	1,372	3,283	41.8	856	2,794	30.6
2014	5,803	18,320	31.7	1,322	2,879	45.9	1,093	3,076	35.5	1,030	3,585	28.7
2015	9,277	18,196	51.0	1,334	3,041	43.9	1,106	3,160	35.0	1,018	3,607	28.2
2016	7,485	12,676	59.0	1,050	2,290	45.9	779	2,568	30.3	880	3,286	26.8
Total	**34,824**	**89,861**	**38.8**	**7,901**	**17,284**	**45.7**	**7,995**	**20,207**	**39.6**	**5,713**	**18,486**	**30.9**

1. Total disability evaluations.
2. Percent of disability cases with a hospitalization.

The most common primary diagnoses at hospitalization for service members evaluated for disability are shown in Tables 21A-21D.

Key Findings:

- Psychiatric disorders were the leading reason for hospitalization among individuals evaluated for disability in 2016 in all services except the Air Force where birth trauma was the leading reason for hospitalization.
    - Adjustment disorders and episodic mood disorders were common in all service in both time periods.
- Intervertebral disc disorders were also common reasons for hospitalization.

TABLE 21A: FIVE MOST COMMON ICD-9 PRIMARY DIAGNOSIS CODES FOR HOSPITALIZATIONS AMONG ACTIVE DUTY DISABILITY EVALUATIONS: **ARMY**, FY 2011-2015 VS. FY 2016

2011-2015			2016		
ICD-9 Diagnosis Code	**n**	**%**	**ICD-9 Diagnosis Code**	**n**	**%**
Adjustment disorders	3,078	11.3	Adjustment disorders	1,185	15.8
Episodic mood disorders	2,216	8.1	Episodic mood disorders	661	8.8
Intervertebral disc disorders	1,583	5.8	Intervertebral disc disorders	353	4.7
Symptoms involving respiratory system and other chest symptoms	1,188	4.3	Trauma to perineum and vulva during delivery	314	4.2
Trauma to perineum and vulva during delivery	940	3.4	Symptoms involving respiratory system and other chest symptoms	288	3.8
Total DES Hospitalized	**27,339**		**Total DES Hospitalized**	**7,485**	

TABLE 21B: FIVE MOST COMMON ICD-9 PRIMARY DIAGNOSIS CODES FOR HOSPITALIZATIONS AMONG ACTIVE DUTY DISABILITY EVALUATIONS: **NAVY**, FY 2011-2015 VS. FY 2016

2011-2015			2016		
ICD-9 Diagnosis Code	**n**	**%**	**ICD-9 Diagnosis Code**	**n**	**%**
Episodic mood disorders	780	11.4	Adjustment disorders	107	10.2
Adjustment disorders	598	8.7	Trauma to perineum and vulva during delivery	83	7.9
Trauma to perineum and vulva during delivery	442	6.5	Episodic mood disorders	81	7.7
Intervertebral disc disorders	303	4.4	Anxiety, dissociative and somatoform disorders	41	3.9
Anxiety, dissociative and somatoform disorders	300	4.4	Alcohol dependence syndrome	32	3.0
Total DES Hospitalized	**6,851**		**Total DES Hospitalized**	**1,050**	

TABLE 21C: FIVE MOST COMMON ICD-9 PRIMARY DIAGNOSIS CODES FOR HOSPITALIZATIONS AMONG ACTIVE DUTY DISABILITY EVALUATIONS: **MARINE CORPS**, FY 2011-2015 VS. FY 2016

2011-2015			2016		
ICD-9 Diagnosis Code	**n**	**%**	**ICD-9 Diagnosis Code**	**n**	**%**
Adjustment disorders	619	8.6	Adjustment disorders	71	9.1
Episodic mood disorders	468	6.5	Acute appendicitis	31	4.0
Other complications of procedures, not elsewhere classified	273	3.8	Other complications of procedures, not elsewhere classified	28	3.6
Intervertebral disc disorders	254	3.5	Intervertebral disc disorders	27	3.5
Other cellulitis and abscess	249	3.5	Anxiety, dissociative and somatoform disorders	25	3.2
Total DES Hospitalized	**7,216**		**Total DES Hospitalized**	**779**	

TABLE 21D: FIVE MOST COMMON ICD-9 PRIMARY DIAGNOSIS CODES FOR HOSPITALIZATIONS AMONG ACTIVE DUTY DISABILITY EVALUATIONS: **AIR FORCE**, FY 2011-2015 VS. FY 2016

2011-2015			2016		
ICD-9 Diagnosis Code	**n**	**%**	**ICD-9 Diagnosis Code**	**n**	**%**
Trauma to perineum and vulva during delivery	379	7.8	Trauma to perineum and vulva during delivery	68	7.7
Episodic mood disorders	331	6.8	Episodic mood disorders	55	6.3
Adjustment disorders	214	4.4	Adjustment disorders	44	5.0
Intervertebral disc disorders	212	4.4	Intervertebral disc disorders	42	4.8
General symptoms	167	3.5	Acute appendicitis	35	4.0
Total DES Hospitalized	**4,833**		**Total DES Hospitalized**	**880**	

The most prevalent primary medical diagnoses at hospitalization are shown in Tables 22A-22D for each service and leading disability body systems Only individuals who were discharged with a service-connected disability were included in these tables (i.e. Fit and SWOB dispositions are excluded). Classification of an individual's disability conditions into body system categories is not mutually exclusive and individuals may be included in more than one body system category in cases of multiple disability conditions. Like the disability body system categories, ICD-9 diagnosis types at hospitalization within a body system are not mutually exclusive and an individual is represented in multiple ICD-9 diagnosis categories if he/she has more than one type of medical diagnosis at hospitalization. Therefore, percentages associated with ICD-9 diagnosis types at hospitalization within each body system should be interpreted as the percent of individuals with discharged with a specific disability type who had each specific condition type at hospitalization.

Key Findings:

- More concordance was observed between the reason for hospitalization and the reason for disability discharge than was observed with either medical disqualifications or waivers, especially among those with musculoskeletal or psychiatric conditions.
- Total rate of hospitalization among individuals disability discharged in 2016 varied from 25% (Marine Corps) to 55% (Navy).
- In all services, rates of hospitalization were lowest in those discharged with a musculoskeletal condition, and highest in those with a psychiatric condition.

TABLE 22A: MOST PREVALENT HOSPITALIZATION ICD-9 CATEGORIES WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: **ARMY**, FY 2011-2015 VS. FY 2016

2011-2015			2016		
	n	%[1]		n	%[1]
Total Disability Discharged	**76,134**		**Total Disability Discharged**	**12,584**	
Musculoskeletal	8,083	10.6	Musculoskeletal	1,034	8.2
Psychiatric	7,258	9.5	Psychiatric	876	7.0
Neurological	2,163	2.8	Neurological	279	2.2
Any Hospitalization	38,248	50.2	Any Hospitalization	5,684	45.2
Musculoskeletal Disability	**52,859**	**69.4**	**Musculoskeletal Disability**	**9,035**	**71.8**
Musculoskeletal	7,151	13.5	Musculoskeletal	918	10.2
Psychiatric	3,101	5.9	Psychiatric	360	4.0
Neurological	1,359	2.6	Neurological	166	1.8
Any Hospitalization	25,026	47.3	Any Hospitalization	3,641	40.3
Psychiatric Disability	**28,728**	**37.7**	**Psychiatric Disability**	**3,855**	**30.6**
Psychiatric	6,009	20.9	Psychiatric	712	18.5
Musculoskeletal	3,047	10.6	Musculoskeletal	291	7.5
Neurological	955	3.3	Neurological	101	2.6
Any Hospitalization	18,932	65.9	Any Hospitalization	2,496	64.7
Neurological Disability	**17,388**	**22.8**	**Neurological Disability**	**2,773**	**22.0**
Musculoskeletal	2,659	15.3	Musculoskeletal	322	11.6
Psychiatric	1,393	8.0	Psychiatric	159	5.7
Neurological	1,113	6.4	Neurological	121	4.4
Any Hospitalization	11,201	64.4	Any Hospitalization	1,179	42.5

1. Percentages associated with ICD-9 diagnosis types at hospitalization within each body system should be interpreted as the percent of individuals discharged with a specific disability type who had each specific disqualification type at hospitalization.

TABLE 22B: MOST PREVALENT HOSPITALIZATION ICD-9 CATEGORIES WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: **NAVY**, FY 2011-2015 VS. FY 2016

2011-2015			2016		
	n	**%[1]**		**n**	**%[1]**
Total Disability Discharged	**14,994**		**Total Disability Discharged**	**2,915**	
Psychiatric	1,659	11.1	Psychiatric	565	19.4
Musculoskeletal	1,139	7.6	Musculoskeletal	256	8.8
Neurological	525	3.5	Neurological	132	4.5
Any Hospitalization	5,749	38.3	Any Hospitalization	1,610	55.2
Musculoskeletal Disability	**4,992**	**33.3**	**Musculoskeletal Disability**	**1,227**	**42.1**
Musculoskeletal	889	17.8	Musculoskeletal	193	15.7
Psychiatric	224	4.5	Psychiatric	63	5.1
Neurological	117	2.3	Neurological	45	3.7
Any Hospitalization	1,940	38.9	Any Hospitalization	462	37.7
Psychiatric Disability	**3,922**	**26.2**	**Psychiatric Disability**	**1,404**	**48.2**
Psychiatric	1,375	35.1	Psychiatric	484	34.5
Musculoskeletal	164	4.2	Substance Abuse	59	4.2
Substance Abuse	138	3.5	Musculoskeletal	43	3.1
Any Hospitalization	2,187	55.8	Any Hospitalization	765	54.5
Neurological Disability	**2,447**	**16.3**	**Neurological Disability**	**631**	**21.6**
Neurological	305	12.5	Neurological	73	11.6
Musculoskeletal	277	11.3	Musculoskeletal	65	10.3
Psychiatric	125	5.1	Psychiatric	34	5.4
Any Hospitalization	1,177	48.1	Any Hospitalization	283	44.8

1. Percentages associated with ICD-9 diagnosis types at hospitalization within each body system should be interpreted as the percent of individuals discharged with a specific disability type who had each specific disqualification type at hospitalization.

TABLE 22C: MOST PREVALENT HOSPITALIZATION ICD-9 CATEGORIES WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: **MARINE CORPS**, FY 2011-2015 VS. FY 2016

2011-2015			2016		
	n	**%[1]**		**n**	**%[1]**
Total Disability Discharged	**17,639**		**Total Disability Discharged**	**2,568**	
Musculoskeletal	2,288	13.0	Musculoskeletal	131	5.1
Psychiatric	1,317	7.5	Psychiatric	119	4.6
Neurological	530	3.0	Neurological	35	1.4
Any Hospitalization	6,630	37.6	Any Hospitalization	635	24.7
Musculoskeletal Disability	**9,065**	**51.4**	**Musculoskeletal Disability**	**1,387**	**54.0**
Musculoskeletal	1,976	21.8	Musculoskeletal	113	8.1
Psychiatric	288	3.2	Psychiatric	37	2.7
Neurological	279	3.1	Neurological	19	1.4
Any Hospitalization	3,539	39.0	Any Hospitalization	341	24.6
Psychiatric Disability	**4,801**	**27.2**	**Psychiatric Disability**	**445**	**17.3**
Psychiatric	1,098	22.9	Psychiatric	85	19.1
Musculoskeletal	490	10.2	Substance Abuse	18	4.0
Neurological	142	3.0	Musculoskeletal	15	3.4
Any Hospitalization	2,410	50.2	Any Hospitalization	192	43.1
Neurological Disability	**3,463**	**19.6**	**Neurological Disability**	**286**	**11.1**
Musculoskeletal	538	15.5	Musculoskeletal	25	8.7
Neurological	252	7.3	Neurological	18	6.3
Psychiatric	169	4.9	Psychiatric	17	5.9
Any Hospitalization	1,584	45.7	Any Hospitalization	115	40.2

1. Percentages associated with ICD-9 diagnosis types at hospitalization within each body system should be interpreted as the percent of individuals discharged with a specific disability type who had each specific disqualification type at hospitalization.

TABLE 22D: MOST PREVALENT HOSPITALIZATION ICD-9 CATEGORIES WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: AIR FORCE, FY 2011-2015 VS. FY 2016

2011-2015			2016		
	n	%[1]		n	%[1]
Total Disability Discharged	**13,604**		**Total Disability Discharged**	**3,115**	
Psychiatric	706	5.2	Musculoskeletal	126	4.0
Musculoskeletal	689	5.1	Psychiatric	114	3.7
Neurological	323	2.4	Neurological	63	2.0
Any Hospitalization	4,800	35.3	Any Hospitalization	966	31.0
Musculoskeletal Disability	**6,847**	**50.3**	**Musculoskeletal Disability**	**1,640**	**52.6**
Musculoskeletal	540	7.9	Musculoskeletal	107	6.5
Neurological	139	2.0	Neurological	26	1.6
Psychiatric	133	1.9	Psychiatric	23	1.4
Any Hospitalization	2,248	32.8	Any Hospitalization	422	25.7
Psychiatric Disability	**3,710**	**27.3**	**Psychiatric Disability**	**859**	**27.6**
Psychiatric	586	15.8	Psychiatric	91	10.6
Musculoskeletal	149	4.0	Neurological	20	2.3
Neurological	93	2.5	Musculoskeletal	19	2.2
Any Hospitalization	1,592	42.9	Any Hospitalization	313	36.4
Neurological Disability	**2,829**	**20.8**	**Neurological Disability**	**557**	**17.9**
Musculoskeletal	189	6.7	Musculoskeletal	37	6.6
Neurological	171	6.0	Neurological	26	4.7
Psychiatric	71	2.5	Psychiatric	9	1.6
Any Hospitalization	1,086	38.4	Any Hospitalization	188	33.8

1. Percentages associated with ICD-9 diagnosis types at hospitalization within each body system should be interpreted as the percent of individuals discharged with a specific disability type who had each specific disqualification type at hospitalization.

Database Limitations

Data utilized in the generation of this report were initially collected for purposes of supporting the Accession Medical Standards Working Group (AMSWG) in the development of evidence-based medical accession standards to reduce morbidity and attrition due to pre-existing conditions. Data use agreements reflected data elements and study populations to support this research and required revision to support DES database analysis. As such, not all data elements were available from the period from FY 2011-2016 for all services.

1. Military Occupational Specialty (MOS) at disability evaluation is only complete for Army for the full study period. The Department of the Navy collects information regarding MOS, but this variable was not included in the initial data extracts that were sent to AMSARA. Occupational classification has been associated with disability in both civilian and military literature and is essential to understanding the precise risk factors associated with disability evaluation, separation, and retirement in the military.

2. Medical Evaluation Board (MEB) ICD-9/ICD-10 diagnosis codes of the medical condition that precipitated the disability evaluation are not included in any of the service disability datasets received by AMSARA. Veterans Affairs Schedule for Rating Disabilities (VASRD) codes give an indication of the unfitting conditions referred to the Physical Evaluation Board (PEB), but do not contain the level of detail available when diagnoses are coded using ICD-9/ICD-10 codes.

3. While the majority of disability evaluations had an accession record in the AMSARA databases, some who undergo disability evaluation do not have an accession record in AMSARA databases due to missing accession records prior to 1995. This may limit the ability to study the relationship between characteristics of service members at accession and disability evaluation, separation, and retirement in detail.

4. None of the VASRD codes associated with medical conditions for which service members are evaluated for disability are identified as primary in the databases. Therefore, it cannot be determined which condition was the primary condition that precipitated disability evaluation and the impact and prevalence of some conditions in the population may be incorrectly characterized.

Data Quality and Standardization Recommendations

1. Accurate indicators of the medical conditions that result in disability rating are not available, precluding surveillance of or evaluation of conditions which lead to disability. Though Veterans Affairs Schedule for Rating Disabilities (VASRD) codes are available, they are not diagnosis codes. To allow for more accurate surveillance of the burden of disability in the military, each service's DES database should include one or more Medical Evaluation Board (MEB) diagnoses in the electronic disability record, in the form of text and ICD-9 codes.

2. To ensure Military Occupational Specialty (MOS) and education are accurate at the time of disability evaluation; each service's DES database should record these variables at the time of disability evaluation. This will allow for the assessment of the role of MOS and education on disability evaluation, separation, and retirement, including changes in these characteristics throughout length of service.

3. Date of the underlying injury or onset of the condition is an important variable to consider when utilizing disability evaluation system data, allowing for the measurement of time elapsed from onset to MEB to Physical Evaluation Board (PEB) to discharge. Though healthcare utilization patterns can be determined from hospitalization and ambulatory data, the precise date of the event, onset of symptoms, or initial diagnosis is difficult to infer from the data available. Each service should include additional variables within to indicate date of onset of illness or injury of the medical condition for which a service member is undergoing disability.

4. High utilization of analogous codes, particularly among individuals with musculoskeletal disabilities, and lack of formal MEB medical diagnosis in the electronic file precludes the evaluation of the association of certain types of disability with specific medical conditions. In the absence of formal medical diagnoses that describe the disabling condition, expanding the VASRD codes, particularly musculoskeletal codes, may reduce the utilization of analogous codes and provide more complete information on the condition that precipitated the disability evaluation. This is needed in order to inform interventions to decrease disability.

Publications

The Relationship Between Deployment Frequency and Cumulative Duration, and Discharge for Disability Retirement Among Enlisted Active Duty Soldiers and Marines

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Military Medicine. 2016(181): e1532-e1539

Objective: To compare deployment, deployment frequency, and total time deployed in personnel who received musculoskeletal disability retirement to those with a musculoskeletal disability discharge other than retirement.

Methods: A case-control analysis was conducted using records on enlisted active duty personnel in the Army and Marine Corps who were evaluated for a musculoskeletal disability and received a final disability disposition between FY 2003-2012.

Results: For females and males in either service, any deployment was associated with an increased risk of disability retirement (aOR[95% CI]: Males 1.76[1.65-1.87]; Females 1.41[1.21-1.64]). Furthermore, increasing number of deployments (3+ deployments Males aOR[95% CI]: 2.21[1.92-2.53]) and time spent deployed (24+ months Army Males aOR[95% CI]: 2.07[1.79-2.40]) significantly increased the odds for disability retirement.

Conclusion: Increasing frequency and duration of military deployments has an increased risk of disability retirement in service members with a musculoskeletal disability. Further research on this relationship is needed in a more representative sample of the U.S. military population.

Epidemiology of Major Depressive Disorder Disability in the U.S. Military: FY 2007-2012

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Journal of Nervous and Mental Disease. 2017(9):672-678

Objective: To assess the incidence of Major Depressive Disorder (MDD) disability discharge and retirement in the Army, Navy, Marine Corps and Air Force and describes MDD comorbidity.

Methods: Service members with a disability discharge for either MDD (n=2,882) or any non-psychiatric disability (n=56,145), between fiscal year 2007 and 2012 were included in the study population.

Results: The incidence of MDD disability discharge increased significantly in the Army and Air Force between fiscal year 2007 and 2012. MDD disability retirement significantly increased in the Army, Navy, and Air Force. Females, and those who experienced at least one deployment, had higher incidence rates of MDD disability discharge. All services included spinal diseases and posttraumatic stress disorder in their top five comorbid categories.

Conclusion: Given the association between trauma and MDD, further research into the role of both combat exposure and injury on MDD is merited.

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