Disability Evaluation Systems Analysis and Research

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Disability Evaluation Systems Analysis and Research

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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). The 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 fiscal year 2015 of existing DES data collected for accessions and disability research through the end of FY 2014.

In the period from FY 2009 to FY 2014, data were collected on over 170,000 disability evaluations of approximately 150,000 service members. Over half of disability evaluations were for discharge from the Army. Regardless of service, the vast majority of disability evaluations were completed on enlisted active duty service members (ADSM). The predominant demographic among personnel who undergo disability evaluation are male, white, and 20-29 years old at the time of disability evaluation.

The prevalence of musculoskeletal conditions, the most common medical condition associated with disability, ranged from 32% (Navy) to 71% (Marine Corps) of individuals discharged for disability. Neurological and psychiatric conditions were the next most common disability. However, the particular conditions 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 common condition associated with psychiatric disability in the Army, Marine Corps, and Air Force while mood disorders were the most common psychiatric condition in the Navy. Traumatic brain injury (TBI) is the most common neurological condition among Marine Corps service members; paralysis and epilepsy were the most common type of neurological conditions in the Navy; and, paralysis was most common in the Army and Air Force.

The most common dispositions associated with disability evaluation (e.g., retirement or separation) in FY 2014 varied by service. In the Army and Air Force, permanent disability retirement 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. This is in contrast to the previous five year period when the most commonly assigned disposition in all services was separated with severance pay. In FY 2014, 10% was the most commonly assigned rating to disability in the Army and Marine Corps; and, 30% and 50% were most commonly assigned disability ratings in the Navy and Air Force. The

proportion of evaluations resulting in a disability rating of 30% or higher and resulting in disability retirement in FY 2013 varied from 57% (Marine Corps) to 74% (Air Force).

The history of permanent medical disqualification prior to accession in service members evaluated for disability ranged from 7% (Air Force) to 11% (Army). Similarly, temporary disqualifications were rarest in Air Force personnel evaluated for disability as compared to the other services and highest among Army disability evaluations. The most common medical conditions at MEPS 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. Hospitalization among service members evaluated for disability was most commonly associated with a mental health diagnosis. This is in contrast to hospitalizations among the general active duty population wherein injuries and fractures are more commonly associated with hospitalization.

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 initial diagnosis and date of onset of symptoms or injury in service members evaluated for disability.

5. Expand the 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), 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

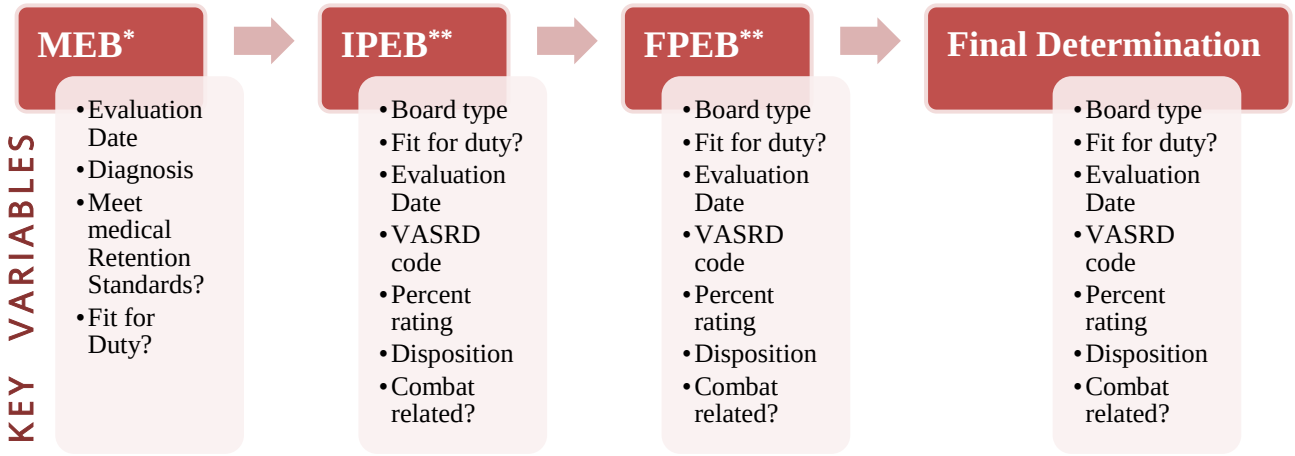
standards, in the Army, or are not able to perform military duties, in the Navy and Marine Corps (no medical retention standards), are forwarded to the IPEB for further review. The IPEB makes a fit/unfit determination and the service member is either returned to duty (deemed fit) or medically discharged (deemed unfit) and assigned a disposition and rating. Dispositions assigned include fit, separated without benefit, 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 member can appeal the IPEB determinations of disposition and rating, though appeals to the FPEB may be denied if a 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



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

**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

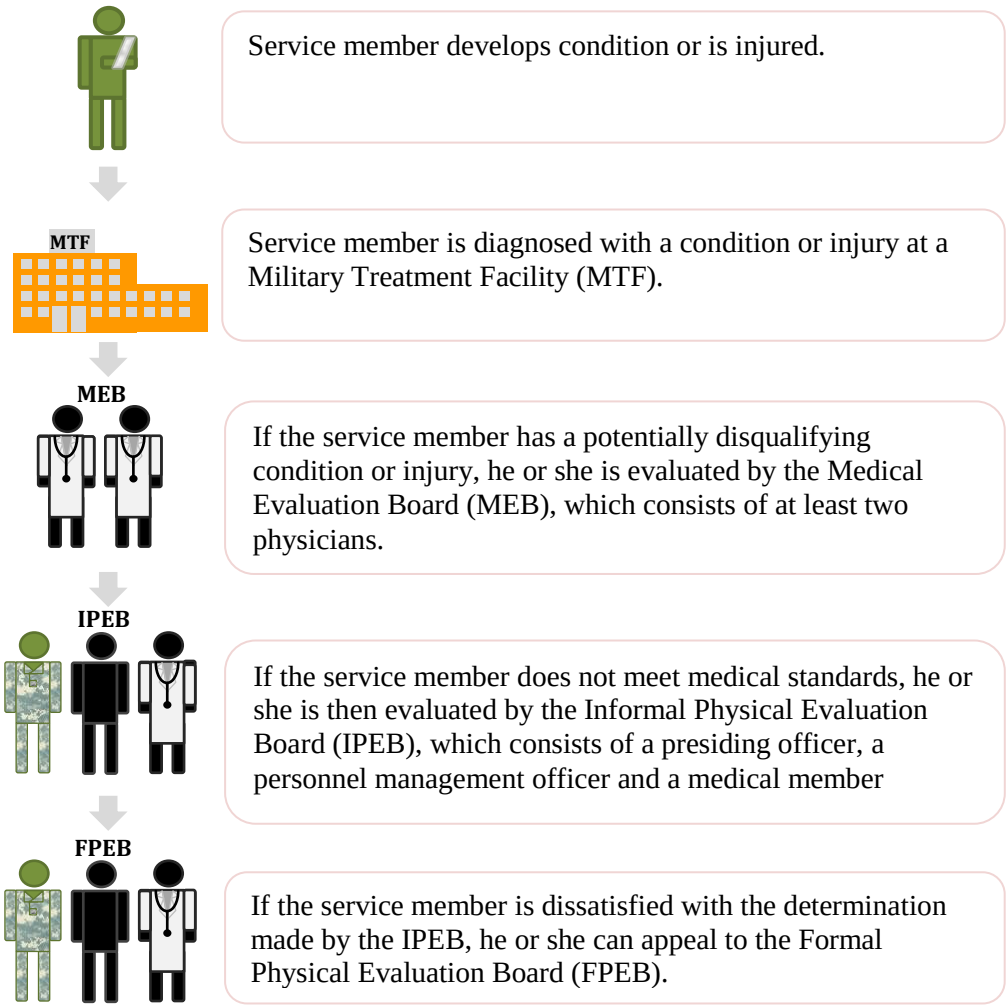


Figure 2: Disability Evaluation Process in the **Army**

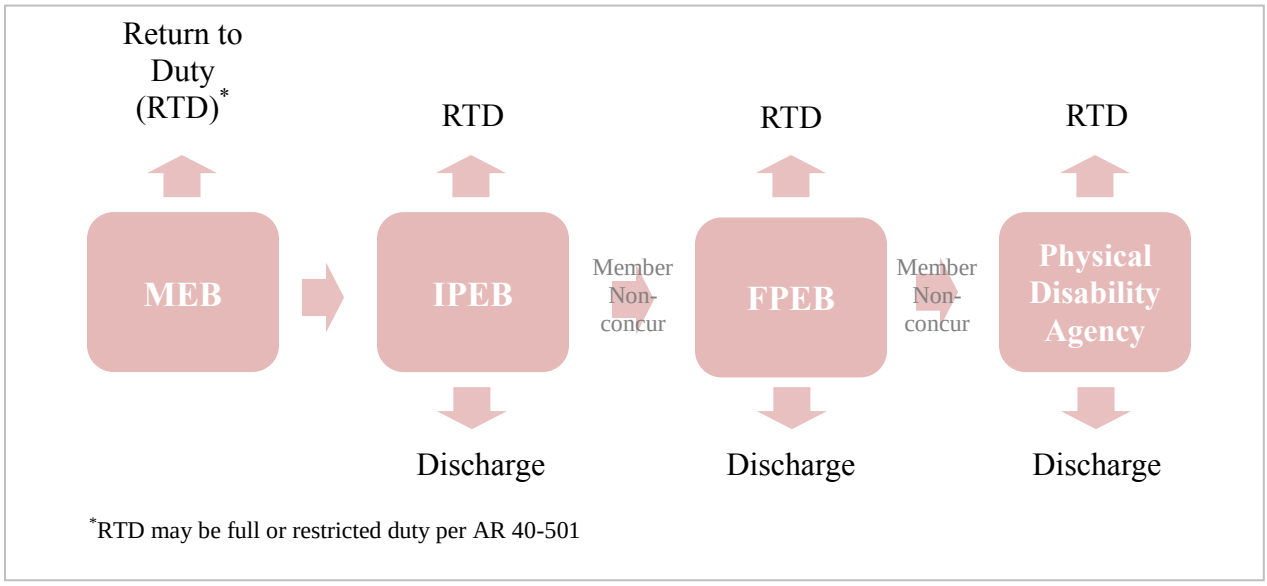


Figure 3: Disability Evaluation Process in the **Navy and Marine Corps***

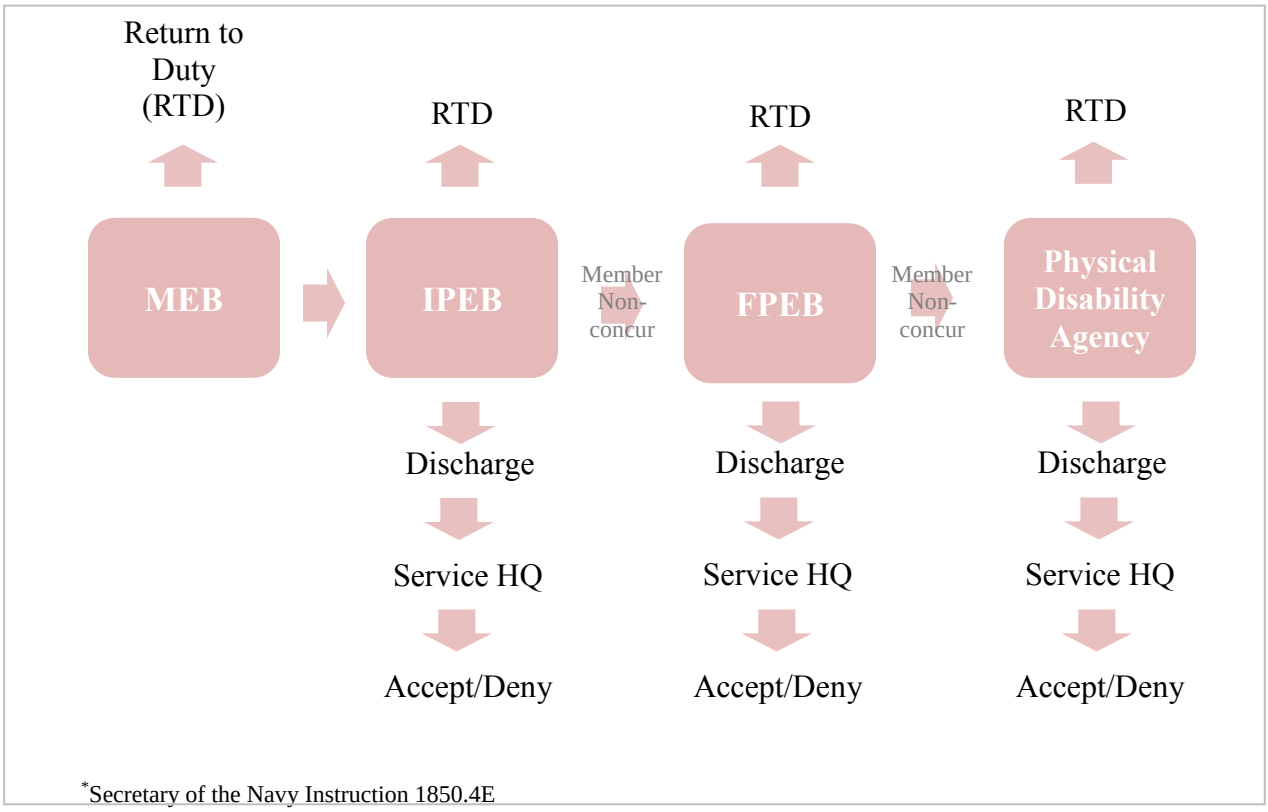
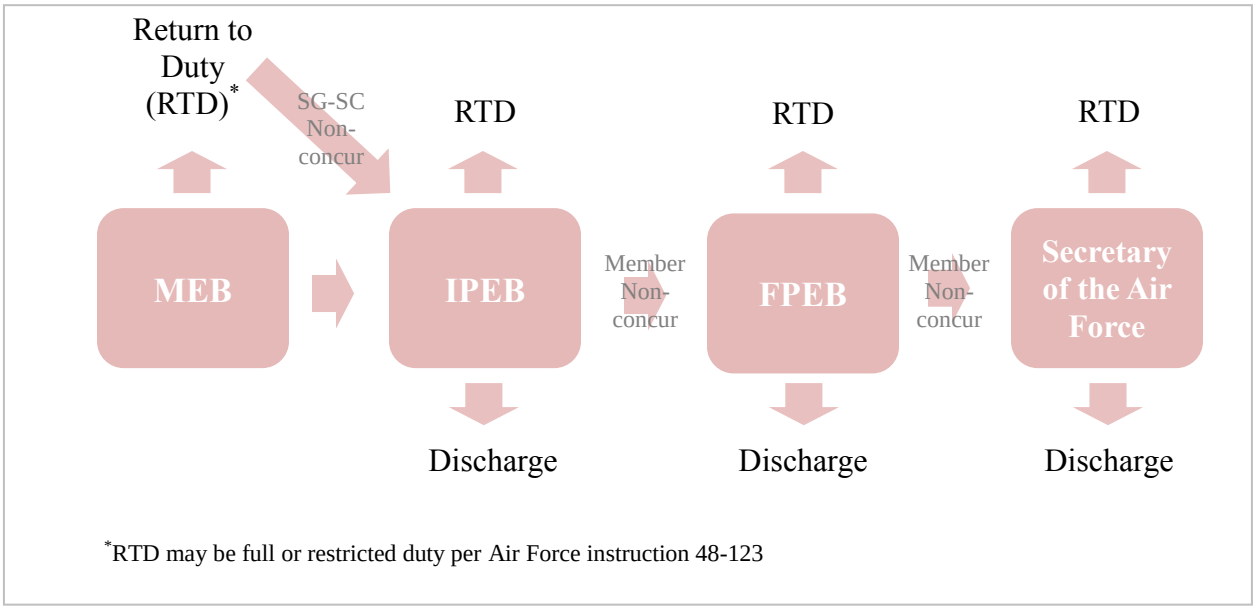


Figure 4: Disability Evaluation in the **Air Force**



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 in years prior to 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	1990-2014	2001-2014	2007-2014
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, 2009 and September 30, 2014. 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	FY14
Race	Y	Y	N
Education	N	N	N
Rank	Y	Y	Y
Component	Y	Y	Y
MOS	Y	FY 2010-14	N
MEB			
Date of MEB Evaluation	FY 1990-2012, 2014	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 2010-14
Armed Conflict	Y	Y	FY 2010-14
Instrumentality of War	FY 1990-2012	N	FY 2010-14

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 received by AMSARA. AMSARA utilizes demographic variables from other sources, such as Defense Manpower Data Center (DMDC) personnel records and 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. Demographic characteristics of individuals evaluated for disability in the Air Force are obtained using DMDC and Military Entrance Processing Station (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 are present in all disability databases prior to FY 2013. Army disability data does not contain MEB dates for FY 2013, the first year of data collected under a new data reporting system. However, MEB data were available again 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, which utilizes a 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, which 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 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 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 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 service 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 branch (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). 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 observations sent to AMSARA. Prior to 2013, Army disability evaluation records contained multiple conditions for each evaluation. In 2013, each Army disability evaluation record represented one condition. Disability records from the Air Force contain multiple conditions per individual while in the Navy and Marine Corps data, the number of records is representative of the number of conditions adjudicated. 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. As the largest service, the Army has more records, evaluations, and individuals evaluated for disabilities than the other services. The highest number of records per evaluation is found in the Navy (3.3) and Marine Corps (3.9). Across services, the average number of evaluations per service member is only slightly higher in the Navy (1.2), Marine Corps (1.2), and Army (1.2) relative to the Air Force (1.1). The average number of VASRD codes assigned, per evaluation, is highest in the Army (2.5) and lower in the three other services (1.7-1.9)

Observed differences in the number of records, individuals, and evaluations can be partially accounted for by the differences in the types of records received by AMSARA from each service. While the Army sends data on only those who were evaluated by the PEB, Navy/Marine Corps sends data on any individual evaluated by the PEB including those without any unfitting conditions. The inclusion of all PEB evaluations contributes a larger proportion of individuals without VASRD codes in the Navy/Marine Corps, and thus a lower average across all records. The TDRL re-evaluations are not included in the Air Force data which causes average evaluations/individual to be underestimated.

TABLE 3: CHARACTERISTICS OF DES EVALUATIONS: FY 2009-2014

	Army	Navy	Marine Corps	Air Force
Total records	173,706	67,719	94,045	22,142
Total individuals	92,045	17,333	19,591	20,445
Total evaluations	111,482	20,388	24,371	22,041
Average records/evaluation	1.6	3.3	3.9	1.0
Average evaluations/individual	1.2	1.2	1.2	1.1
Non-TDRL	1.1	1.0	1.0	-
TDRL	1.1	1.5	1.7	-
Average VASRD/evaluation	2.5	1.7	1.9	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. Between 2009 and 2012, the number of disability evaluations per year remained relatively stable in the Army. However, there was a large increase in the number of disability evaluation in 2013. No concurrent increase was observed in the other services. In fact, the number of disability evaluations in both the Navy and Marine Corps decreased slightly in 2013 relative to 2012 before increasing again in 2014. The number of evaluations between 2009 and 2013 was relatively stable in the Air Force with a small increase observed in 2014.

TABLE 4: TOTAL DES EVALUATIONS BY SERVICE AND FISCAL YEAR FY 2009-2014

	Army		Navy		Marine Corps		Air Force	
	n	%	n	%	n	%	n	%
2009	15,827	14.2	3,171	15.6	3,071	12.6	3,117	14.8
2010	14,788	13.3	3,061	15.0	3,418	14.0	3,624	17.2
2011	14,123	12.7	2,826	13.9	3,764	15.4	3,814	18.1
2012	15,857	14.2	4,078	20.0	5,485	22.5	2,516	12.0
2013	23,936	21.5	3,357	16.5	4,173	17.1	3,626	17.2
2014	26,951	24.2	3,895	19.1	4,460	18.3	4,344	20.6
Total	**111,482**		**20,388**		**24,371**		**21,041**	

Estimates of the rate of disability evaluation per total military population from 2009 to 2014 are shown in Table 5 by service and demographic characteristics. Rates from 2014 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. The overall rate of disability evaluation per 1,000 service members was highest in the Army and Marine Corps during both 2014 and the previous five years. In the Army, the rate of disability evaluation has nearly doubled in 2014 (22.0 per 1,000) relative to the previous five years (12.4 per 1,000). Small decreases in the rate of disability evaluation were observed in Navy and Marine Corps while the rate of disability evaluation per 1,000 service members in the Air Force increased slightly when comparing 2014 to the previous five years. All services had higher rates of disability among enlisted and active component service members in both 2014 and years prior. In all services except the Army, the rate of disability evaluation was higher in females than males, both in 2014 and in the previous five years. Rates of disability evaluation were the highest in the 25-29 age group in the period from 2009 to 2013 in all services except the Air Force where the rates in all age groups between the ages of 20 and 39 were similar. In 2014, the 30-34 age group had the highest rate of disability evaluation in all services except the Air Force where the rate of disability evaluation was highest in the 25-29 age group. However, disability evaluation rates were similar in the 25-29 and 30-34 age group in all services. Large increases in the rate of disability evaluation were observed in the Army in 2014 across all demographic groups.

TABLE 5: RATE OF DES EVALUATION PER 1,000 SERVICE MEMBERS (TOTAL SERVICE POPULATION) BY DEMOGRAPHIC CHARACTERISTICS AND SERVICE: FY 2009-2013 VS. FY 2014[1]

	2009-2013								2014							
	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	57,032	12.2	10,927	6.8	14,896	13.3	11,245	5.6	19,478	22.1	1,984	6.4	2,675	12.6	2,520	6.5
Female	11,741	13.5	3,639	11.1	1,632	21.1	5,171	10.3	3,733	21.8	771	11.0	378	23.9	1,123	11.4
Age at Evaluation																
<20	1,042	3.0	206	2.3	653	4.4	429	4.7	64	0.8	30	1.6	107	3.7	45	2.7
20-24	14,620	9.5	3,715	6.7	7,262	13.3	4,007	6.9	3,286	11.6	691	6.4	1,207	11.6	743	6.7
25-29	18,693	14.8	4,011	8.9	5,174	20.4	3,971	6.8	5,709	24.7	826	8.9	949	21.3	947	8.3
30-34	12,068	14.8	2,671	8.7	1,953	17.0	2,740	6.5	4,922	29.2	565	9.0	495	21.7	729	7.9
35-39	8,181	13.3	1,909	7.7	915	12.0	2,111	6.3	3,123	27.4	337	7.3	182	12.3	465	7.1
≥ 40	14,137	14.5	1,989	7.1	494	8.2	2,809	5.5	6,069	33.5	298	5.7	94	7.5	543	6.0
Race																
White	50,869	12.6	9,134	7.6	11,446	12.1	12,314	6.5	16,021	21.4	1,636	7.0	1,923	10.6	2,719	7.5
Black	11,534	11.2	2,395	7.2	1,202	10.0	2,553	7.5	3,997	19.3	419	6.5	245	10.3	563	8.6
Other	6,201	24.6	2,941	8.9	3,803	58.7	1,394	8.3	2,898	50.7	565	8.1	708	53.9	313	8.3
Rank																
Enlisted	65,018	13.9	13,510	8.5	16,034	15.0	15,305	7.4	21,890	25.0	2,569	8.2	2,964	14.7	3,340	8.4
Officer	3,812	4.4	1,022	3.0	442	3.5	1,474	3.1	1,320	7.4	182	2.6	80	3.2	302	3.3
Component																
Active	53,178	19.4	13,668	8.5	15,498	15.5	14,341	8.7	16,922	33.6	2,644	8.2	2,918	15.5	3,089	9.9
Reserve/NG	15,588	5.5	905	2.8	1,039	5.3	2,428	2.7	6,284	11.4	116	2.0	136	3.4	574	3.3
Total Individuals	**68,834**	**12.4**	**14,573**	**7.6**	**16,537**	**13.8**	**16,782**	**6.6**	**23,211**	**22.0**	**2,760**	**7.2**	**3,054**	**13.4**	**3,663**	**7.5**

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; therefore, rates for service members that were evaluated for disability could not be calculated.
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 2009 to 2014 are shown in Table 6, comparing 2014 evaluations to 2009 through 2013 in aggregate. The vast majority of 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. In addition, most individuals evaluated for disability were male, aged 20-29 at the time of disability evaluation, and white, in all four services. No substantial changes in the demographic composition of the disability evaluated population were observed in 2014 relative to the previous five years, in any service.

TABLE 6: DEMOGRAPHIC CHARACTERISTICS OF SERVICE MEMBERS EVALUATED FOR DISABILITY: FY 2009-2013 VS. FY 2014[1]

	2009-2013								2014							
	Army		Navy		Marine Corps		Air Force		Army		Navy		Marine Corps		Air Force	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Sex																
Male	57,032	82.9	10,927	75.0	14,896	90.1	11,245	67.0	19,478	83.9	1,984	71.9	2,675	87.6	2,520	68.8
Female	11,741	17.1	3,639	25.0	1,632	9.9	5,171	30.8	3,733	16.1	771	27.9	378	12.4	1,123	30.7
Missing[1]	61	0.1	7	<0.1	9	0.1	366	2.2	-	0.0	5	0.2	1	<0.1	20	0.5
Age																
<20	1,042	1.5	206	1.4	653	3.9	429	2.6	64	0.3	30	1.1	107	3.5	45	1.2
20-24	14,620	21.2	3,715	25.5	7,262	43.9	4,007	23.9	3,286	14.2	691	25.0	1,207	39.5	743	20.3
25-29	18,693	27.2	4,011	27.5	5,174	31.3	3,971	23.7	5,709	24.6	826	29.9	949	31.1	947	25.9
30-34	12,068	17.5	2,671	18.3	1,953	11.8	2,740	16.3	4,922	21.2	565	20.5	495	16.2	729	19.9
35-39	8,181	11.9	1,909	13.1	915	5.5	2,111	12.6	3,123	13.5	337	12.2	182	6.0	465	12.7
≥ 40	14,137	20.5	1,989	13.6	494	3.0	2,809	16.7	6,069	26.1	298	10.8	94	3.1	453	12.4
Missing[1]	93	0.1	72	0.5	86	0.5	715	4.3	38	0.2	13	0.5	20	0.7	191	5.2
Race																
White	50,869	73.9	9,134	62.7	11,446	69.2	12,314	73.4	16,021	69.0	1,636	59.3	1,923	63.0	2,719	74.2
Black	11,534	16.8	2,395	16.4	1,202	7.3	2,553	15.2	3,997	17.2	419	15.2	245	8.0	563	15.4
Other	6,201	9.0	2,941	20.2	3,803	23.0	1,394	8.3	2,898	12.5	565	20.5	708	23.2	313	8.5
Missing[1]	230	0.3	103	0.7	86	0.5	521	3.1	295	1.3	140	5.1	178	5.8	68	1.9
Rank		0.0														
Enlisted	65,018	94.5	13,510	92.7	16,034	97.0	15,305	91.2	21,890	94.3	2,569	93.1	2,964	97.1	3,340	91.2
Officer	3,812	5.5	1,022	7.0	442	2.7	1,474	8.8	1,320	5.7	182	6.6	80	2.6	302	8.2
Missing[1]	4	<0.1	41	0.3	61	0.4	3	0.0	1	<0.1	9	0.3	10	0.3	21	0.6
Component																
Active	53,178	77.3	13,668	93.8	15,498	93.7	14,341	85.5	16,922	72.9	2,644	95.8	2,918	95.5	3,089	84.3
Reserve/NG	15,588	22.6	905	6.2	1,039	6.3	2,428	14.5	6,284	27.1	116	4.2	136	4.5	574	15.7
Missing[1]	68	0.1	-	0.0	-	0.0	13	0.1	5	<0.1	-	0.0	-	0.0	-	0.0
Total Individuals	**68,834**		**14,573**		**16,537**		**16,782**		**23,211**		**2,760**		**3,054**		**3,663**	

1. Includes service members for which the specific demographic variable is missing.

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.

In all services, musculoskeletal conditions were the most common type of disability evaluation, followed by psychiatric and neurological conditions. The proportion of individuals discharged with a disability in 2014 with a musculoskeletal condition increased substantially when compared to the previous five year period in the Marine Corps with more modest increases observed in the Navy and Air Force. In the Army the proportion of individuals with a musculoskeletal related disability discharge in 2014 was similar to previous five year period. Large increases in the proportion of discharged individuals with a psychiatric condition were observed in all services. This increase was largest in Navy and Marine Corps cases where the proportion of individuals with psychiatric disability conditions more than doubled in 2014 relative to the previous five years.

TABLE 7A: DISTRIBUTION OF UNFITTING CONDITIONS BY BODY SYSTEM CATEGORY IN INDIVIDUALS WITH A DISABILITY DISCHARGE: **ARMY**, FY 2009-2013 VS. FY 2014

	2009-2013			2014		
Body System Category	**n**	**%[1]**	**Rate[2]**	**n**	**%[1]**	**Rate[2]**
Musculoskeletal	47,081	68.6	84.7	18,626	69.5	176.8
Psychiatric	24,007	35.0	43.2	11,819	44.1	112.2
Neurological	15,323	22.3	27.6	6,614	24.7	62.8
Respiratory	3,452	5.0	6.2	1,007	3.8	9.6
Digestive	1,712	2.5	3.1	643	2.4	6.1
Dermatologic	1,593	2.3	2.9	592	2.2	5.6
Cardiovascular	1,505	2.2	2.7	575	2.1	5.5
Endocrine	1,288	1.9	2.3	509	1.9	4.8
Genitourinary	1,098	1.6	2.0	377	1.4	3.6
Ears/Hearing	1,063	1.5	1.9	368	1.4	3.5
Eyes/Vision	753	1.1	1.4	262	1.0	2.5
Hemic/Lymphatic	307	0.4	0.6	120	0.4	1.1
Immune	270	0.4	0.5	76	0.3	0.7
Gynecologic	236	0.3	0.4	85	0.3	0.8
Dental/Oral	102	0.1	0.2	45	0.2	0.4
Other Sensory	20	<0.1	<0.1	16	0.1	0.2
Total Individuals Discharged	**68,616**			**26,807**		

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 2009-2013 VS. FY 2014

	2009-2013			2014		
Body System Category	**n**	**%[1]**	**Rate[2]**	**n**	**%[1]**	**Rate[2]**
Musculoskeletal	4,584	31.5	23.8	1,284	46.5	33.7
Psychiatric	2,735	18.8	14.2	1,223	44.3	32.1
Neurological	2,187	15.0	11.4	674	24.4	17.7
Digestive	770	5.3	4.0	196	7.1	5.1
Respiratory	346	2.4	1.8	77	2.8	2.0
Cardiovascular	304	2.1	1.6	74	2.7	1.9
Endocrine	409	2.8	2.1	63	2.3	1.7
Hemic/Lymphatic	135	0.9	0.7	60	2.2	1.6
Genitourinary	296	2.0	1.5	57	2.1	1.5
Dermatologic	172	1.2	0.9	47	1.7	1.2
Eyes and Vision	186	1.3	1.0	39	1.4	1.0
Gynecologic	74	0.5	0.4	27	1.0	0.7
Infectious Disease	118	0.8	0.6	27	1.0	0.7
Ears and Hearing	109	0.7	0.6	19	0.7	0.5
Dental and Oral	13	0.1	0.1	6	0.2	0.2
Endocrine	1	<0.1	<0.1	0	0.0	0.0
Other Sensory	1	<0.1	<0.1	0	0.0	0.0
Total Individuals Discharged	**14,573**			**23,766**		

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 2009-2013 VS. FY 2014

	2009-2013			2014		
Body System Category	**n**	**%[1]**	**Rate[2]**	**n**	**%[1]**	**Rate[2]**
Musculoskeletal	7,947	48.1	66.3	2,168	71.0	95.4
Psychiatric	3,426	20.7	28.6	1,558	51.0	68.5
Neurological	3,072	18.6	25.6	902	29.5	39.7
Digestive	460	2.8	3.8	131	4.3	5.8
Respiratory	426	2.6	3.6	118	3.9	5.2
Genitourinary	272	1.6	2.3	66	2.2	2.9
Dermatologic	273	1.7	2.3	55	1.8	2.4
Cardiovascular	229	1.4	1.9	53	1.7	2.3
Eyes and Vision	268	1.6	2.2	49	1.6	2.2
Endocrine	198	1.2	1.7	40	1.3	1.8
Ears and Hearing	162	1.0	1.4	32	1.0	1.4
Hemic/Lymphatic	95	0.6	0.8	16	0.5	0.7
Infectious Disease	67	0.4	0.6	10	0.3	0.4
Dental and Oral	28	0.2	0.2	7	0.2	0.3
Gynecologic	27	0.2	0.2	7	0.2	0.3
Other Sensory Disorders	4	<0.1	<0.1	1	<0.1	<0.1
Total Individuals Discharged	**16,537**			**3,054**		

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 2009-2013 VS. FY 2014

	2009-2013			2014		
Body System Category	**n**	**%[1]**	**Rate[2]**	**n**	**%[1]**	**Rate[2]**
Musculoskeletal	6,563	39.1	26.0	1,857	52.8	38.0
Psychiatric	3,345	19.9	13.2	1,065	30.3	21.8
Neurological	2,554	15.2	10.1	914	26.0	18.7
Respiratory	1,556	9.3	6.2	284	8.1	5.8
Digestive	667	4.0	2.6	199	5.7	4.1
Cardiovascular	575	3.4	2.3	150	4.3	3.1
Genitourinary	275	1.6	1.1	90	2.6	1.8
Endocrine	354	2.1	1.4	86	2.4	1.8
Eyes and Vision	176	1.0	0.7	63	1.8	1.3
Dermatologic	226	1.3	0.9	60	1.7	1.2
Hemic/Lymphatic	127	0.8	0.5	48	1.4	1.0
Ears and Hearing	156	0.9	0.6	45	1.3	0.9
Infectious Disease	61	0.4	0.2	39	1.1	0.8
Other Sensory	3	0.0	0.0	4	0.1	0.1
Dental and Oral	18	0.1	0.1	1	<0.1	<0.1
Gynecologic	45	0.3	0.2	0	0.0	0.0
Total Individuals Discharged	**13,246**			**3,571**		

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 most prevalent conditions (VASRD categories, excluding analogous codes), within leading body system categories among individuals with a disability discharge from 2009 to 2014, are shown in Tables 8A through 8D. Classification of an individual's condition(s) 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.

The data in Tables 8A through 8D are notable for the following observations for disability discharges in 2014 vs. preceding five years:

- Musculoskeletal conditions:
  - Dorsopathies were the most common musculoskeletal condition for the Army and Air Force.
  - Limitation of motion was the most common musculoskeletal condition for the Navy and Marine Corps.
    - Dorsopathies have also increased in prevalence in the Army, Navy, and Marine Corps in 2014 relative to the previous five years.
    - Limitation of motion has increased in prevalence in all services relative to the previous five year period.
- Psychiatric conditions:
  - Posttraumatic stress disorder (PTSD) was the most commonly diagnosed psychiatric condition in the Army, Marine Corps, and Air Force disability discharges and was the second most common for the Navy.
  - PTSD has increased markedly in prevalence among psychiatric disorders in Army, Marine Corps, and Air Force in 2014 relative to previous years; nearly 75% of psychiatric disability cases had PTSD in each service.
  - In the Air Force, the increased prevalence of PTSD was most striking, more than doubling relative to the previous five year period.
- Neurological conditions:
  - Paralysis was the most common type of neurological disability condition in 2014 in the Army, Navy and Air Force.
  - Residuals of traumatic brain injury was most common in the Marine Corps.
  - Notable for the Army, Residuals of traumatic brain injury was no longer the most common cause of neurological disability in 2014 being surpassed by paralysis and migraines. This noted, the proportion of neurological disability associated with residuals of traumatic brain injury did not change in 2014 relative to previous years; paralysis and migraine became more prevalent relative to previous years.

TABLE 8A: MOST PREVALENT CONDITIONS WITHIN LEADING BODY SYSTEM CATEGORIES AMONG INDIVIDUALS WITH A DISABILITY DISCHARGE: **ARMY**, FY 2009-2013 VS. FY 2014

2009-2013				2014			
	n	%[1]	Rate[2]		n	%[1]	Rate[2]
Musculoskeletal	**47,081**	**68.6**	**84.7**	**Musculoskeletal**	**18,626**	**69.5**	**176.8**
Dorsopathies	25,735	54.7	46.3	Dorsopathies	10,804	58.0	102.5
Limitation of motion	17,515	37.2	31.5	Limitation of motion	9,605	51.6	91.2
Arthritis	11,339	24.1	20.4	Arthritis	3,728	20.0	35.4
Psychiatric	**24,007**	**35.0**	**43.2**	**Psychiatric**	**11,819**	**44.1**	**112.2**
PTSD	16,362	68.2	29.4	PTSD	8,939	75.6	84.8
Mood disorder	5,545	23.1	10.0	Mood disorder	2,337	19.8	22.2
Anxiety disorder	2,246	9.4	4.0	Anxiety disorder	931	7.9	8.8
Neurological	**15,323**	**22.3**	**27.6**	**Neurological**	**6,614**	**24.7**	**62.8**
Residuals of TBI	4,262	27.8	7.7	Paralysis	2,499	37.8	23.7
Paralysis	4,187	27.3	7.5	Migraine	1,810	27.4	17.2
Migraine	3,746	24.4	6.7	Residuals of TBI	1,781	26.9	16.9
Total Individuals Discharged	**68,616**			**Total Individuals Discharged**	**26,807**		

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 2009-2013 VS. FY 2014

2009-2013				2014			
	n	%[1]	Rate[2]		n	%[1]	Rate[2]
Musculoskeletal	**4,584**	**31.5**	**23.8**	**Musculoskeletal**	**1,284**	**46.5**	**33.7**
Dorsopathies	1,656	36.1	8.6	Limitation of motion	577	44.9	15.2
Limitation of motion	1,650	36.0	8.6	Dorsopathies	518	40.3	13.6
Arthritis	1,137	24.8	5.9	Arthritis	277	21.6	7.3
Psychiatric	**2,735**	**18.8**	**14.2**	**Psychiatric**	**1,223**	**44.3**	**32.1**
Mood disorder	1,225	44.8	6.4	Mood disorder	574	46.9	15.1
PTSD	905	33.1	4.7	PTSD	403	33.0	10.6
Anxiety disorder	264	9.7	1.4	Anxiety disorder	149	12.2	3.9
Neurological	**2,187**	**15.0**	**11.4**	**Neurological**	**674**	**24.4**	**17.7**
Paralysis	503	23.0	2.6	Epilepsy	156	23.1	4.1
Epilepsy	499	22.8	2.6	Paralysis	151	22.4	4.0
Migraine	293	13.4	1.5	Migraine	128	19.0	3.4
Total Individuals Discharged	**14,573**			**Total Individuals Discharged**	**2,760**		

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 2009-2013 VS. FY 2014

2009-2013				2014			
	n	%[1]	Rate[2]		n	%[1]	Rate[2]
Musculoskeletal	**7,947**	**48.1**	**66.3**	**Musculoskeletal**	**2,168**	**71.0**	**95.4**
Limitation of motion	3,569	44.9	29.8	Limitation of motion	1,242	57.3	54.6
Dorsopathies	2,271	28.6	19.0	Dorsopathies	772	35.6	34.0
Arthritis	1,801	22.7	15.0	Arthritis	371	17.1	16.3
Psychiatric	**3,426**	**20.7**	**28.6**	**Psychiatric**	**1,558**	**51.0**	**68.5**
PTSD	2,300	67.1	19.2	PTSD	1,161	74.5	51.1
Mood disorder	783	22.9	6.5	Mood disorder	338	21.7	14.9
Dementia	179	5.2	1.5	Anxiety disorder	77	4.9	3.4
Neurological	**3,072**	**18.6**	**25.6**	**Neurological**	**902**	**29.5**	**39.7**
Residuals of TBI	866	28.2	7.2	Residuals of TBI	296	32.8	13.0
Paralysis	857	27.9	7.2	Paralysis	225	24.9	9.9
Epilepsy	463	15.1	3.9	Migraine	196	21.7	8.6
Total Individuals Discharged	**16,537**			**Total Individuals Discharged**	**3,054**		

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 2009-2013 VS. FY 2014

2009-2013				2014			
	n	%[1]	Rate[2]		n	%[1]	Rate[2]
Musculoskeletal	**6,563**	**49.5**	**26.0**	**Musculoskeletal**	**1,857**	**52.8**	**38.0**
Dorsopathies	3,506	53.4	13.9	Dorsopathies	1,195	64.4	24.5
Limitation of motion	1,721	26.2	6.8	Limitation of motion	753	40.5	15.4
Arthritis	1,413	21.5	5.6	Arthritis	341	18.4	7.0
Psychiatric	**3,345**	**25.3**	**13.2**	**Psychiatric**	**1,065**	**30.3**	**21.8**
PTSD	1,184	35.4	4.7	PTSD	761	71.5	15.6
Mood disorder	1,596	47.7	6.3	Mood disorder	528	49.6	10.8
Anxiety disorder	492	14.7	1.9	Anxiety disorder	188	17.7	3.8
Neurological	**2,554**	**19.3**	**10.1**	**Neurological**	**914**	**26.0**	**18.7**
Paralysis	616	24.1	2.4	Paralysis	307	33.6	6.3
Migraine	545	21.3	2.2	Migraine	236	25.8	4.8
Epilepsy	387	15.2	1.5	Neuritis	166	18.2	3.4
Total Individuals Discharged	**13,246**			**Total Individuals Discharged**	**3,517**		

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.

The data presented in Tables 9A-9D are for the ten most common VASRD categories in individuals with a disability discharge: FY 2009-2013 vs. FY 2014.

The VASRD category data for 2014 disability discharges are notable for the following observations:

Army:

- Dorsopathies were the leading VASRD condition, followed by limitation of motion and posttraumatic stress disorder.
    - Limitation of motion was more common in 2014 (36%) as compared to the previous five years (26%).
    - PTSD was also much more prevalent among Soldiers disability discharged in 2014 (33%) as compared to previous years (24%).

Navy:

- Limitation of motion was the most common condition followed by mood disorders and dorsopathies.
    - The prevalence of limitation of motion nearly doubled in 2014 (21%) relative the previous five years (11%).
    - PTSD also increased in prevalence in 2014 (15%) relative to the previous five year period (6%).

Marine Corps:

- Limitation of motion and PTSD were the most common VASRD condition types (41% and 38% of cases respectively). Both of these conditions also increased in prevalence in 2014 relative to the previous five years.
    - Limitation of motion was present in 22% of cases.
    - PTSD was present in 14% of cases.

Air Force:

- Dorsopathies were the most common disability condition in 2014 (34%), increasing slightly in prevalence as compared to previous years (27%).
- PTSD was the second most common condition (22%) and increased substantially in prevalence relative to the previous five year period (9%).

TABLE 9A: TEN MOST COMMON VASRD CATEGORIES IN INDIVIDUALS WITH A DISABILITY DISCHARGE: **ARMY**, FY 2009-2013 VS. FY 2014

2009-2013				2014			
	n	%[1]	Rate[2]		n	%[1]	Rate[2]
Dorsopathies	25,735	37.5	46.3	Dorsopathies	10,804	40.3	102.5
Limitation of motion	17,515	25.5	31.5	Limitation of motion	9,605	35.8	91.2
PTSD	16,362	23.8	29.4	PTSD	8,939	33.3	84.8
Arthritis	11,339	16.5	20.4	Arthritis	3,728	13.9	35.4
Mood disorder	5,545	8.1	10.0	Paralysis	2,504	9.3	23.8
Residuals of TBI	4,262	6.2	7.7	Mood disorder	2,337	8.7	22.2
Paralysis	4,198	6.1	7.6	Joint disorders or inflammation	1,841	6.9	17.5
Joint disorders or inflammation	4,002	5.8	7.2	Migraine	1,810	6.8	17.2
Migraine	3,746	5.5	6.7	Residuals of TBI	1,781	6.6	16.9
Skeletal and joint deformities	3,684	5.4	6.6	Skeletal and joint deformities	1,504	5.6	14.3
Total Individuals Discharged	**68,616**			**Total Individuals Discharged**	**26,807**		

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 2009-2013 VS. FY 2014

2009-2013				2014			
	n	%[1]	Rate[2]		n	%[1]	Rate[2]
Dorsopathies	1,656	11.4	8.6	Limitation of motion	577	20.9	15.2
Limitation of motion	1,650	11.3	8.6	Mood disorder	574	20.8	15.1
Mood disorder	1,225	8.4	6.4	Dorsopathies	518	18.8	13.6
Arthritis	1,137	7.8	5.9	PTSD	403	14.6	10.6
PTSD	905	6.2	4.7	Arthritis	277	10.0	7.3
Joint disorders or inflammation	558	3.8	2.9	Joint disorders or inflammation	167	6.1	4.4
Paralysis	503	3.5	2.6	Epilepsy	156	5.7	4.1
Epilepsy	499	3.4	2.6	Paralysis	151	5.5	4.0
Noninfectious enteritis and colitis	495	3.4	2.6	Anxiety disorder	149	5.4	3.9
Diabetes mellitus	356	2.4	1.8	Noninfectious enteritis and colitis	142	5.1	3.7
Total Individuals Discharged	**14,573**			**Total Individuals Discharged**	**2,760**		

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 2009-2013 VS. FY 2014

2009-2013				2014			
	n	%[1]	Rate[2]		n	%[1]	Rate[2]
Limitation of motion	3,569	21.6	29.8	Limitation of motion	1,242	40.7	51.1
PTSD	2,300	13.9	19.2	PTSD	1,161	38.0	34.0
Dorsopathies	2,271	13.7	19.0	Dorsopathies	772	25.3	16.3
Arthritis	1,801	10.9	15.0	Arthritis	371	12.1	14.9
Residuals of TBI	866	5.2	7.2	Mood disorder	338	11.1	13.0
Paralysis	857	5.2	7.2	Residuals of TBI	296	9.7	11.0
Mood disorder	783	4.7	6.5	Joint disorders or inflammation	249	8.2	9.9
Joint disorders or inflammation	766	4.6	6.4	Paralysis	226	7.4	8.6
Amputations	503	3.0	4.2	Migraine	196	6.4	4.8
Epilepsy	463	2.8	3.9	Skeletal and joint deformities	108	3.5	60.0
Total Individuals Discharged	**16,537**			**Total Individuals Discharged**	**3,054**		

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 2009-2013 VS. FY 2014

2009-2013				2014			
	n	%[1]	Rate[2]		n	%[1]	Rate[2]
Dorsopathies	3,506	26.5	13.9	Dorsopathies	1,195	34.0	24.5
Limitation of motion	1,721	13.0	6.8	PTSD	761	21.6	15.6
Mood disorder	1,596	12.0	6.3	Limitation of motion	753	21.4	15.4
Arthritis	1,413	10.7	5.6	Mood disorder	528	15.0	10.8
PTSD	1,184	8.9	4.7	Arthritis	341	9.7	7.0
Asthma	1,148	8.7	4.5	Paralysis	307	8.7	6.3
Joint disorders or inflammation	741	5.6	2.9	Joint disorders or inflammation	279	7.9	5.7
Paralysis	617	4.7	2.4	Migraine	236	6.7	4.8
Migraine	545	4.1	2.2	Asthma	234	6.7	4.8
Anxiety disorder	492	3.7	1.9	Anxiety disorder	188	5.3	3.8
Total Individuals Discharged	**13,246**			**Total Individuals Discharged**	**3,517**		

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, the most recent disposition by service for all individuals evaluated for disability discharge: FY 2009-2013 vs FY 2014, shows the distribution of the last disposition, by service, for all disability discharge evaluations, excluding periodic TDRL re-evaluations.

The following observations were made:

- Compared to the previous five year period, the proportion of disability evaluations that resulted in a disposition of permanent disability retirement increased in 2014 in all services.
- Permanent disability retirement was the most common disposition in the Army and Air Force.
- In the Navy, placement on the TDRL was the most common disposition followed closely by separated with severance pay.
- Among Marines, separated with severance pay was the most common disposition followed by placement on the TDRL.
- The distribution of disability dispositions in the Army, Navy, and Marine Corps in 2014 was similar to previous years.
- In the Air Force, a larger proportion of disability dispositions were permanent disability retired as compared to previous years. This increase in permanent disability retirement in the Air Force was accompanied by a substantial decrease in fit dispositions from 18% of dispositions in 2009-2013 to 3% in 2014.
- Fit determinations were most common in the Navy in 2014, though the proportion of Navy disability evaluations that result in fit determinations decreased in 2014 relative to the previous five years.

TABLE 10A: MOST RECENT DISPOSITION BY SERVICE FOR ALL INDIVIDUALS EVALUATED FOR DISABILITY DISCHARGE: FY 2009-2013 VS FY 2014[1]

	2009-2013								2014							
	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	20,355	29.6	2,738	19.3	3,094	19.1	4,679	27.9	10,621	51.6	812	29.4	749	24.5	1,871	51.1
Separated without Benefit	421	0.6	343	2.4	355	2.2	542	3.2	85	0.4	30	1.1	22	0.7	43	1.2
Separated with Severance	21,316	31.0	3,632	25.6	5,848	36.2	4,524	27.0	6,564	31.9	590	21.4	1,126	36.9	881	24.1
Fit	4,260	6.2	2,460	17.3	1,114	6.9	2,994	17.8	7	<0.1	384	13.9	184	6.0	103	2.8
Placed on TDRL	19,660	28.6	4,009	28.3	5,072	31.4	4,004	23.9	2,917	14.2	704	25.5	797	26.1	740	20.2
Administrative Termination[3]	1,444	2.1	-	-	-	-	-	-	13	0.1	-	-	-	-	-	-
Other[4]	1,329	1.9	1,009	7.1	685	4.2	39	0.2	364	1.8	240	8.7	176	5.8	25	0.7
Total Individuals	**68,785**		**14,191**		**16,168**		**16,782**		**20,571**		**2,760**		**3,054**		**3,663**	

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, the rate of disposition type per 10,000 service members by service for all individuals evaluated for disability discharge: FY 2009-2013 vs FY 2014, shows the distribution of the last disposition, by service, for all disability discharge evaluations, excluding periodic TDRL re-evaluations.

The following observations were made:

- Compared to the previous five year period, the rate of permanent disability retirement increased in 2014 in all services.
- Rates of separation with severance were highest in the Army and Marine Corps in 2014 relative to the previous five year period.
- The Navy and Marine Corps had higher rates of fit dispositions in 2014 than the other services. In contrast to the previous five year period when the highest rate of fit dispositions was observed in the Air Force.
- The rate of permanent disability retirement more than doubled in the Air Force in 2014 relative to the previous five years.
- Permanent disability retirement rates were also much higher in the Army in 2014 relative to the previous five year period.

TABLE 10B: RATE OF DISPOSITION TYPE PER 10,000 SERVICE MEMBERS BY SERVICE FOR ALL INDIVIDUALS EVALUATED FOR DISABILITY DISCHARGE: FY 2009-2013 VS FY 2014[1]

	2009-2013								2014							
	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	20,355	36.6	2,738	14.2	3,094	25.8	4,679	18.5	10,621	100.8	812	21.3	749	32.9	1,871	38.3
Separated without Benefit	421	0.8	343	1.8	355	2.2	542	2.1	85	0.8	30	0.8	22	1.0	43	0.9
Separated with Severance	21,316	38.4	3,632	18.9	5,848	36.2	4,524	17.9	6,564	62.3	590	15.5	1,126	49.5	881	18.0
Fit	4,260	7.7	2,460	12.8	1,114	6.9	2,994	11.8	7	0.1	384	10.1	184	8.1	103	2.1
Placed on TDRL	19,660	35.4	4,009	20.8	5,072	31.4	4,004	15.8	2,917	27.7	704	18.5	797	35.1	740	15.2
Administrative Termination[3]	1,444	2.6	-	-	-	-	-	-	13	0.1	-	-	-	-	-	
Other[4]	1,329	2.4	1,009	5.2	685	4.2	39	0.2	364	3.5	240	6.3	176	7.7	25	0.7

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.

Table 11A presents the most recent percent rating, by service, for all individuals evaluated for disability discharge: FY 2009-2013 vs FY 2014:

- The most frequently assigned rating:
  - For the Army and Marine Corps was 10%, similar to the previous five year period.
  - In the Air Force, 30% was the most commonly assigned rating in 2014 followed by 50%.
  - For Navy, 30% and 50% were the most commonly assigned ratings.
  - Air Force and Navy disability evaluations most frequently resulted in a rating of 100% when compared to other services in 2014.

- The proportional ratings of disability were as follows:
  - 100% - The proportion of ratings of 100% increased relative to the previous five year period, in all services, except in the Marine Corps, where the proportion of individuals rated 100% remained stable in 2014 relative to previous years.
  - Greater than 30% accounted for about 60% of Marine Corps disability ratings and about 70% of Army, Navy, and Air Force ratings.
    - In all services, the proportion of disability evaluations resulting in ratings of 30% or higher increased in 2014 relative to the previous five year period.
  - Unrated: There was a decrease in the proportion of disability evaluations that were unrated in 2014 relative to previous five years.

TABLE 11A: LATEST PERCENT DISABILITY RATING BY SERVICE FOR ALL INDIVIDUALS EVALUATED FOR DISABILITY DISCHARGE: FY 2009-2013 VS FY 2014[1]

	2009-2013												2014											
	Army			Navy			Marine Corps			Air Force			Army			Navy			Marine Corps			Air Force		
	n	%	CP	n	%	CP	n	%	CP	n	%	CP	n	%	CP	n	%	CP	n	%	CP	n	%	CP
0	1,219	1.8	2.0	490	3.5	4.4	813	5.0	5.6	292	1.7	2.2	291	1.4	1.5	134	4.9	5.8	219	7.2	7.8	120	3.3	3.4
10	11,862	17.2	21.1	2,028	14.3	22.8	3,408	21.1	29.2	2,779	16.6	22.9	3,539	17.2	19.3	305	11.1	19.1	614	20.1	29.5	440	12.0	16.0
20	8,864	12.9	35.3	1,352	9.5	35.1	1,827	11.3	41.8	1,841	11.0	36.6	2,724	13.2	32.9	227	8.2	28.9	386	12.6	43.2	355	9.7	26.2
30	6,563	9.5	45.9	2,307	16.3	56.0	2,199	13.6	57.0	2,624	15.6	56.2	2,273	11.0	44.4	369	13.4	45.0	296	9.7	53.6	547	14.9	41.8
40	5,375	7.8	54.6	1,421	10.0	68.9	1,485	9.2	67.3	1,549	9.2	67.7	2,214	10.8	55.5	274	9.9	56.9	287	9.4	63.8	402	11.0	53.3
50	7,408	10.8	66.5	1311	9.2	80.8	1594	9.9	78.3	1,657	9.9	80.1	2,986	14.5	70.5	369	13.4	72.9	293	9.6	74.2	471	12.9	66.8
60	7,569	11.0	78.7	609	4.3	86.3	870	5.4	84.3	909	5.4	86.9	1,595	7.8	78.5	119	4.3	78.1	156	5.1	79.7	307	8.4	75.6
70	5,991	8.7	88.3	596	4.2	91.7	1082	6.7	91.8	740	4.4	92.4	2,053	10.0	88.9	250	9.1	88.9	302	9.9	90.4	393	10.7	86.9
80	3,470	5.0	93.9	186	1.3	93.4	382	2.4	94.4	295	1.8	94.6	878	4.3	93.3	74	2.7	92.1	118	3.9	94.5	150	4.1	91.2
90	1,507	2.2	96.3	47	0.3	93.9	130	0.8	95.3	78	0.5	95.2	441	2.1	95.5	15	0.5	92.8	34	1.1	95.8	59	1.6	92.8
100	2,271	3.3	100	677	4.8	100	674	4.2	100	647	3.9	100	898	4.4	100	166	6.0	100	120	3.9	100	250	6.8	100
UR	4,962	7.2	N/A	2,799	19.7	N/A	1,468	9.1	N/A	3,335	19.9	N/A	349	1.7	N/A	412	14.9	N/A	206	6.7	N/A	145	4.0	N/A
Miss	1,724	2.5	N/A	368	2.6	N/A	236	1.5	N/A	36	0.2	N/A	330	1.6	N/A	46	1.7	N/A	23	0.8	N/A	24	0.7	N/A
Total	**59,853**			**14,191**			**16,168**			**16,782**			**20,571**			**2,760**			**3,054**			**3,663**		

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.

Table 11B presents the rates of each disability rating per 10,000 service members by service, for all individuals evaluated for disability discharge: FY 2009-2013 vs FY 2014:

- The highest rates of disability per 10,000 service members were found:
  - Among those with a disability rating of 10% in the Army and Marine Corps similar to the previous five year period.
  - Those rated 30%, followed closely by 50%, in the Air Force.
  - Among those with 30% and 50% disability rating in the Navy
  - The highest rates of disability rated 100% were observed in the Army.
  - The highest rates of unrated disability were found in the Navy and Marine Corps.

- Rates of disability rating per 10,000 were as follows:
  - The rate of ratings of 100% increased relative to the previous five year period, in all services, except in the Marine Corps, where the rate of 100% ratings remained stable in 2014 relative to previous years.

  - There was a decrease in the rate of unrated disability in 2014 relative to previous five years.

TABLE 11B: RATE OF PERCENT DISABILITY RATING PER 10,000 SERVICE MEMBERS BY SERVICE FOR ALL INDIVIDUALS EVALUATED FOR DISABILITY DISCHARGE: FY 2009-2013 VS FY 2014[1]

	2009-2013								2014							
	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]
0	1,219	2.2	490	2.5	813	6.8	292	1.2	291	2.8	134	3.5	219	9.6	120	2.5
10	11,862	21.3	2,028	10.5	3,408	28.4	2,779	11.0	3,539	33.6	305	8.0	614	27.0	440	9.0
20	8,864	15.9	1,352	7.0	1,827	15.3	1,841	7.3	2,724	25.9	227	6.0	386	17.0	355	7.3
30	6,563	11.8	2,307	12.0	2,199	18.4	2,624	10.4	2,273	21.6	369	9.7	296	13.0	547	11.2
40	5,375	9.7	1,421	7.4	1,485	12.4	1,549	6.1	2,214	21.0	274	7.2	287	12.6	402	8.2
50	7,408	13.3	1311	6.8	1594	13.3	1,657	6.6	2,986	28.3	369	9.7	293	12.9	471	9.6
60	7,569	13.6	609	3.2	870	7.3	909	3.6	1,595	15.1	119	3.1	156	6.9	307	6.3
70	5,991	10.8	596	3.1	1082	9.0	740	2.9	2,053	19.5	250	6.6	302	13.3	393	8.0
80	3,470	6.2	186	1.0	382	3.2	295	1.2	878	8.3	74	1.9	118	5.2	150	3.1
90	1,507	2.7	47	0.2	130	1.1	78	0.3	441	4.2	15	0.4	34	1.5	59	1.2
100	2,271	4.1	677	3.5	674	5.6	647	2.6	898	8.5	166	4.4	120	5.3	250	5.1
UR	4,962	8.9	2,799	14.5	1,468	12.3	3,335	13.2	349	3.3	412	10.8	206	9.1	145	3.0

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
2. Rate of each percent disability rating per 10,000 service members.

1

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

MEDICAL HISTORY

Table 12 presents the number and percentages of individuals evaluated for disability with records in other AMSARA data sources: FY 2009 - FY 2014. Applicant and waiver data are for enlisted active duty and reserve service members; 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. Regardless of service, the majority of those who were evaluated for disability had a discharge record. Applicant records were also available for the majority in all services.

Accession records are available for the majority of individuals evaluated for disability. However, the percentage of individuals with an accession record is lower in the Army and Air Force than in the Navy and Marine Corps. Missing applicant data may represent applications prior to 1995, the first year complete data are available. Similarly, in the case of accession data, missing data may represent accessions prior to 1995. The highest percentage of individuals evaluated for disabilities with waiver records from any waiver authority was found in the Army (8%). Most accession medical waiver records for individuals evaluated for disability were approved regardless of service.

Hospitalization at a military treatment facility was least common in Air Force members evaluated for disability. In Army, Navy, and Marine Corps members evaluated for disability, hospitalization rates were similar.

TABLE 12: INDIVIDUALS EVALUATED FOR DISABILITY WITH RECORDS IN OTHER AMSARA DATA SOURCES: FY 2009-FY 2014

	Army		Navy		Marine Corps		Air Force	
	n	%	n	%	n	%	n	%
Applicant record[1] (1995-2013)	74,916	79.3	12,582	78.3	17,266	90.9	13,661	73.3
Accession medical waiver record[1] (1995-2013)	7,509	7.9	982	6.1	1,063	5.6	559	3.0
Approved	6,972	7.4	953	5.9	1,025	5.4	539	2.9
Denied	537	0.6	29	0.2	38	0.2	20	0.1
Accession record (1995-2014)	78,928	78.7	16,326	94.2	18,956	96.8	15,584	76.3
Hospitalization record[2] (1995-2014)	29,648	39.1	7,277	44.6	7,716	41.9	5,481	31.4
Discharge record (1995-2014)	62,478	62.3	11,785	68.0	14,578	74.4	18,052	88.4
Total Individuals	100,268		17,333		19,591		20,421	
Total Enlisted	94,505		16,079		18,998		18,645	
Total Active Duty	75,750		16,314		18,419		17,429	

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

AMSARA 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. In cases where 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 at MEPS among enlisted service members evaluated for disability by year of disability evaluation (FY 2009-FY 2014) and by service. There is a general trend in all services of increasing proportions of applicant records with increasing year of disability, a trend which is expected given the time frame for which application records are available. Overall, the Marine Corps had the highest percentage of individuals evaluated for disability who also had a MEPS medical examination record for each year of disability evaluation.

TABLE 13: RECORD OF MEDICAL EXAMINATION AT MEPS AMONG ENLISTED SERVICE MEMBERS EVALUATED FOR DISABILITY BY YEAR OF DISABILITY EVALUATION: FY 2009-FY 2014

	Army			Navy			Marine Corps			Air Force		
	App	Total	%	App	Total	%	App	Total	%	App	Total	%
2009	7,992	10,442	76.5	1,352	2,007	67.4	1,591	1,819	87.5	1,690	2,784	60.7
2010	8,399	10,974	76.5	1,665	2,291	72.7	2,037	2,339	87.1	2,177	3,251	67.0
2011	8,773	11,296	77.7	1,613	2,179	74.0	2,481	2,773	89.5	2,438	3,423	71.2
2012	10,946	13,970	78.4	2,500	3,172	78.8	3,889	4,204	92.5	2,405	3,199	75.2
2013	18,378	22,475	81.8	2,439	2,897	84.2	3,355	3,625	92.6	2,166	2,648	81.8
2014	20,428	25,348	80.6	3,013	3,533	85.3	3,913	4,238	92.3	2,785	3,340	83.4
Total	**74,916**	**94,505**	**79.3**	**12,582**	**16,079**	**78.3**	**17,266**	**18,998**	**90.9**	**13,661**	**15,861**	**86.1**

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

Tables 14A-14D present the medical qualification status among enlisted individuals who were evaluated for disability with MEPS examination record: FY 2009-2013 vs. FY 2014.

The rates of medical disqualification were as follows:

- Permanent medical disqualifications:
  - Rates were similar for both time periods in each service.
  - Between 6% and 12% of service members evaluated for disability had a history of permanent medical disqualification .
  - The Air Force had the lowest rates of permanent medical disqualification; less than 7% of disability cases had a history of permanent medical disqualification.
  - The Army had the highest rates of permanent medical disqualification regardless of time period; about 11% of Army disability cases had a history of permanent medical disqualification prior to accession.
- Temporary medical disqualifications:
  - Between 3% and 10% of service members evaluated for disability had a temporary medical disqualification.
  - Lowest rates of history of temporary accession medical disqualification were found in Air Force where less than 5% of cases with medical exam record had a temporary disqualification.
  - Highest rates were found in the Army where approximately 8% of individuals evaluated for disability in 2014 had a history of temporary disqualification.

TABLE 14A: MEDICAL QUALIFICATION STATUS AMONG ENLISTED INDIVIDUALS WHO WERE EVALUATED FOR DISABILITY WITH MEPS EXAMINATION RECORD: **ARMY**, FY 2009-2013 VS. FY 2014

	2009-2013		2014	
	n	**%**	**n**	**%**
Fully Qualified	42,740	78.4	16,401	80.3
Permanently Disqualified	6,299	11.6	2,305	11.3
Temporarily Disqualified*	5,449	10.0	1,722	8.4
Total DES Cases with Medical Exam Record	**54,488**		**20,428**	

*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 2009-2013 VS. FY 2014

	2009-2013		2014	
	n	**%**	**n**	**%**
Fully Qualified	8,055	84.2	2,575	85.5
Permanently Disqualified	896	9.4	272	9.0
Temporarily Disqualified*	618	6.5	166	5.5
Total DES Cases with Medical Exam Record	**9,569**		**3,013**	

*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 2009-2013 VS. FY 2014

	2009-2013		2014	
	n	**%**	**n**	**%**
Fully Qualified	11,259	84.3	3,377	86.3
Permanently Disqualified	1,191	8.9	293	7.5
Temporarily Disqualified*	903	6.8	243	6.2
Total DES Cases with Medical Exam Record	**13,353**		**3,913**	

*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 2009-2013 VS. FY 2014

	2009-2013		2014	
	n	**%**	**n**	**%**
Fully Qualified	9,699	89.2	2,482	89.1
Permanently Disqualified	698	6.4	197	7.1
Temporarily Disqualified*	479	4.4	106	3.8
Total DES Cases with Medical Exam Record	**10,876**		**2,785**	

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

Table 15A-Table 15D present the five most common ICD-9 diagnosis codes appearing in MEPS medical examination records of service members evaluated for disability. All ICD-9 diagnoses present in the most recent medical examination record that preceded disability evaluation were used. The ICD-9 codes present in records of MEPS examination represent the presence of pre-existing conditions in applicants. The leading ICD-9 diagnoses present in MEPS examination records of enlisted service members by year of disability evaluation are shown.

In all services and for all time periods, the conditions noted in the applicant files of service members who underwent disability are consistent with highly prevalent conditions in the general military applicant population [8].

- The most common conditions noted at the MEPS, were: overweight, obesity, and other hyperalimentation, for all services except the Air Force.
- *Cannabis* abuse was also common in the Army, Navy, and Marine Corps.
- Hearing loss and disorders of refraction and accommodation were among the leading ICD-9 codes in all services.

TABLE 15A: FIVE MOST COMMON ICD-9 DIAGNOSIS CODES APPEARING IN MEPS MEDICAL EXAMINATION RECORDS OF SERVICE MEMBERS EVALUATED FOR DISABILITY: **ARMY**, FY 2009-2013 VS. FY 2014

2009-2013				2014			
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	3,085	33.0	5.7	Overweight, obesity and other hyperalimentation	947	28.9	4.6
Hearing loss	591	6.3	1.1	Disorders of lipoid metabolism	239	7.3	1.2
Disorders of lipoid metabolism	536	5.7	1.0	Hearing loss	197	6.0	1.0
Cannabis abuse	515	5.5	0.9	Disorders of refraction and accommodation	141	4.3	0.7
Disorders of refraction and accommodation	371	4.0	0.7	*Cannabis* abuse	129	3.9	0.6
Total Applicants with Medical Conditions	**9,341**		**17.1**	**Total Applicants with Medical Conditions**	**3,280**		**16.1**
Total DES Cases with Medical Exam Record	**54,488**			**Total DES Cases with Medical Exam Record**	**20,428**		

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 2009-2013 VS. FY 2014

2009-2013				2014			
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	2,649	33.2	6.6	Overweight, obesity and other hyperalimentation	1,026	33.2	6.4
Hearing loss	514	6.4	1.3	Hearing loss	193	6.2	1.2
Cannabis abuse	496	6.2	1.2	Disorders of lipoid metabolism	176	5.7	1.1
Disorders of lipoid metabolism	373	4.7	0.9	Disorders of refraction and accommodation	149	4.8	0.9
Disorders of refraction and accommodation	292	3.7	0.7	*Cannabis* abuse	116	3.8	0.7
Total Applicants with Medical Conditions	**1,288**		**13.5**	**Total Applicants with Medical Conditions**	**424**		**14.1**
Total DES Cases with Medical Exam Record	**9,569**			**Total DES Cases with Medical Exam Record**	**3,013**		

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 2009-2013 VS. FY 2014

2009-2013				2014			
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	2,649	33.2	6.6	Overweight, obesity and other hyperalimentation	1,026	33.2	6.4
Hearing loss	514	6.4	1.3	Hearing loss	193	6.2	1.2
Cannabis abuse	496	6.2	1.2	Disorders of lipoid metabolism	176	5.7	1.1
Disorders of lipoid metabolism	373	4.7	0.9	Disorders of refraction and accommodation	149	4.8	0.9
Disorders of refraction and accommodation	292	3.7	0.7	*Cannabis* abuse	116	3.8	0.7
Total Applicants with Medical Conditions	**2,018**		**15.1**	**Total Applicants with Medical Conditions**	**544**		**13.9**
Total DES Cases with Medical Exam Record	**13,353**			**Total DES Cases with Medical Exam Record**	**3,913**		

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 2009-2013 VS. FY 2014

2009-2013				2014			
ICD-9 Diagnosis Code	**n**	**% of Cond[1]**	**% of App[2]**	**ICD-9 Diagnosis Code**	**n**	**% of Cond[1]**	**% of App[2]**
Disorders of refraction and accommodation	51	4.3	0.5	Disorders of refraction and accommodation	18	5.9	0.6
Asthma	36	3.1	0.3	Asthma	11	3.6	0.4
Overweight, obesity, and other hyperalimentation	34	2.9	0.3	Other nonspecific abnormal findings	11	3.6	0.4
Other disorders of bone and cartilage	33	2.8	0.3	Neurotic disorders	9	3.0	0.3
Other nonspecific abnormal findings	29	2.5	0.3	Hyperkinetic syndrome of childhood	8	2.6	0.3
Total Applicants with Medical Conditions	**1,177**		**10.8**	**Total Applicants with Medical Conditions**	**303**		**10.9**
Total DES Cases with Medical Exam Record	**10,876**			**Total DES Cases with Medical Exam Record**	**2,785**		

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.

Tables 16A-16D present the most prevalent disqualification types at MEPS medical examination within leading disability body system categories: FY 2009-2013 vs. FY 2014 for each service. 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. The following observations are noted:

- Total rate ("Any DQ") of medical disqualification prior to accession in 2014 varied from 9% in the Navy to 16% in the Army.
- From 2009 to 2013, the rate of medical disqualification overall varied from 7% in the Navy to 18% in the Army.
- In the Army and Marine Corps, individuals discharged with a musculoskeletal disability had the highest rates of medical disqualification prior to accession.
- Rates of disqualification among musculoskeletal and psychiatric disability cases for the Navy and Air Force were similar.
- Overall, medical disqualification rates among those with a musculoskeletal disability discharge in the Air Force were approximately equal to the overall disqualification rate among individuals discharged with a psychiatric disability.
- In all services, the leading reasons for medical disqualification, described using ICD-9 diagnoses, did not vary based on the body system evaluated for disability.
- Weight disqualifications, including both underweight and overweight, and musculoskeletal conditions were the most common types of pre-accession medical disqualification in all services regardless of the type of disability discharge.

TABLE 16A: MOST PREVALENT DISQUALIFICATION TYPES AT MEPS MEDICAL EXAMINATION WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: **ARMY**, FY 2009-2013 VS. FY 2014

2009-2013			2014		
	n	%[1]		n	%[1]
Total Individuals Discharged	**66,757**	**100**	**Total Individuals Discharged**	**26,446**	**100**
Weight	3,176	4.8	Weight	1,015	3.8
Musculoskeletal	1,102	1.7	Musculoskeletal	510	1.9
Psychiatric	1,077	1.6	Psychiatric	348	1.3
Any DQ	12,059	18.1	Any DQ	4,357	16.5
Musculoskeletal	**47,084**	**70.5**	**Musculoskeletal**	**18,626**	**70.4**
Weight	2,324	4.9	Weight	742	4.0
Musculoskeletal	892	1.9	Musculoskeletal	387	2.1
Psychiatric	731	1.6	Psychiatric	226	1.2
Any DQ	8,702	18.5	Any DQ	3,138	16.8
Psychiatric	**24,007**	**36.0**	**Psychiatric**	**11,819**	**44.7**
Weight	876	3.6	Weight	419	3.5
Psychiatric	393	1.6	Musculoskeletal	189	1.6
Musculoskeletal	275	1.1	Psychiatric	172	1.5
Any DQ	3,347	13.9	Any DQ	1,707	14.4
Neurological	**15,320**	**22.9**	**Neurological**	**6,614**	**25.0**
Weight	591	3.9	Weight	188	2.8
Psychiatric	225	1.5	Musculoskeletal	101	1.5
Musculoskeletal	204	1.3	Psychiatric	88	1.3
Neurological	28	0.2	Neurological	15	0.2
Any DQ	2,306	15.1	Any DQ	939	14.2

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.

TABLE 16B: MOST PREVALENT DISQUALIFICATION TYPES AT MEPS MEDICAL EXAMINATION WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: **NAVY**, FY 2009-2013 VS. FY 2014

2009-2013			2014		
	n	%[1]		n	%[1]
Total Individuals Discharged	**12,546**	**100**	**Total Individuals Discharged**	**3,533**	**100**
Weight	235	1.9	Weight	70	2.0
Musculoskeletal	182	1.5	Musculoskeletal	62	1.8
Psychiatric	89	0.7	Vision	35	1.0
Any DQ	896	7.1	Any DQ	319	9.0
Musculoskeletal	**4,393**	**35.0**	**Musculoskeletal**	**1,232**	**34.9**
Musculoskeletal	122	2.8	Musculoskeletal	32	2.6
Weight	112	2.5	Weight	27	2.2
Psychiatric	40	0.9	Respiratory	15	1.2
Any DQ	435	9.9	Any DQ	116	9.4
Psychiatric	**2,542**	**20.3**	**Psychiatric**	**1,146**	**32.4**
Weight	55	2.2	Weight	30	2.6
Psychiatric	28	1.1	Musculoskeletal	20	1.7
Vision	28	1.1	Vision	14	1.2
Musculoskeletal	26	1.0	Psychiatric	11	1.0
Any DQ	216	8.5	Any DQ	124	10.8
Neurological	**2,027**	**16.2**	**Neurological**	**631**	**17.9**
Weight	46	2.3	Weight	16	2.5
Musculoskeletal	32	1.6	Vision	8	1.3
Psychiatric	24	1.2	Dermatological	7	1.1
Neurological	10	0.5	Neurological	2	0.3
Any DQ	192	9.5	Any DQ	69	10.9

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.

TABLE 16C: MOST PREVALENT DISQUALIFICATION TYPES AT MEPS MEDICAL EXAMINATION WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: **MARINE CORPS**, FY 2009-2013 VS. FY 2014

2009-2013			2014		
	n	%[1]		n	%[1]
Total Individuals Discharged	**14,760**	**100**	**Total Individuals Discharged**	**4,238**	**100**
Weight	391	2.6	Weight	91	2.1
Musculoskeletal	301	2.0	Psychiatric	75	1.8
Psychiatric	254	1.7	Musculoskeletal	63	1.5
Any DQ	1,544	10.5	Any DQ	446	10.5
Musculoskeletal	**7,748**	**52.5**	**Musculoskeletal**	**2,107**	**49.7**
Weight	251	3.2	Weight	54	2.6
Musculoskeletal	215	2.8	Musculoskeletal	42	2.0
Psychiatric	152	2.0	Psychiatric	37	1.8
Any DQ	955	12.3	Any DQ	241	11.4
Psychiatric	**3,341**	**22.6**	**Psychiatric**	**1,524**	**36.0**
Weight	83	2.5	Psychiatric	36	2.4
Musculoskeletal	60	1.8	Weight	33	2.2
Psychiatric	57	1.7	Musculoskeletal	17	1.1
Any DQ	324	9.7	Any DQ	147	9.6
Neurological	**2,972**	**20.1**	**Neurological**	**875**	**20.6**
Weight	82	2.8	Psychiatric	16	1.8
Musculoskeletal	64	2.2	Weight	14	1.6
Psychiatric	54	1.8	Musculoskeletal	12	1.4
Neurological	7	0.2	Neurological	4	0.5
Any DQ	314	10.6	Any DQ	89	10.2

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.

TABLE 16D: MOST PREVALENT DISQUALIFICATION TYPES AT MEPS MEDICAL EXAMINATION WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: **AIR FORCE**, FY 2009-2013 VS. FY 2014

2009-2013			2014		
	n	%		n	%
Total Individuals Discharged	**12,297**	**100**	**Total Individuals Discharged**	**3,221**	**100**
Musculoskeletal	305	2.5	Musculoskeletal	84	2.6
Weight	177	1.4	Weight	52	1.6
Vision	146	1.2	Vision	46	1.4
Any DQ	1,177	9.6	Any DQ	303	9.4
Musculoskeletal	**6,147**	**50.0**	**Musculoskeletal**	**1,746**	**54.2**
Musculoskeletal	187	3.0	Musculoskeletal	57	3.3
Weight	101	1.6	Weight	31	1.8
Vision	68	1.1	Vision	17	1.0
Any DQ	561	9.1	Any DQ	170	9.7
Psychiatric	**3,052**	**24.8**	**Psychiatric**	**956**	**29.7**
Musculoskeletal	66	2.2	Vision	26	2.7
Vision	37	1.2	Musculoskeletal	21	2.2
Psychiatric	22	0.7	Psychiatric	13	1.4
Any DQ	271	8.9	Any DQ	92	9.6
Neurological	**2,327**	**18.9**	**Neurological**	**828**	**25.7**
Musculoskeletal	50	2.1	Musculoskeletal	19	2.3
Weight	22	0.9	Weight	16	1.9
Vision	21	0.9	Dermatological	8	1.0
Neurological	0	0.0	Neurological	0	0.0
Any DQ	184	7.9	Any DQ	68	8.2

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.

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

AMSARA enlisted waiver records include data on medical waivers considered by each service's waiver authority from 1995 to present. Officer waiver data are not currently collected by AMSARA. 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 applications among enlisted service members evaluated for disability by year of disability evaluation and service. The following observations are noted:

- Overall prevalence was highest in the Army where about 7% of all disability evaluated service members applied for a waiver.
- Air Force members evaluated for disability had the lowest percentage of service members with an accession medical waiver, about 3%.
- In the Navy and Marine Corps the rate of accession medical waiver in the disability evaluated population was approximately 6%.

TABLE 17: HISTORY OF ACCESSION MEDICAL WAIVER APPLICATIONS AMONG ENLISTED SERVICE MEMBERS EVALUATED FOR DISABILITY BY YEAR OF DISABILITY EVALUATION: FY 2009-2014

	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]
2009	752	10,442	7.2	126	2,007	6.3	116	1,819	6.4	70	2,784	2.5
2010	799	10,974	7.3	107	2,291	4.7	129	2,339	5.5	64	3,251	2.0
2011	795	11,296	7.0	119	2,179	5.5	166	2,773	6.0	102	3,423	3.0
2012	1,062	13,970	7.6	229	3,172	7.2	229	4,204	5.4	104	3,199	3.3
2013	1,747	22,475	7.8	211	2,897	7.3	211	3,625	5.8	99	2,648	3.7
2014	1,817	25,348	7.2	212	3,533	6.0	212	4,238	5.0	120	3,340	3.6
Total	**6,972**	**94,505**	**7.4**	**1004**	**16,079**	**6.2**	**1063**	**18,998**	**5.6**	**559**	**18,645**	**3.0**

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

Tables 18A-18D present the five most common ICD-9 diagnosis codes for accession medical waivers considered among enlisted individuals evaluated for disability: FY 2009-2013 vs. FY 2014. Results are shown by year of disability evaluation comparing 2014 to the previous five years.

- The leading waiver condition in both 2014 and the preceding five years for Army service members was hearing loss.
- Among Navy and Air Force service members, disorders of refraction and accommodation were the most common for both time periods.
- Non-specific abnormal findings and other disorders of bone and cartilage were the leading reasons Marine Corps personnel sought pre-accession medical waivers, regardless of the time period they became disabled.

TABLE 18A: FIVE MOST COMMON ICD-9 DIAGNOSIS CODES FOR ACCESSION MEDICAL WAIVERS CONSIDERED AMONG ENLISTED INDIVIDUALS EVALUATED FOR DISABILITY: **ARMY**, FY 2009-2013 VS. FY 2014

2009-2013			2014		
ICD-9 Diagnosis Code	**n**	**%**	**ICD-9 Diagnosis Code**	**n**	**%**
Hearing loss	612	10.8	Hearing loss	174	8.8
Disorders of refraction and accommodation	403	7.1	Disorders of refraction and accommodation	169	8.5
Disorders of lipoid metabolism	392	6.9	Disorders of lipoid metabolism	153	7.7
Elevated blood pressure reading without diagnosis of hypertension	297	5.2	Elevated blood pressure reading without diagnosis of hypertension	100	5.0
Asthma	252	4.4	Asthma	94	4.7
Total Waiver Applications	**5,675**		**Total Waiver Applications**	**1,981**	

TABLE 18B: FIVE MOST COMMON ICD-9 DIAGNOSIS CODES FOR ACCESSION MEDICAL WAIVERS CONSIDERED AMONG ENLISTED INDIVIDUALS EVALUATED FOR DISABILITY: **NAVY**, FY 2009-2013 VS. FY 2014

2009-2013			2014		
ICD-9 Diagnosis Code	**n**	**%**	**ICD-9 Diagnosis Code**	**n**	**%**
Disorders of refraction and accommodation	61	7.7	Disorders of refraction and accommodation	25	11.8
Other and unspecified disorders of bone and cartilage	57	7.2	Asthma	23	10.8
Asthma	52	6.6	Other and unspecified disorders of bone and cartilage	14	6.6
Hearing loss	41	5.2	Hearing loss	14	6.6
Elevated blood pressure reading w/o dx of hypertension	24	3.0	Essential hypertension	10	4.7
Total Waiver Applications	**792**		**Total Waiver Applications**	**212**	

TABLE 18C: FIVE MOST COMMON ICD-9 DIAGNOSIS CODES FOR ACCESSION MEDICAL WAIVERS CONSIDERED AMONG ENLISTED INDIVIDUALS EVALUATED FOR DISABILITY: **MARINE CORPS**, FY 2009-2013 VS. FY 2014

2009-2013			2014		
ICD-9 Diagnosis Code	**n**	**%**	**ICD-9 Diagnosis Code**	**n**	**%**
Other and unspecified disorders of bone and cartilage	103	12.1	Other nonspecific abnormal findings	36	17.0
Other nonspecific abnormal findings	94	11.0	Asthma	26	12.3
Disorders of refraction and accommodation	71	8.3	Disorders of refraction and accommodation	20	9.4
Asthma	67	7.9	Other and unspecified disorders of bone and cartilage	18	8.5
Essential hypertension	47	5.5	Hearing loss	16	7.5
Total Waiver Applications	**851**		**Total Waiver Applications**	**212**	

TABLE 18D: FIVE MOST COMMON ICD-9 DIAGNOSIS CODES FOR ACCESSION MEDICAL WAIVERS CONSIDERED AMONG ENLISTED INDIVIDUALS EVALUATED FOR DISABILITY: **AIR FORCE**, FY 2009-2013 VS. FY 2014

2009-2013			2014		
ICD-9 Diagnosis Code	**n**	**%**	**ICD-9 Diagnosis Code**	**n**	**%**
Disorders of refraction and accommodation	52	11.8	Disorders of refraction and accommodation	13	10.8
Reduction of fracture and dislocation	35	8.0	Affective psychoses	9	7.5
Hyperkinetic syndrome of childhood	31	7.1	Hyperkinetic syndrome of childhood	9	7.5
Asthma	28	6.4	Asthma	7	5.8
Repair and plastic operations on joint structures	23	5.2	Reduction of fracture and dislocation	7	5.8
Total Waiver Applications	**439**		**Total Waiver Applications**	**120**	

Tables 19A-19D present the most prevalent accession medical waiver types, by service, within leading disability body system categories for FY 2009-2013 vs. FY 2014. 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 waiver types 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 waiver. Therefore, percentages associated with ICD-9 diagnosis waiver types within each body system should be interpreted as the percent of individuals with discharged with a specific disability type who had each specific waiver type.

The following observations are noted:

- Total rate of waiver among individuals disability discharged in 2014 was between 4-9% in all services.
- From 2009 to 2013 the rate of waiver overall varied from 3% in the Air Force to 6% in the Army. Within each service, the overall waiver rate did not vary significantly by type of disability discharge.
- Waivers for musculoskeletal conditions were most common in all services.
- Hearing and vision waivers were the second and third most common waiver type in the Army, while psychiatric and vision waivers were second and third most common in the Navy, Marine Corps, and Air Force.
- In all services, the leading reasons for waiver, described using ICD-9 diagnoses, did not 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 2009-2013 VS. FY 2014

2009-2013			2014		
	n	%[1]		n	%[1]
Total Individuals Discharged	**66,757**	**100**	**Total Individuals Discharged**	**26,446**	**100**
Musculoskeletal	1,191	1.8	Musculoskeletal	504	1.9
Hearing	617	0.9	Vision	245	0.9
Vision	594	0.9	Hearing	188	0.7
Any Waiver	5,813	8.7	Any Waiver	2,233	8.4
Musculoskeletal	**47,084**	**70.5**	**Musculoskeletal**	**18,626**	**70.4**
Musculoskeletal	932	2.0	Musculoskeletal	396	2.1
Vision	408	0.9	Vision	160	0.9
Hearing	371	0.8	Hearing	132	0.7
Any Waiver	4,094	8.7	Any Waiver	1,568	8.4
Psychiatric	**24,007**	**36.0**	**Psychiatric**	**11,819**	**44.7**
Musculoskeletal	322	1.3	Musculoskeletal	191	1.6
Hearing	231	1.0	Vision	94	0.8
Psychiatric	196	0.8	Psychiatric	57	0.5
Any Waiver	1,735	7.2	Any Waiver	839	7.1
Neurological	**15,320**	**22.9**	**Neurological**	**6,614**	**25.0**
Musculoskeletal	229	1.5	Musculoskeletal	100	1.5
Hearing	144	0.9	Hearing	47	0.7
Vision	113	0.7	Vision	46	0.7
Neurological	22	0.1	Neurological	6	0.1
Any Waiver	1,191	7.8	Any Waiver	479	7.2

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.

TABLE 19B: MOST PREVALENT ACCESSION MEDICAL WAIVER TYPES WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: **NAVY**, FY 2009-2013 VS. FY 2014

2009-2013			2014		
	n	%[1]		n	%[1]
Total Individuals Discharged	**12,546**	**100**	**Total Individuals Discharged**	**3,533**	**100**
Musculoskeletal	168	1.3	Musculoskeletal	52	1.5
Vision	73	0.6	Vision	31	0.9
Psychiatric	49	0.4	Respiratory	21	0.6
Any Waiver	586	4.7	Any Waiver	224	6.3
Musculoskeletal	**4,393**	**35.0**	**Musculoskeletal**	**1,232**	**34.9**
Musculoskeletal	114	2.6	Musculoskeletal	28	2.3
Vision	34	0.8	Respiratory	9	0.7
Respiratory	22	0.5	Vision	9	0.7
Any Waiver	292	6.6	Any Waiver	89	7.2
Psychiatric	**2,542**	**20.3**	**Psychiatric**	**1,146**	**32.4**
Musculoskeletal	23	0.9	Musculoskeletal	15	1.3
Vision	20	0.8	Vision	10	0.9
Psychiatric	19	0.7	Psychiatric	7	0.6
Any Waiver	136	5.4	Any Waiver	75	6.5
Neurological	**2,027**	**16.2**	**Neurological**	**631**	**17.9**
Musculoskeletal	25	1.2	Vision	10	1.6
Psychiatric	13	0.6	Musculoskeletal	9	1.4
Vision	13	0.6	Hearing	6	1.0
Neurological	3	0.1	Neurological	1	0.2
Any Waiver	128	6.3	Any Waiver	49	7.8

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.

TABLE 19C: MOST PREVALENT ACCESSION MEDICAL WAIVER TYPES WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: **MARINE CORPS**, FY 2009-2013 VS. FY 2014

2009-2013			2014		
	n	%[1]		n	%[1]
Total Individuals Discharged	**14,760**	**100**	**Total Individuals Discharged**	**4,238**	**100**
Musculoskeletal	224	1.5	Musculoskeletal	40	0.9
Psychiatric	110	0.7	Vision	32	0.8
Vision	104	0.7	Respiratory	25	0.6
Any Waiver	770	5.2	Any Waiver	202	4.8
Musculoskeletal	**7,748**	**52.5**	**Musculoskeletal**	**2,107**	**49.7**
Musculoskeletal	158	2.0	Musculoskeletal	22	1.0
Psychiatric	66	0.9	Vision	14	0.7
Vision	58	0.7	Psychiatric	12	0.6
Any Waiver	478	6.2	Any Waiver	100	4.7
Psychiatric	**3,341**	**22.6**	**Psychiatric**	**1,524**	**36.0**
Musculoskeletal	53	1.6	Musculoskeletal	18	1.2
Psychiatric	27	0.8	Vision	11	0.7
Vision	19	0.6	Respiratory	9	0.6
Any Waiver	170	5.1	Any Waiver	72	4.7
Neurological	**2,972**	**20.1**	**Neurological**	**875**	**20.6**
Musculoskeletal	53	1.8	Vision	11	1.3
Vision	23	0.8	Musculoskeletal	5	0.6
Psychiatric	20	0.7	Psychiatric	5	0.6
Neurological	0	0.0	Neurological	0	0.0
Any Waiver	174	5.9	Any Waiver	39	4.5

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.

TABLE 19D: MOST PREVALENT ACCESSION MEDICAL WAIVER TYPES WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: **AIR FORCE**, FY 2009-2013 VS. FY 2014

2009-2013			2014		
	n	%[1]		n	%[1]
Total Individuals Discharged	**12,297**	**100**	**Total Individuals Discharged**	**3,221**	**100**
Musculoskeletal	13	0.1	Musculoskeletal	25	0.8
Vision	60	0.5	Psychiatric	22	0.7
Psychiatric	53	0.4	Vision	15	0.5
Any Waiver	422	3.4	Any Waiver	117	3.6
Musculoskeletal	**5,507**	**44.8**	**Musculoskeletal**	**1,541**	**47.8**
Musculoskeletal	54	1.0	Musculoskeletal	17	1.1
Vision	29	0.5	Psychiatric	7	0.5
Psychiatric	26	0.5	Vision	4	0.3
Any Waiver	208	3.8	Any Waiver	57	3.7
Psychiatric	**2,809**	**22.8**	**Psychiatric**	**855**	**26.5**
Vision	21	0.7	Psychiatric	11	1.3
Musculoskeletal	18	0.6	Musculoskeletal	8	0.9
Psychiatric	15	0.5	Vision	7	0.8
Any Waiver	108	3.8	Any Waiver	42	4.9
Neurological	**2,159**	**17.6**	**Neurological**	**777**	**24.1**
Musculoskeletal	11	0.5	Musculoskeletal	5	0.6
Psychiatric	9	0.4	Respiratory	2	0.3
Vision	7	0.3	Vision	2	0.3
Neurological	2	0.1	Neurological	-	0.0
Any Waiver	65	3.0	Any Waiver	25	3.2

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.

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. Only hospitalizations that occurred prior to the date of medical evaluation board were included in these analyses. All hospitalizations that occurred among individuals who were later evaluated for disability were included in these analyses. Only the diagnoses listed as primary 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. Observations made:

- Over time, the prevalence of hospitalization in the disability evaluated population has remained stable in the Navy and Air Force.
- In 2014, Marine Corps hospitalization rates decreased slightly relative to previous years.
- Army hospitalization rates have increased in the period from 2009 to 2014.
- The Air Force and Army had lower percentages of service members evaluated for disability that had been hospitalized.
- Hospitalization rates were highest in the Navy and Marine Corps.

TABLE 20: HISTORY OF HOSPITALIZATION BY YEAR OF DISABILITY EVALUATION: FY 2009-2014

	Army			Navy			Marines Corps			Air Force		
	Hosp	Total[1]	%[2]	Hosp	Total[1]	%[2]	Hosp	Total[1]	%[2]	Hosp	Total[1]	%[2]
2009	3,415	11,751	29.1	1,265	2,890	43.8	1,251	2,736	45.7	891	2,651	33.6
2010	3,573	10,866	32.9	1,241	2,748	45.2	1,248	2,834	44.0	995	3,078	32.3
2011	3,501	10,505	33.3	935	2,183	42.8	1,167	2,752	42.4	978	3,156	31.0
2012	4,467	11,948	37.4	1,472	3,214	45.8	1,777	4,029	44.1	859	2,992	28.7
2013	7,162	19,262	37.2	1,174	2,635	44.6	1,276	3,149	40.5	772	2,463	31.3
2014	7,530	19,839	38.0	1,190	2,644	45.0	997	2,919	34.2	986	3,089	31.9
Total	**29,648**	**84,171**	**35.2**	**7,277**	**16,314**	**44.6**	**7,716**	**18,419**	**41.9**	**5,481**	**17,429**	**31.4**

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

Tables 21A-21D present the five most common ICD-9 primary diagnosis codes for hospitalizations among active duty disability evaluations for FY 2009-2013 vs. FY 2014. The following observations are noted:

- Psychiatric disorders were the leading reason for hospitalization among individuals evaluated for disability in all services.
    - For the Army and Marine Corps, adjustment disorders were the most common reason for hospitalization of individuals evaluated for 2014 as well as those evaluated for disability in the previous five year period.

- Episodic mood disorders were the most common reason for hospitalization in 2014 for the Navy disability evaluations and evaluations in the previous five year period.
- In the Air Force, the most common reason for hospitalization in 2014 was affective psychoses though in the previous five year period, hospitalizations due to childbirth were a more common reason for hospitalization then affective psychoses.

TABLE 21A: FIVE MOST COMMON ICD-9 PRIMARY DIAGNOSIS CODES FOR HOSPITALIZATIONS AMONG ACTIVE DUTY DISABILITY EVALUATIONS: **ARMY**, FY 2009-2013 VS. FY 2014

2009-2013			2014		
ICD-9 Diagnosis Code	**n**	**%**	**ICD-9 Diagnosis Code**	**n**	**%**
Adjustment disorders	2,257	10.2	Adjustment disorders	1,074	14.3
Episodic mood disorders	1,975	8.9	Episodic mood disorders	593	7.9
Intervertebral disc disorders	1,263	5.7	Intervertebral disc disorders	425	5.6
Symptoms involving respiratory system and other chest symptoms	928	4.2	Symptoms involving respiratory system and other chest symptoms	349	4.6
Other cellulitis and abscess	617	2.8	Trauma to perineum and vulva during delivery	247	3.3
Total DES Hospitalized	**22,118**		**Total DES Hospitalized**	**7,530**	

TABLE 21B: FIVE MOST COMMON ICD-9 PRIMARY DIAGNOSIS CODES FOR HOSPITALIZATIONS AMONG ACTIVE DUTY DISABILITY EVALUATIONS: **NAVY**, FY 2009-2013 VS. FY 2014

2009-2013			2014		
ICD-9 Diagnosis Code	**n**	**%**	**ICD-9 Diagnosis Code**	**n**	**%**
Episodic mood disorders	628	10.3	Episodic mood disorders	144	12.1
Adjustment disorders	397	6.5	Adjustment disorders	111	9.3
Trauma to perineum and vulva during delivery	330	5.4	Trauma to perineum and vulva during delivery	77	6.5
Intervertebral disc disorders	284	4.7	Intervertebral disc disorders	53	4.5
Schizophrenic disorders	205	3.4	Anxiety, dissociative and somatoform disorders	43	3.6
Total DES Hospitalized	**6,087**		**Total DES Hospitalized**	**1,190**	

TABLE 21C: FIVE MOST COMMON ICD-9 PRIMARY DIAGNOSIS CODES FOR HOSPITALIZATIONS AMONG ACTIVE DUTY DISABILITY EVALUATIONS: **MARINE CORPS**, FY 2009-2013 VS. FY 2014

2009-2013			2014		
ICD-9 Diagnosis Code	**n**	**%**	**ICD-9 Diagnosis Code**	**n**	**%**
Adjustment disorders	520	7.7	Adjustment disorders	83	8.3
Episodic mood disorders	457	6.8	Episodic mood disorders	43	4.3
Traumatic amputation of leg(s)	232	3.5	Other complications of procedures, not elsewhere classified	42	4.2
Other complications of procedures, not elsewhere classified	226	3.4	Acute appendicitis	41	4.1
Fracture of tibia and fibula	218	3.2	Intervertebral disc disorders	36	3.6
Total DES Hospitalized	**6,719**		**Total DES Hospitalized**	**997**	

TABLE 21D: FIVE MOST COMMON ICD-9 PRIMARY DIAGNOSIS CODES FOR HOSPITALIZATIONS AMONG ACTIVE DUTY DISABILITY EVALUATIONS: **AIR FORCE**, FY 2009-2013 VS. FY 2014

2009-2013			2014		
ICD-9 Diagnosis Code	**n**	**%**	**ICD-9 Diagnosis Code**	**n**	**%**
Trauma to perineum and vulva during delivery	297	6.9	Affective psychoses	103	8.8
Affective psychoses	269	6.2	Trauma to perineum and vulva during delivery	84	7.2
Intervertebral disc disorders	181	4.2	Adjustment reaction	67	5.7
Symptoms involving respiratory system and other chest symptoms	148	3.4	Intervertebral disc disorders	63	5.4
Adjustment reaction	144	3.3	General symptoms	45	3.8
Total DES Hospitalized	**4,312**		**Total DES Hospitalized**	**1,169**	

Tables 22A-22D present the most prevalent hospitalization ICD-9 categories within leading disability body system categories by service for FY 2009-2013 vs. FY 2014. 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.

The rate observations for hospitalizations were as follows:

- Total rate of hospitalization varied from 36% in the Army to 53% in the Marine Corps.
- From 2009 to 2013, the rate of hospitalization varied from 24% in Navy to 41% in the Army.
- In all services, the rates of hospitalization were lowest in individuals discharged with a musculoskeletal condition. 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.
- In 2014, the percentage of musculoskeletal disability cases with a history of hospitalization for a musculoskeletal condition varied from 10% in the Army to 18% in the Marine Corps.
- Rates of psychiatric hospitalizations varied from 14% of psychiatric disability discharges in the Army to 34% of psychiatric disability discharges in the Navy in 2014. Similar trends in the rate of hospitalization by body system type were observed in the previous five year period though considerable variation was observed by service.

TABLE 22A: MOST PREVALENT HOSPITALIZATION ICD-9 CATEGORIES WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: **ARMY**, FY 2009-2013 VS. FY 2014

2009-2013			2014		
	n	%[1]		n	%[1]
Total Individuals Discharged	**66,757**	**100**	**Total Individuals Discharged**	**26,446**	**100**
Musculoskeletal	6,395	9.6	Psychiatric	2,000	7.6
Psychiatric	4,662	7.0	Musculoskeletal	1,947	7.4
Neurological	1,726	2.6	Neurological	539	2.0
Any Hospitalization	27,359	41.0	Any Hospitalization	9,715	36.7
Musculoskeletal	**47,084**	**70.5**	**Musculoskeletal**	**18,626**	**70.4**
Musculoskeletal	5,671	12.0	Musculoskeletal	1,771	9.5
Psychiatric	1,926	4.1	Psychiatric	826	4.4
Neurological	1,040	2.2	Neurological	350	1.9
Any Hospitalization	17,701	37.6	Any Hospitalization	6,384	34.3
Psychiatric	**24,007**	**36.0**	**Psychiatric**	**11,819**	**44.7**
Psychiatric	3,735	15.6	Psychiatric	1,664	14.1
Musculoskeletal	2,096	8.7	Musculoskeletal	775	6.6
Neurological	685	2.9	Neurological	244	2.1
Any Hospitalization	12,131	50.5	Any Hospitalization	5,039	42.6
Neurological	**15,320**	**22.9**	**Neurological**	**6,614**	**25.0**
Musculoskeletal	1,925	12.6	Musculoskeletal	682	10.3
Psychiatric	882	5.8	Psychiatric	387	5.9
Neurological	816	5.3	Neurological	269	4.1
Any Hospitalization	7,835	51.1	Any Hospitalization	2,854	43.2

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.

TABLE 22B: MOST PREVALENT HOSPITALIZATION ICD-9 CATEGORIES WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: **NAVY**, FY 2009-2013 VS. FY 2014

2009-2013			2014		
	n	%[1]		n	%[1]
Total Individuals Discharged	**13,670**	**100**	**Total Individuals Discharged**	**2,644**	**100**
Psychiatric	1,095	8.0	Psychiatric	475	18.0
Musculoskeletal	995	7.3	Musculoskeletal	276	10.4
Neurological	419	3.1	Neurological	139	5.3
Any Hospitalization	4,574	33.5	Any Hospitalization	1,495	56.5
Musculoskeletal	**4,267**	**31.2**	**Musculoskeletal**	**1,220**	**46.1**
Musculoskeletal	783	18.4	Musculoskeletal	222	18.2
Psychiatric	136	3.2	Psychiatric	69	5.7
Neurological	132	3.1	Neurological	41	3.4
Any Hospitalization	1,608	37.7	Any Hospitalization	508	41.6
Psychiatric	**2,546**	**18.6**	**Psychiatric**	**1,162**	**43.9**
Psychiatric	909	35.7	Psychiatric	396	34.1
Musculoskeletal	119	4.7	Musculoskeletal	48	4.1
Neurological	72	2.8	Neurological	43	3.7
Any Hospitalization	1,437	56.4	Any Hospitalization	639	55.0
Neurological	**2,067**	**15.1**	**Neurological**	**645**	**24.4**
Neurological	257	12.4	Neurological	79	12.2
Musculoskeletal	225	10.9	Musculoskeletal	70	10.9
Psychiatric	84	4.1	Psychiatric	33	5.1
Any Hospitalization	996	48.2	Any Hospitalization	302	46.8

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.

TABLE 22C: MOST PREVALENT HOSPITALIZATION ICD-9 CATEGORIES WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: **MARINE CORPS**, FY 2009-2013 VS. FY 2014

2008-2012			2013		
	n	%[1]		n	%[1]
Total Individuals Discharged	**15,500**	**100**	**Total Individuals Discharged**	**2,919**	**100**
Musculoskeletal	2,183	14.1	Musculoskeletal	435	14.9
Psychiatric	1,009	6.5	Psychiatric	339	11.6
Neurological	425	2.7	Neurological	126	4.3
Any Hospitalization	5,571	35.9	Any Hospitalization	1,544	52.9
Musculoskeletal	**7,415**	**47.8**	**Musculoskeletal**	**2,053**	**70.3**
Musculoskeletal	1,905	25.7	Musculoskeletal	368	17.9
Neurological	218	2.9	Neurological	65	3.2
Psychiatric	201	2.7	Psychiatric	61	3.0
Any Hospitalization	3,015	40.7	Any Hospitalization	760	37.0
Psychiatric	**3,180**	**20.5**	**Psychiatric**	**1,485**	**50.9**
Psychiatric	820	25.8	Psychiatric	307	20.7
Musculoskeletal	386	12.1	Musculoskeletal	139	9.4
Neurological	95	3.0	Dermatological	42	2.8
Any Hospitalization	1,727	54.3	Any Hospitalization	713	48.0
Neurological	**2,888**	**18.6**	**Neurological**	**861**	**29.5**
Musculoskeletal	530	18.4	Musculoskeletal	114	13.2
Neurological	220	7.6	Neurological	62	7.2
Psychiatric	130	4.5	Psychiatric	42	4.9
Any Hospitalization	1,406	48.7	Any Hospitalization	377	43.8

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.

TABLE 22D: MOST PREVALENT HOSPITALIZATION ICD-9 CATEGORIES WITHIN LEADING DISABILITY BODY SYSTEM CATEGORIES: **AIR FORCE**, FY 2009-2013 VS. FY 2014

2008-2012			2013		
	n	%[1]		n	%[1]
Total Individuals Discharged	**11,318**	**100**	**Total Individuals Discharged**	**2,956**	**100**
Musculoskeletal	585	5.2	Psychiatric	206	7.0
Psychiatric	505	4.5	Musculoskeletal	184	6.2
Neurological	238	2.1	Neurological	101	3.4
Any Hospitalization	4,312	38.1	Any Hospitalization	1,169	39.5
Musculoskeletal	**5,304**	**46.9**	**Musculoskeletal**	**1,176**	**39.8**
Musculoskeletal	472	8.9	Musculoskeletal	135	11.5
Neurological	99	1.9	Neurological	44	3.7
Psychiatric	93	1.8	Psychiatric	34	2.9
Any Hospitalization	1,941	36.6	Any Hospitalization	524	44.6
Psychiatric	**2,717**	**24.0**	**Psychiatric**	**578**	**19.6**
Psychiatric	418	15.4	Psychiatric	182	31.5
Musculoskeletal	101	3.7	Musculoskeletal	50	8.7
Neurological	55	2.0	Neurological	33	5.7
Any Hospitalization	1,130	41.6	Any Hospitalization	488	84.4
Neurological	**2,105**	**18.6**	**Neurological**	**439**	**14.9**
Musculoskeletal	136	6.5	Musculoskeletal	69	15.7
Neurological	125	5.9	Neurological	63	14.4
Psychiatric	46	2.2	Psychiatric	21	4.8
Any Hospitalization	888	42.2	Any Hospitalization	311	70.8

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.

Database Limitations

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. Therefore, not all data elements were available for the full study period for all services.

- 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. MOS 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.

- Medical Evaluation Board (MEB) ICD-9 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 codes.

- 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. This may limit the ability to study the relationship between characteristics of service members at accession and disability evaluation, separation, and retirement in detail.

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

Data Quality and Standardization Recommendations

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-10 codes.

2. No metric is currently available to determine the severity of the injury or medical condition which resulted in the medical board. Inclusion of laboratory and diagnostic information on the medical condition or injury that precipitated the disability evaluation in each service's disability database is recommended so that severity of disability conditions can be objectively assessed.

3. 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 evaluation of the role of MOS and education on disability evaluation, separation, and retirement, including changes in these characteristics throughout length of service.

4. 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 and whether medical condition for which a service member is undergoing disability.

5. High utilization of analogous codes, particularly among individuals with musculoskeletal disabilities, and lack of formal MEB medical diagnosis in the electronic file preclude 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 to inform interventions to decrease disability.

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Special Studies

Risk of Disability Discharge in Accessions with a History of Medical Disqualification or Waiver: FY 2003-2013 Enlisted Active and Reserve Component

Background

There is significant interest in the role of pre-existing medical conditions among service members and how these conditions are associated with the risk of disability. Prior to accession, service members are screened for medical conditions at Military Entrance Processing Stations (MEPS). During these screenings medical conditions may be identified medically disqualifying the applicant. Some of these conditions, such as exceeding weight for height standards, can be remediated the applicant can return at a later date and be eligible for accession. Other conditions, such as hearing loss exceeding medical standards, require a medical waiver prior to accession.

Previous studies have examined the relationship between medical waivers for specific reasons and attrition [1-4]. Other studies have examined the risk of disability discharge associated with any waiver [5,6]. Medical disqualification has also been examined as a risk factor for both attrition [7] and disability [8-10]. However, no studies have examined the relationship between specific types of waivers or medical disqualifications (i.e. cardiac, vision, psychiatric) and disability discharge for any reason. The objective of this study was to determine the relative risk of disability associated with a pre-existing medical condition whether or not a waiver was required.

Methods

This study was restricted to enlisted active and reserve component accessions that entered the Army, Navy, and Marine Corps between FY 2003 and FY 2013 and Air Force accessions between FY 2006 and FY 2013. MEPS medical examination records were located for the accessed population; only applications to the same service as accession with medical examinations that occurred in the 730 days prior to accession. Applicants at MEPS were classified as disqualified if they had either and OMF code or an ICD-9 code regardless of whether the disqualification was temporary or permanent. Waivers approved in the 730 days prior to accession in the same service as the accession were also collected for the accessed population and classified in to condition types using the ICD-9 code associated with each waiver record. Accessions were deemed disability discharged if they had a disability evaluation that occurred after their accession date and within the same service. Only disability evaluations that resulted in a disposition of separated with severance pay, temporary disability retired, or permanent disability retired were considered discharged.

Those with a disability disposition of separated without benefit or fit were not considered disability discharges.

Individuals who received both a disqualification and a waiver were included in both groups. Similarly, individuals with more than one disqualification and/or waiver condition type were included in all applicable condition categories. Percent disqualified and waived were calculated per accessed population while percent disabled were calculated per accessions with disqualification or waiver respectively. Relative risk was calculated comparing the prevalence of disability in the exposed population, either disqualified or waived as appropriate, to the prevalence of disability in the unexposed population (i.e. fully qualified or non-waived population).

Results

Table 23 shows the relative risk of disability in individuals with history of medical disqualification or waiver relative to the rest of the accessed population. Overall, 14% of soldiers who accessed in FY 03-13 had either a temporary or permanent DQ prior to accession; 6% of these individuals were subsequently disabled. The risk of disability discharge in individuals with a history of medical disqualification for any condition was 1.31 times the risk in those who were fully qualified, a difference that was statistically significant (95% CI: 1.29, 1.34). When looking at the risk of disability associated with specific types of medical disqualifications the risk was highest among those with a previous disqualification due to weight (RR: 2.20, 95% CI: 1.96, 2.47) and was lowest (and in fact protective) among those with a visual impairment disqualification (RR: 0.71, 95% CI 0.64, 0.79). The second highest risk of disability was associated with a history of medical disqualification related to hearing loss which was associated with a 74% increased risk of disability (RR: 1.74, 95% CI: 1.58, 1.92).

Similar, patterns of disability discharge risk were observed in soldiers who accessed with a waiver. Overall, waiver for any reason was significantly associated with an increased risk of disability (RR: 1.19, 95% CI: 1.15, 1.22). The highest risk of disability discharge was among those who accessed with a waiver for hearing loss (RR: 1.80, 95% CI: 1.62, 1.99) and the lowest relative risk, a risk that was significantly protective, was observed in individuals with a waiver for visual impairment (RR: 0.71, 95% CI: 0.64, 0.79).

The relative risks of disability associated with medical disqualifications and waivers by condition type in Navy accessions are shown in Table 24. About 12% of Navy accessions had a history of medical disqualification and 2% of these individuals went on to be discharged with a service-connected disability. Overall, the risk of disability among sailors with a medical disqualification was significantly higher than among fully qualified sailors (RR: 1.37, 95% CI: 1.29, 1.45). When examining significant risk of disability by specific type of medical disqualification the highest risk was observed in those with a musculoskeletal disqualification (RR: 1.78, 95% CI: 1.58, 1.99) and

was second highest in sailors with a history of neurological disqualification (RR: 1.69, 95% CI: 1.23, 2.31).

About 5% of Navy accessions had a medical waiver prior to accession and about 2% of these individuals went on to be discharged with a disability. The risk of disability in sailors who access with a waiver is significantly elevated relative to those who access without a waiver (RR: 1.27, 95% CI: 1.15, 1.22). Significantly increased risk of disability was highest among sailors with a waiver for musculoskeletal conditions (RR: 1.60, 95% CI : 1.37, 1.88), hearing loss (RR: 1.59, 95% CI: 1.13, 2,22), and respiratory conditions (RR: 1.59, 95% CI: 1.19, 2.14) conditions. Waivers for cardiac conditions (RR: 1.41, 95% CI: 1.10, 1.80) and psychiatric conditions (RR: 1.40, 95% CI: 1.05, 2.88) were also associated with a significantly increased risk of disability discharge relative to those with no waiver.

The relative risk of disability associated with specific types of disqualifying and waived conditions in Marines is shown in Table 25. Overall, about 14% of Marine Corps accessions had a history of DQ and 4% of these individuals were subsequently disabled. This represented a significantly increased risk of disability discharge in Marines with a history of medical disqualification (RR: 1.23, 95% CI: 1.18, 1.29). The highest risk of disability discharge in Marines was observed in those with a history of medical disqualification due to musculoskeletal conditions (RR: 1.77, 95% CI: 1.64, 1.92). Cardiac conditions (RR: 1.31, 95% CI: 1.11, 1.54), weight (RR: 1.25, 95% CI: 1.15, 1.35), and substance abuse (RR: 1.23, 95% CI: 1.07, 1.41) disqualifications were also significantly associated with and increased risk of disability discharge.

About 4% of Marines accessed with a waiver and 4% of those individuals were subsequently disability discharged. This represented a significantly increased risk of disability in the waived population relative to those that access without a waiver (RR: 1.28, 95% CI: 1.19, 1.38). Similar to the medically disqualified population, those with waivers for musculoskeletal conditions had the highest significant risk of disability discharge (RR: 1.64, 95% CI: 1.43, 1.88) though risk of disability was also significantly increased among those with cardiac (RR: 1.51, 95% CI: 1.23, 1.86), psychiatric (RR: 1.55, 95% CI: 1.27 1.89), and weight (RR: 8.25, 95% CI: 1.16, 58.5) waivers.

Disqualifying and wavier condition types and associated risk of disability discharge is shown for the Air Force in Table 26. Overall about 10% of Air Force accessions had a history of a medical disqualification and about 1.5% of those individuals went on to be disability discharged. About 4% of Airmen accessed with a waiver and about 1.5% of those individuals went on to be disability discharged. Neither the risk of disability associated with a history of medical disqualification nor the risk associated with waiver was significantly different than the risk in the fully qualified population.

Discussion

In all services except the Air Force, history of a medical disqualification or waiver was significantly associated with an increased risk of disability discharge that ranged from 19% to 37%. In the Air Force, neither medical disqualifications nor waivers in aggregate or by type were significantly associated with disability discharge. However, complete disability data are only available for the Air Force from FY 2007 to FY 2013, restricting the population available for study and potentially resulting in a sample size that is underpowered to detect an association between disqualifications or waivers and disability discharges.

History of disqualifications for weight, musculoskeletal conditions, cardiac conditions, and substance abuse were significantly associated with an elevated risk of disability discharge in all services except the Air Force. Disqualifications for hearing were associated with an increased risk of disability discharge in the Army only; disqualifications for neurological conditions were associated with an elevated risk of disability discharge in the Navy only. When examining history of medical waiver, cardiac, musculoskeletal, and psychiatric condition waivers were significantly associated with an increased risk of disability in all services except the Air Force. In addition, hearing loss waivers were significantly associated with disability discharge in the Army and Navy.

Despite the significant associations observed between medical disqualification or waiver and disability discharge, disability discharge is a rare event in all services occurring in 1.5-6% of the medically disqualified population and waived population. Medical disqualification and waiver are also rare in the accessed population; history of disqualification was present in 10-14% of the accessed population and waiver was present in 4-7% of the accessed population. Thus, while the risk of disability associated with a given medical disqualification may be significantly elevated, the total number of personnel affected is small. The proportion of accessions with a history of medical disqualification and a disability discharge ranges from 0.1% in the Air Force to 0.9% in the Army. The proportion with medical waivers at accession and a subsequent disability discharge ranges from 0.1% in the Air Force and Navy to 0.4% in the Army. Therefore, the elimination of disqualifications and waivers in accessions cannot be expected to have a meaningful impact on the number of disability cases overall and may result in the exclusion of valuable service members from the military population. Further research is necessary to determine if specific types of disqualifications and waivers (i.e. musculoskeletal conditions and weight) would be meaningful targets for interventions to reduce future disability.

TABLE 23: RELATIVE RISK OF DISABILITY DISCHARGE IN ACTIVE DUTY AND RESERVED ENLISTED ACCESSIONS WITH A HISTORY OF MEDICAL DISQUALIFICATION OR WAIVER BY CONDITION TYPE: **ARMY** FY 2003-2013 ACCESSIONS

	History of DQ				Waiver			
Condition Type	**Percent DQ'd**	**Percent Disabled**	**Rel Risk Disability**	**95% CI**	**Percent Waived**	**Percent Disabled**	**Rel Risk Disability**	**95% CI**
Cardiac	0.7	6.6	1.39	(1.26, 1.52)	0.8	7.2	1.48	(1.36, 1.61)
Dermatologic	0.6	5.2	1.10	(0.98, 1.23)	0.4	5.4	1.10	(0.95, 1.27)
Hearing	0.5	8.3	1.74	(1.58, 1.92)	0.5	8.8	1.80	(1.62, 1.99)
Musculoskeletal	1.8	6.0	1.26	(1.18, 1.34)	1.4	5.9	1.22	(1.13, 1.31)
Neurological	0.2	5.7	1.21	(0.97, 1.50)	0.1	4.9	1.01	(0.77, 1.33)
Psychiatric	1.1	6.9	1.46	(1.35, 1.58)	0.5	6.0	1.23	(1.10, 1.38)
Respiratory	0.5	5.7	1.20	(1.06, 1.37)	0.3	6.2	1.27	(1.10, 1.47)
Substance Abuse	0.8	7.4	1.56	(1.43, 1.71)	0.1	5.5	1.12	(0.84, 1.50)
Visual Impairment	1.2	3.4	0.71	(0.64, 0.79)	1.1	3.5	0.71	(0.64, 0.79)
Weight	0.3	10.4	2.20	(1.96, 2.47)	0.1	6.8	1.40	(1.09, 1.80)
Total Accessions	**14.2**	**6.2**	**1.31**	**(1.29, 1.34)**	**7.2**	**5.8**	**1.19**	**(1.15, 1.22)**

TABLE 24: RELATIVE RISK OF DISABILITY DISCHARGE IN ACTIVE DUTY AND RESERVED ENLISTED ACCESSIONS WITH A HISTORY OF MEDICAL DISQUALIFICATION OR WAIVER BY CONDITION TYPE: **NAVY** FY 2003-2013 ACCESSIONS

	History of DQ				Waiver			
Condition Type	**Percent DQ'd**	**Percent Disabled**	**Rel Risk Disability**	**95% CI**	**Percent Waived**	**Percent Disabled**	**Rel Risk Disability**	**95% CI**
Cardiac	1.0	2.2	1.44	(1.19, 1.75)	0.6	2.2	1.41	(1.10, 1.80)
Dermatologic	1.1	1.7	1.09	(0.88, 1.35)	0.3	1.7	1.09	(0.71, 1.65)
Hearing	0.4	1.7	1.09	(0.77, 1.55)	0.3	2.5	1.59	(1.13, 2.22)
Musculoskeletal	2.4	2.7	1.78	(1.58, 1.99)	1.3	2.5	1.60	(1.37, 1.88)
Neurological	0.3	2.6	1.69	(1.23, 2.31)	0.1	2.2	1.37	(0.69, 2.75)
Psychiatric	0.9	1.9	1.21	(0.97, 1.51)	0.4	2.2	1.40	(1.05, 1.88)
Respiratory	0.8	2.3	1.51	(1.22, 1.85)	0.4	2.5	1.59	(1.19, 2.14)
Substance Abuse	0.6	2.3	1.47	(1.15, 1.88)	0.1	0.8	0.51	(0.13, 2.02)
Visual Impairment	1.0	1.4	0.93	(0.74, 1.18)	0.8	1.5	0.93	(0.71, 1.20)
Weight	2.8	2.3	1.47	(1.31, 1.65)	<0.1	-	-	-
Total Accessions	**11.7**	**2.1**	**1.37**	**(1.29, 1.45)**	**5.3**	**2.0**	**1.27**	**(1.15, 1.22)**

TABLE 25: RELATIVE RISK OF DISABILITY DISCHARGE IN ACTIVE DUTY AND RESERVED ENLISTED ACCESSIONS WITH A HISTORY OF MEDICAL DISQUALIFICATION OR WAIVER BY CONDITION TYPE: **MARINE CORPS** FY 2003-2013 ACCESSIONS

	History of DQ				Waiver			
Condition Type	**Percent DQ'd**	**Percent Disabled**	**Rel Risk Disability**	**95% CI**	**Percent Waived**	**Percent Disabled**	**Rel Risk Disability**	**95% CI**
Cardiac	0.9	3.9	1.31	(1.11, 1.54)	0.5	4.6	1.51	(1.23, 1.86)
Dermatologic	1.2	2.9	0.98	(0.83, 1.16)	0.2	3.3	1.08	(0.76, 1.54)
Hearing	0.5	3.1	1.04	(0.81, 1.34)	0.2	3.7	1.20	(0.86, 1.69)
Musculoskeletal	2.6	5.3	1.77	(1.63, 1.92)	1.0	5.0	1.64	(1.43, 1.88)
Neurological	0.4	3.4	1.15	(0.87, 1.51)	0.1	2.3	0.77	(0.37, 1.61)
Psychiatric	1.2	3.5	1.16	(1.00, 1.34)	0.5	4.7	1.55	(1.27, 1.89)
Respiratory	1.0	3.2	1.07	(0.90, 1.27)	0.4	3.3	1.09	(0.84, 1.41)
Substance Abuse	1.3	3.6	1.23	(1.07, 1.41)	0.1	2.2	0.72	(0.34, 1.51)
Visual Impairment	0.9	2.8	0.95	(0.78, 1.15)	0.6	2.7	0.89	(0.70, 1.14)
Weight	4.2	3.7	1.25	(1.15, 1.35)	<0.1	25.0	8.25	(1.16, 58.5)
Total Accessions	**14.0**	**3.7**	**1.23**	**(1.18, 1.29)**	**4.3**	**3.9**	**1.28**	**(1.19, 1.38)**

TABLE 26: RELATIVE RISK OF DISABILITY DISCHARGE IN ACTIVE DUTY AND RESERVED ENLISTED ACCESSIONS WITH A HISTORY OF MEDICAL DISQUALIFICATION OR WAIVER BY CONDITION TYPE: **AIR FORCE** FY 2006-2013 ACCESSIONS

	History of DQ				Waiver			
Condition Type	**Percent DQ'd**	**Percent Disabled**	**Rel Risk Disability**	**95% CI**	**Percent Waived**	**Percent Disabled**	**Rel Risk Disability**	**95% CI**
Cardiac	1.0	1.6	1.05	(0.77, 1.44)	0.6	1.6	1.00	(0.65, 1.55)
Dermatologic	1.0	1.1	0.73	(0.50, 1.07)	0.2	1.2	0.78	(0.35, 1.75)
Hearing	0.2	1.5	0.95	(0.43, 2.11)	0.0	-	-	-
Musculoskeletal	2.1	1.8	1.18	(0.95, 1.45)	1.0	1.8	1.15	(0.85, 1.56)
Neurological	0.3	1.6	1.04	(0.59, 1.84)	0.1	1.0	0.66	(0.21, 2.05)
Psychiatric	1.1	1.3	0.85	(0.61, 1.19)	0.7	1.5	0.96	(0.64, 1.45)
Respiratory	0.7	1.4	0.89	(0.60, 1.33)	0.3	1.5	0.96	(0.50, 1.84)
Substance Abuse	0.1	0.5	0.30	(0.04, 2.12)	0.0	1.8	1.16	(0.16, 8.25)
Visual Impairment	1.0	1.2	0.76	(0.52, 1.11)	0.7	1.7	1.06	(0.73, 1.54)
Weight	1.4	1.8	1.15	(0.89, 1.48)	0.0	-	-	-
Total Accessions	**9.6**	**1.5**	**0.96**	**(0.87, 1.07)**	**4.3**	**1.4**	**0.92**	**(0.78, 1.08)**

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