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14. ABSTRACT AMSARA's mission is to support the development of evidence based medical standards for the Department of Defense (DoD) by guiding improvement of medical and administrative databases and conducting epidemiologic and special studies analyses. Analyses presented in this annual report include analyses of accession medical disqualifications, waivers, existed prior to service and disability discharges. Descriptive statistics are reported for DoD enlisted accessions who enlisted in 2012 compared to FY 2007 through FY 2011 accessions totals. Data are collected while the recruits remain on active duty for the first fiscal year (through fiscal year 2012 for this report). The data are then merged, analyzed and results presented as aggregated tables and figures.					
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Accession Medical Standards
Analysis & Research Activity



Attrition & Morbidity Data for 2012 Accessions

Annual Report 2013



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**Accession Medical Standards Analysis & Research Activity
2013 Annual Report
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The views expressed are those of the authors and should not be construed to represent the positions of the Department of the Army or Department of Defense.

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Executive Summary

The Accession Medical Standards Analysis and Research Activity (AMSARA) has completed its seventeenth year of providing the Department of Defense with evidence-based evaluations of accession medical standards. AMSARA evaluates medical standards and retention programs to improve military readiness by maximizing both the accession and retention of motivated and capable recruits. This report provides findings from selected special studies and descriptive data on FY 2012 accessions.

Section 1 of this report, Special Studies, presents brief reports on selected research conducted at AMSARA. Special studies in this annual report include analysis of variation in deployment length among military personnel, examination of the Assessment of Recruit Motivation and Strength (ARMS) study accession fitness test as a predictor of respiratory conditions in the first six months of service, and evaluation of the Tailored Adaptive Personality Assessment System (TAPAS), a non-cognitive accession aptitude test, as a predictor of overuse injuries early in service.

Section 2 of this report includes the descriptive statistics AMSARA compiles and publishes annually for historical and reference value. Descriptive statistics are for applicants who enlisted in FY12 and are compared to the five year aggregate data from FY 2007-2011. Data are collected while the recruits are in their first year of active duty. By convention, the annual report is dated for the first complete year after enlistment (FY 2013). Comparisons can be made between services and on occasion between enlisted component (active, reserve, guard).

Approximately 279,000 active duty, reserve, and National Guard enlisted applicants were examined for medical fitness at Military Entrance Processing Stations (MEPS) in 2012 compared to approximately 323,000 per year average from 2007 to 2011. The age, gender, and race, of active duty, reserves, and Guard enlisted applicants remained relatively constant over the past few years. In 2012, applicants scoring in the lowest Armed Forces Qualification test (AFQT) percentiles for military eligibility (11-49th) decreased in active duty, reserve, and National Guard applicants, relative to the previous 5-year period, a finding noted in previous years' reports as well.

Approximately 13% (2007-2011) of applicants for active duty enlisted service were initially disqualified for service due to permanently disqualifying medical conditions, and another 7% (2007-2011) received temporary disqualifications for conditions that could be remediated. Such recruits, however, are less likely to ultimately become service members, with approximately 55% (2007-2011) of applicants with temporary disqualifications and 48% (2007-2011) of applicants with permanently disqualifying conditions subsequently gained onto active duty service, compared to 78% of fully qualified recruits who accessed. In 2012, disorders of refraction and accommodation (i.e. visual impairment) were the most common reason for medical disqualification. This is the second consecutive year since 1995 that body weight was not the most common reason for medical disqualification and was replaced by disorders of refraction and accommodation. Overweight/obesity and nondependent abuse of cannabis, both historically common temporary disqualifications, continued to decrease compared to previous years.

Accession medical waivers are considered by each service for applicants with a disqualifying medical condition. Accordingly, the conditions most frequently considered for a waiver closely

reflect the most common permanently disqualifying conditions. In total, about 27,000 applications for accession medical waivers were considered in 2012. The number of medical waiver considerations is significantly greater than in 2011, primarily due to improved reporting of Marine Corps records. The percentage of waivers approved varies substantially by the medical condition being considered, with overall approval percentages ranging from 55% to over 90% for the most commonly applied for and most highly approved waivers. Differences in approval percentages between the services may reflect differences in the applicant pools applying to the services, different distributions of conditions being considered for waiver, or different needs of each service.

Hospitalization data are provided for the period 2007-2012. In 2012, there were approximately 5,000 hospitalizations among active duty enlistees (all services) in the first year of service. The rate of first year hospitalization in 2012 was lower than the rate observed in 2007-2011, a trend noted for the past few years. The top reasons for hospitalization within the first year of service for all services 2007-2012 were psychiatric conditions, pneumonia and influenza, and infections of the skin and subcutaneous tissue. During the first two years of service, psychiatric conditions remained the most frequent reason for hospital admissions. However, the frequency of hospitalizations for complications of pregnancy increased dramatically when compared to the first year of service, with pregnancy the most common reason for hospital admission in the second year. For first-time active duty enlistees who accessed in 2007-2012, Army enlistees had the highest risk of hospitalization followed by the Marine Corps. Navy enlistees had the lowest risk of hospitalization. Women, whites, those older in age at the time of enlistment, those with lower military aptitude score (AFQT), and those with a medical disqualification were at higher risk for hospitalization.

All-cause attrition of first-time active duty recruits following 90, 180, 365, and 730 days of service is also described. At two years, the Army had the highest rate of attrition for all services (approximately 20%) while the Air Force had the lowest (about 16%). Being female, white, older at the time of enlistment, achieving lower educational attainment, scoring in the lower percentile groups on the AFQT, and having a medical disqualification were all characteristics associated with significantly higher attrition.

Discharges of recent enlistees for medical conditions that existed prior to service are a costly problem for all branches of the military, and are considerably more common than data indicate. Documentation of EPTS discharges is requested from each Initial Entry Training (IET) site by USMEPCOM but this reporting is not required by service regulations. The total numbers of reported discharges have varied over time and by training base.

Past AMSARA studies have shown that the great majority of EPTS discharges are for medical conditions that were not discovered or disclosed at the time of application for service, with concealment by the applicant being the most common scenario. Accordingly, the primary problem of EPTS discharges appears to be the bypassing of accession medical standards rather than the implementation of those standards. Psychiatric conditions, orthopedic conditions, and asthma continue to be the most common causes of EPTS discharges reported to USMEPCOM. Risk of EPTS discharge varies by service, with those in the Army having the lowest risk and Navy the highest. Increased risk of EPTS discharge is observed for females, recruits older than 30 years of age at accession, whites, recruits without a high school education at accession, recruits who scored in the lower AFQT percentile score groups, and recruits with a medical disqualification.

Disability evaluation is infrequent among new enlistees, with less than one percent of enlistees being considered for such a discharge within the first year of service. The rate of disability evaluation has decreased over the period 2007-2012. The most common disability evaluations during the first year of service for 2007 to 2012 accessions were for diseases of the spine, skull, limbs, and extremities in all services. Other common conditions prompting disability evaluation in the first year of service included prosthetic implants and diseases of the musculoskeletal system, and psychiatric and neurologic disorders. Risk of evaluation for disability discharge in the first year of service was highest in the Army and lowest in the Navy. Characteristics associated with increased risk of disability evaluation include being female, white, aged over 30 at time of accession, and having a lower AFQT score, and medical disqualification.

AMSARA is committed to further development of evidence-based medical standards to enable the DoD to enlist the highest quality applicants in a cost-effective manner, thereby ensuring a healthy, fit, and effective force. The following programmatic recommendations are based on more than 15 years of research:

1. Various databases must be improved. For example, waiver data do not provide sufficient clinical detail such as severity, duration and prognosis to allow analyses of waiver decision criteria.
2. EPTS classification and reporting from the IET sites to USMEPCOM, which is still passive, should be mandated and standardized by DoD/service regulations. Analysis would be enhanced with conversion from paper to digital records.
3. AMSARA should develop expertise in cost-benefit analyses in order to better advise DoD medical standards policy makers.
4. AMSARA should continue prospective and retrospective cohort studies similar to the Assessment of Recruit Motivation and Strength (a study evaluating those who exceed Army body fat standards using a physical fitness test on accession) that challenge current accession standards. MEPS-based studies, including assessments of the Assessment of Individual Motivation (AIM) and the Tailored Adaptive Personality Assessment System (TAPAS), that are outcome oriented (morbidity, occupational qualification and performance, deployability, and attrition) in the area of physical and mental fitness, including motivation to serve, should be prioritized.
5. Rather than study accession medical standards in isolation, medical standards across the continuum of a service member's life-cycle should be analyzed using evidence-based principles. This would include medical standards for deployment and retention, in addition to accession medical standards. In FY 2009 at the direction of ASD Health Affairs, Clinical Program and Policy AMSARA began to systematically evaluate each service's Disability Evaluation System. The first annual retention medical standards analysis and research report was published for FY 2010, with subsequent reports since that time.

Introduction

The Medical-Personnel Executive Steering Committee (formerly the Accession Medical Standards Steering Committee) was established by the Under Secretary of Defense (Personnel and Readiness) to integrate the medical and personnel communities so they could provide policy guidance and establish standards for accession requirements. These standards would stem from evidence-based information provided by analysis and research. The committee is co-chaired by the Deputy Assistant Secretary of Defense (Military Personnel Policy) and the Principal Deputy Assistant Secretary of Defense (Health Affairs) and comprises representatives from the Office of the Assistant Secretary of Defense (Force Health Protection and Readiness), Office of the Assistant Secretary of Defense (Clinical and Program Policy), Office of the Assistant Secretary of Defense (Reserve and Manpower Personnel), Office of the Assistant Secretary of Defense (Civilian Personnel Policy), Offices of the Service Surgeons General, Offices of the Service Deputy Chiefs of Staff for Personnel, and Health and Safety Directorate (Department of Homeland Security, U.S. Coast Guard).

The Accession Medical Standards Working Group is a subordinate working group that reviews accession medical policy issues contained in DoD Instruction 6130.03, entitled "Medical Standards for Appointment, Enlistment, or Induction in the Armed Forces." This group is composed of representatives from each of the offices listed above.

AMSARA was established in 1996 within the Division of Preventive Medicine at Walter Reed Army Institute of Research. AMSARA support the efforts of the Medical-Personnel Executive Steering Committee and the Accession Medical Standards Working Group. The mission of AMSARA is to support the development of evidence-based medical standards by guiding the improvement of medical and administrative databases, conducting epidemiologic analyses, and integrating relevant operational, clinical, and economic considerations into policy recommendations. AMSARA has the following seven key objectives:

1. Validate current and proposed standards utilizing existing databases (e.g., should asthma as a child be disqualifying?);
2. Incorporate prospective research studies to challenge selected standards (e.g., are body weight standards adequate measures of fitness?);
3. Validate assessment techniques (e.g., improve current screening tools);
4. Perform quality assurance (e.g., monitor geographic variation);
5. Optimize assessment techniques (e.g., develop attrition and morbidity prediction models);
6. Track impact of policies, procedures, and waivers;
7. Recommend changes to enhance readiness, protect health, and save money.

Military staffing to support this effort includes MAJ Marlene Gubata, Chief, Department of Epidemiology, and MAJ Michael Boivin, Chief, Accession Medical Standards Analysis and Research Activity.

AMSARA is augmented with contract support through Allied Technology Group, Inc. Staff in 2012 included Dr. David N. Cowan, Program Manager; Vanessa Grinblat-Moglin, Bin Yi, Statisticians; Ricardford Connor, Janice Gary, Alexis Oetting, Elizabeth Packnett, Nadia Urban, Analysts; and Vielka Rivera, Program Administrative Assistant.

1. SPECIAL STUDIES

Variations in length of U.S. Military Deployments 2001 – 2012

Background

The United States Government has demonstrated increasing interest and concern for the potential adverse effects of military deployments on American service members [1]. This is due in part to studies which have suggested that increases in the length of deployments and the number of deployment rotations can increase risk of suffering from disabilities and mental health issues [2,3]. The purpose of this study is to describe the characteristics of service members who were deployed and compare the length and number of deployments across military services, between October 1, 2001 and September 30, 2012.

Methods

All subjects were enlisted personnel in the Army, Navy, Marine Corps and Air Force from both active duty and reserve components, who completed at least one deployment between October 1, 2001 and September 30, 2012. For the purpose of this study, individuals with ongoing deployments, personnel who were wounded or killed in action, and deployments of less than 30 days and greater than 730 days were not included in the analyses. Data on history of deployments and casualties were provided by the Defense Manpower Data Center (DMDC). Military occupation status was collected from DMDC deployment data and categorized based on occupation code definitions included within the data file.

Results

Table 1.1 shows the demographic characteristics (at time of deployment) of the active duty and reserve personnel deployed between fiscal year 2002-2012. Among active duty personnel in the four military services, most individuals deployed were between the ages of 20-24. This age group was also the most common in Marine Corps reservists. Among reservists in the Army, Navy, and Air Force the highest percentage of individuals deployed were older than 30. Most personnel at time of deployment had received a high school diploma. This was evident in both active duty and reserve Army, Navy and Marine Corp personnel. In the Air Force however, the highest proportion of reserve personnel deployed had some level of college training while among active duty personnel the largest section had only completed high school.

The distribution of Military Occupation Specialty (MOS) categories across services indicates that the most common MOS category among Army and Marine Corps personnel who deployed was Infantry, Gun Crew and Seaman/ship specialist regardless of component. In the active duty Navy the most common MOS was Electrical/Mechanical and Equipment repairers, and among Navy reserves the leading MOS category was Infantry, Gun Crew and Seaman/ship specialist. The most common MOS category in deployed Air Force personnel was Electrical/Mechanical and Equipment repairers regardless of whether the deployed Airman was active duty or reserve component.

TABLE 1.1: CHARACTERISTICS OF THE STUDY POPULATION AT DEPLOYMENT (ALL DEPLOYMENTS)

	Army		Navy		Marine Corps		Air Force	
	Active %	Reserve %	Active %	Reserve %	Active %	Reserve %	Active %	Reserve %
Age at Deployment								
<20	6.8	4.3	6.3	0.5	11.0	4.8	2.8	0.7
20-24	41.6	31.1	44.5	12.1	61.7	57.6	39.6	14.2
25-29	24.1	20.3	20.6	14.6	15.6	25.0	25.8	16.4
30+	27.4	44.3	28.6	72.8	11.7	12.6	31.8	68.7
Missing/Unknown	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Education								
Less than HS	1.0	2.8	1.6	0.9	0.2	0.5	0.1	0.7
HS Graduate	77.6	66.2	87.3	72.6	94.3	90.1	82.5	31.3
Some College	6.4	13.9	4.4	11.5	2.2	3.7	13.2	60.2
Bachelor's or Higher	3.8	7.2	2.7	9.7	1.0	4.3	3.9	7.3
Other	9.4	9.3	2.9	3.2	1.6	1.3	0.0	0.2
Missing/Unknown	1.8	0.6	1.1	2.1	0.7	0.1	0.3	0.3
MOS								
Infantry, Gun Crews, and Seamanship	30.5	24.0	11.1	19.2	37.4	40.6	13.6	23.6
Electronic Equipment Repairers	5.9	3.3	11.2	6.9	6.0	3.2	8.2	7.4
Communications and Intelligence	11.7	7.6	9.2	5.6	9.9	9.2	8.8	3.5
Health Care	5.2	4.9	7.0	7.0	0.0	0.0	4.0	3.4
Other Technical and Allied	3.0	2.5	1.8	0.6	2.0	1.5	4.6	3.6
Functional Support and Administration	12.1	16.4	10.0	17.0	10.6	8.4	17.5	14.1
Electrical/Mechanical Equipment	15.4	13.7	32.4	16.9	16.6	12.7	26.3	30.7
Crafts workers	2.4	5.8	6.6	17.9	3.5	4.1	5.7	5.7
Service and Supply Handlers	13.7	20.7	6.3	7.3	13.5	18.3	11.0	7.8
Other	0.1	1.1	4.4	1.6	0.5	2.0	0.3	0.2
Total	1,049,771	503,507	506,42	43,375	351,704	46,918	497,186	194,946

Table 1.2 shows the distribution of deployments and a comparison of the average length of first compared to all other deployments by military service and component from FY 2002 to 2012. Multiple deployments were more common in the Air Force than in all other services; 60% of reservists and 54% of active duty Airmen were deployed more than once. However, among both active duty and reserve Airmen, the average length of deployment and total months deployed were the lowest among all services. In the Army, Navy, and Marine Corps approximately 50% of active duty deployed only once; single deployments were more common in the reserves for all three services. Army deployments were longest, regardless of component, with a median deployment length of 11.4 months in active duty deployments and 9.7 months in reservists. Median Navy deployments were 6 months among active duty and 7 months in reservists. Marine Corps median deployment lengths were similar to those observed in the Navy. Air Force deployments were shortest on average. Deployments averaged 4 months among active duty personnel and about 2 months among reserve component Airmen.

TABLE 1.2: CHARACTERISTICS OF DEPLOYMENT BY SERVICE AND COMPONENT

	Army		Navy		Marine Corps		Air Force	
	Active	Reserve	Active	Reserve	Active	Reserve	Active	Reserve
Deployments	1,049,771	503,507	506,423	43,375	351,704	46,918	497,186	194,946
Service members	608,166	371,871	31,8479	31,996	225,691	39,179	262,214	92,543
One Deployment	50.0%	67.2%	49.9%	60.4%	53.3%	74.1%	46.4%	40.1%
>1 Deployment	50.0%	32.8%	50.1%	39.7%	46.7%	25.9%	53.6%	59.9%
Number of Deployments								
1	50.0%	67.2%	49.9%	60.4%	53.3%	74.1%	46.4%	40.1%
2	29.8%	24.4%	31.0%	24.1%	33.9%	19.1%	27.1%	26.4%
3+	20.2%	8.4%	19.1%	15.5%	12.8%	6.8%	26.5%	33.5%
Deployment Length (months)								
Mean (SD)	9.93±3.82	9.08±3.40	5.98±2.56	6.54±3.39	6.69±2.82	6.91±2.90	4.72±2.06	3.14±1.92
Median	11.4	9.7	6.1	7.0	6.7	6.9	4.3	2.8
Total Time Deployed (months)								
Mean (SD)	9.43±4.15	8.79±3.65	5.78±2.51	6.21±3.50	6.60±2.72	6.60±2.89	4.42±2.04	2.77 ±1.79
Median	11.1	9.5	6.1	7.0	6.7	6.9	4.2	2.1

Figures 1.1 through 1.4 show the distribution of the number of deployments, and the average length of deployments by fiscal year among the Army, Navy, Marine Corps and Air force. Due to incomplete follow up, and high occurrence of ongoing deployments (which were removed from the analysis) in FY 2012, deployments during that began during FY 2012 were not included in these analyses. Over the ten year time period the Army consistently had the most deployments as well as the longest average deployments among both active duty and reserve deployments. The Marine Corps consistently had the lowest number of deployments among active duty personnel during that same period except for FY 2004 where the Navy had the lowest total number of deployments. Average deployment length was similar within each service when comparing active duty to reserves. Regardless of year of deployment Army deployments were consistently the longest while Air Force deployments were shortest.

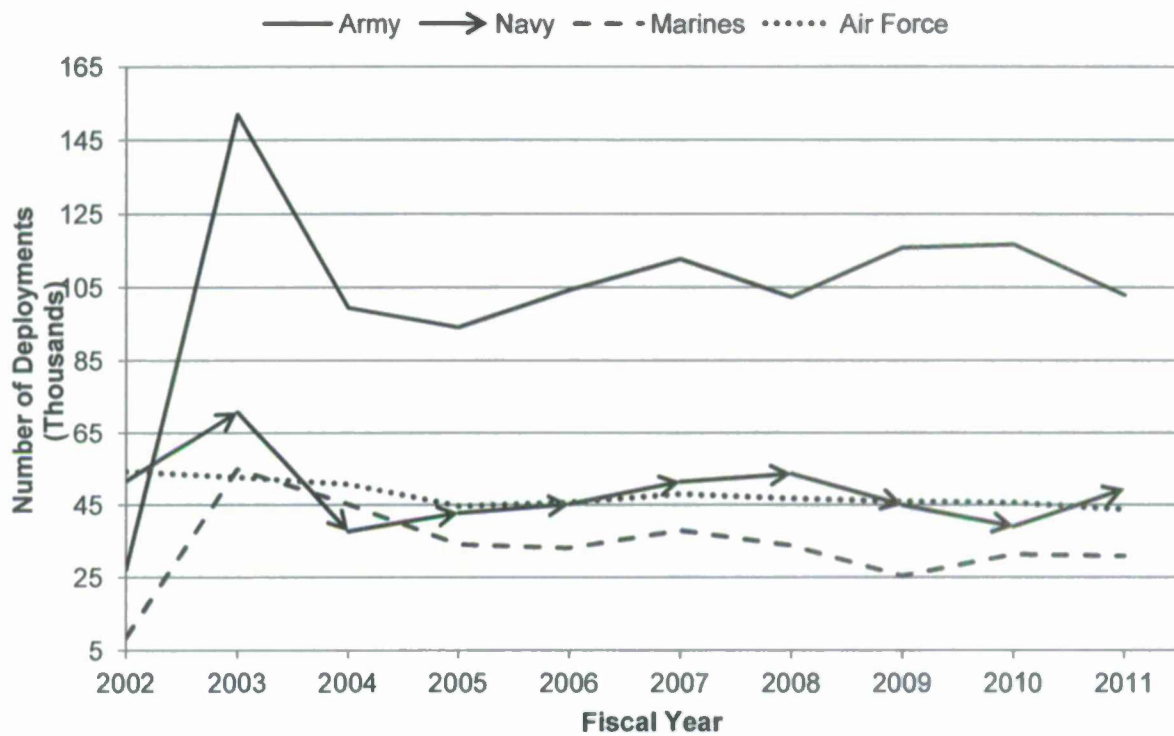


FIGURE 1.1 NUMBER OF ACTIVE DUTY MILITARY DEPLOYMENTS BY YEAR AND SERVICE

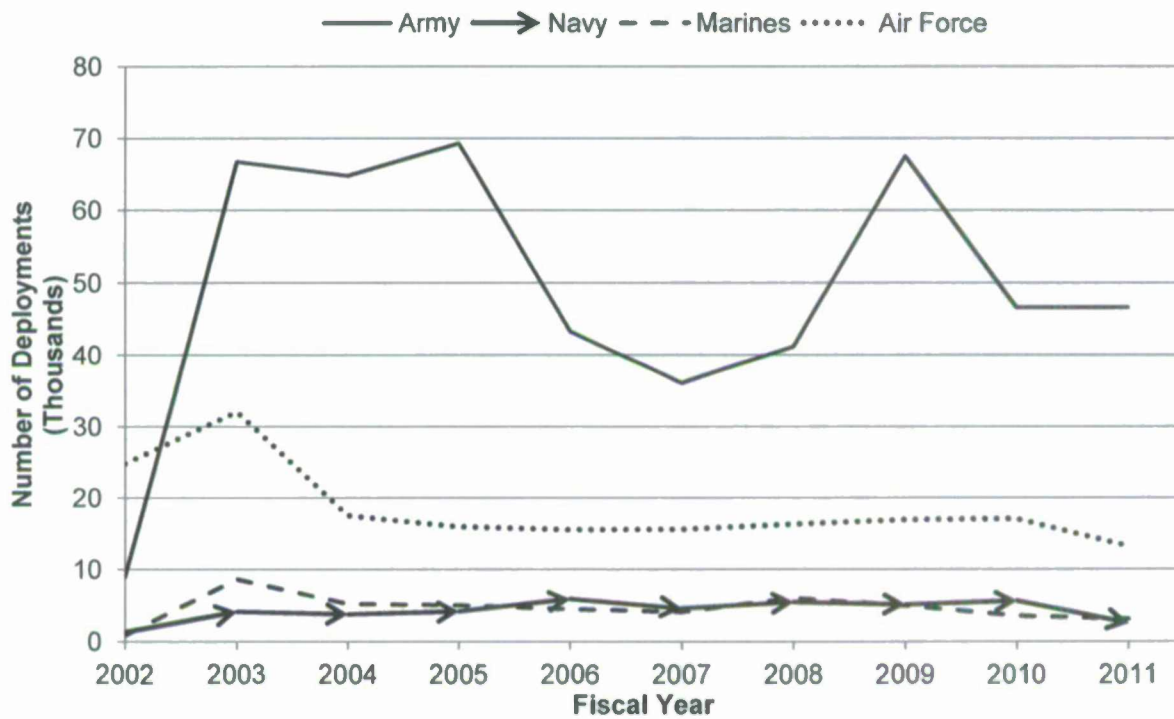


FIGURE 1.2 NUMBER OF RESERVE COMPONENT MILITARY DEPLOYMENTS BY YEAR AND SERVICE

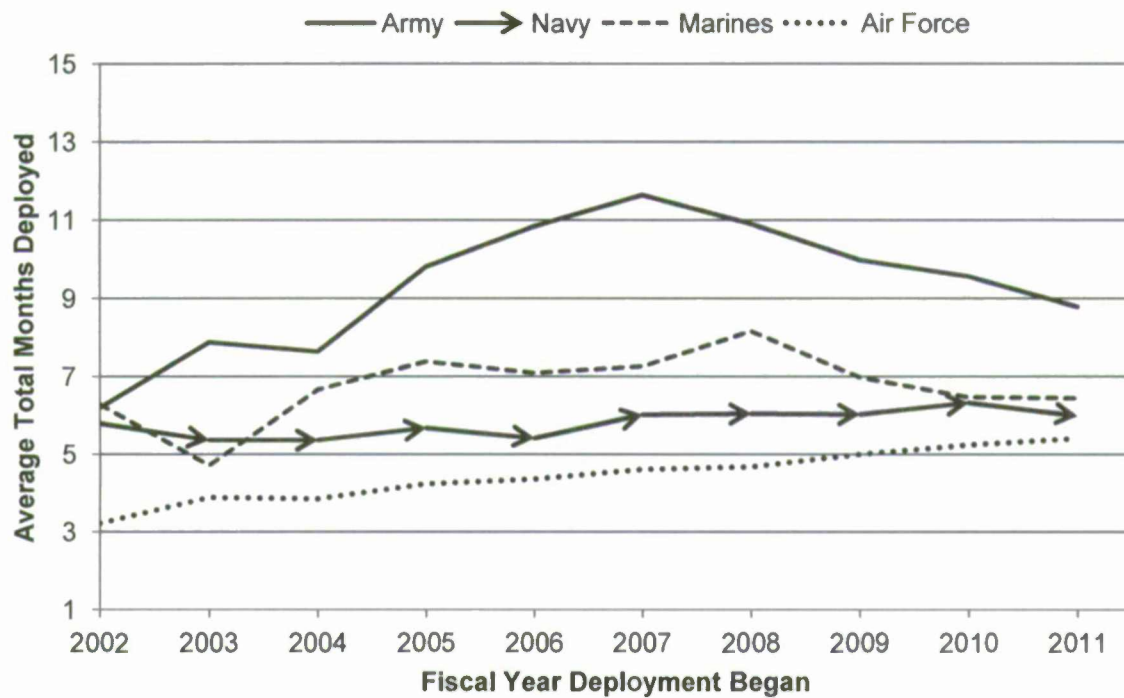


FIGURE 1.3 AVERAGE LENGTH OF ACTIVE DUTY DEPLOYMENT BY YEAR DEPLOYMENT BEGAN AND SERVICE

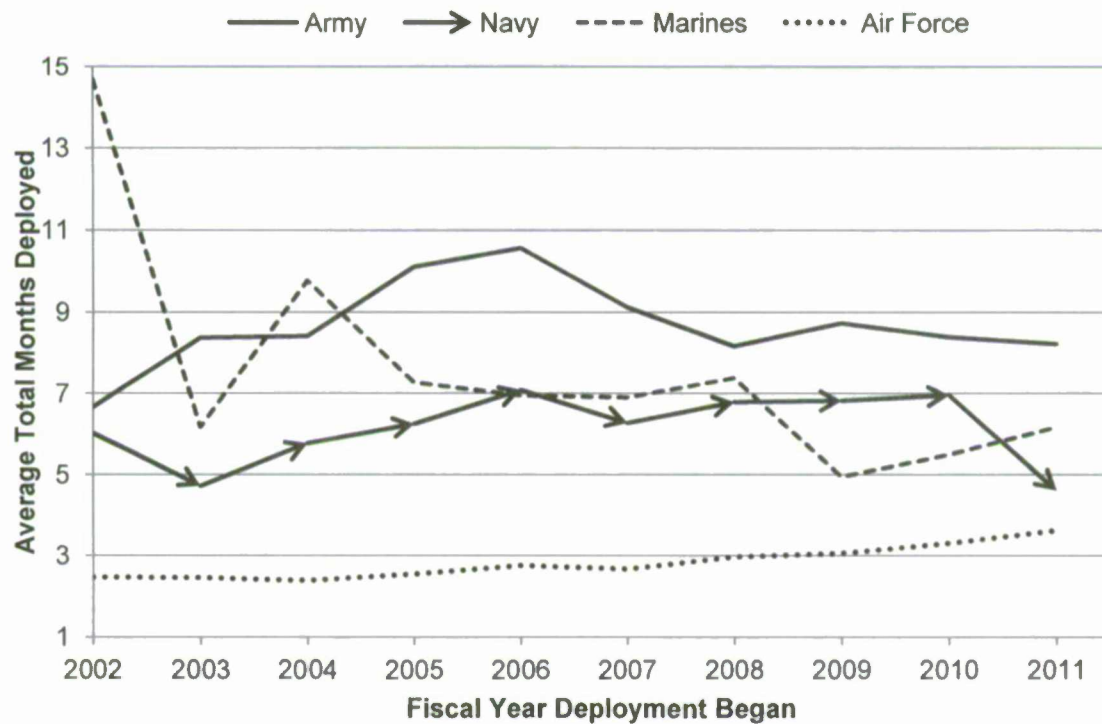


FIGURE 1.4 AVERAGE LENGTH OF RESERVE DEPLOYMENT BY YEAR DEPLOYMENT BEGAN AND SERVICE

Discussion

Over the decade long engagement in military operations in Iraq and Afghanistan, there were over 3 million deployments and nearly 2 million deployed service members between October 1, 2001 and September 30, 2012. During this time period, Army personnel were deployed for the longest periods of time on average and were deployed more frequently than other services. The highest prevalence of multiple deployments was observed in the Air Force. However, Air Force deployments were significantly shorter than deployments in other services.

The average Army deployment length in this study is slightly shorter than the average 12-15 months reported elsewhere [4]. However, this primary analysis utilizes data obtained directly from the Defense Manpower Data Center (DMDC) which carefully tracks deployments in all military personnel and represents an original analysis of these data. No other analyses of these data have provided a reliable estimate of the deployment length could be located. In addition, this study is strengthened by utilization of tri-service deployment data to estimate and describe variations in deployment frequency by service and component. Future studies are necessary to fully understand reasons for interservice variation in deployment frequency and length including how such variation may be associated with characteristics of service members at accession and post-deployment morbidity.

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ARMS Step Test Performance as a Predictor of New-Onset Respiratory Conditions

Background

Poor fitness is known to be associated with a number of adverse outcomes among Army trainees [1-10]. Little is known about non-psychiatric medical encounters early in an individual's Army career and subsequent attrition. As part of the Assessment of Recruit Motivation and Strength (ARMS) study, we evaluated the relationship between failing the ARMS step test and the incidence rate of new-onset asthma and other respiratory conditions among male Army recruits. We also evaluated the association between these endpoints and attrition during the first six months of military service.

Methods

Details of the ARMS study are available [8-14]. For these analyses, we defined the Fit cohort as those men who passed the ARMS step test, and the Unfit cohort as those who failed it. Other data elements evaluated included age (grouped as 18-19, 20-24, and ≥ 25 years), race (grouped as white, black, and other), smoker (yes, no), and body mass index (BMI) (grouped as underweight <18.5 , normal 18.5 to <25 , overweight 25 to <30 , and obese ≥ 30). The endpoints were defined as asthma, any respiratory diagnosis other than asthma, and no respiratory diagnosis. Recruits were followed from service entry until the first qualifying event.

Results

There were 8,621 study subjects followed. The demographic characteristics of study subjects, stratified by fitness status, are presented in Table 1.3.

TABLE 1.3 CHARACTERISTICS OF WEIGHT-QUALIFIED MALE ARMS STUDY

	Passed Step Test		Failed Step Test		p
	N	%	N	%	
Age (Years)					
18-19	3,080	46.4	804	40.7	<0.0001
20-24	2,754	41.4	875	44.3	
≥ 25	811	12.2	297	15.0	
Race					
White	4,863	73.2	1,352	68.4	<0.001
Black	774	11.6	274	13.9	
Other	1,008	15.2	350	17.7	
Smoker					
No	4,804	72.3	1,468	74.3	<0.0001
Yes	1,745	26.3	506	25.6	
Missing	96	1.4	2	0.1	
BMI					
Underweight ($x < 18.5$)	234	3.5	55	2.8	<0.0001
Normal weight ($18.5 < x < 25$)	3,766	56.7	808	40.9	
Overweight ($25 < x < 30$)	1,861	28.0	733	37.1	
Obese (> 30)	784	11.8	380	19.2	

ARMS: Assessment of Recruit Motivation and Strength; BMI: Body Mass Index

The distribution of endpoints by fitness status is given in Table 1.4. Those who failed the ARMS step test were significantly more likely to have a non-asthma respiratory encounter, and a diagnosis of asthma, than were the fit cohort. The relative risk for asthma among the unfit group was 2.03 (1.47, 2.81).

TABLE 1.4 FREQUENCY OF RESPIRATORY CONDITIONS BY ARMS STEP TEST STATUS AMONG MALE ARMS STUDY PARTICIPANTS IN FIRST SIX MONTHS OF SERVICE

Respiratory Condition	Passed Step Test (N=6,645)		Failed Step Test (N=1,976)		RR (95% CI)
	n	%	n	%	
No Resp/Asthma	3,402	51.2	867	43.9	1.00
Resp (No Asthma)	3,142	47.3	1,055	53.4	1.14 (1.09,1.20)
Asthma	101	1.5	54	2.7	2.03 (1.47,2.81)

Table 1.5 presents the risk and relative risk of attrition among the cohorts defined by respiratory conditions. Those with non-asthma respiratory conditions were not at higher or lower risk of attrition, but those with a diagnosis of asthma had a relative risk of 3.77.

TABLE 1.5 RISK OF ATTRITION BY RESPIRATORY CONDITION STATUS AMONG MALE ARMS STUDY PARTICIPANTS IN FIRST SIX MONTHS OF SERVICE

Respiratory Condition	Not Attrition (N=8,043)		Attrition (N=578)		RR (95% CI)
	n	%	n	%	
No Resp/Asthma	3,402	51.2	867	43.9	1.00
Resp (No Asthma)	3,142	47.3	1,055	53.4	1.02(0.88,1.20)
Asthma	101	1.5	54	2.7	3.77(2.79,5.12)

The results of multivariable Poisson regression controlling for entry variables, fitness, and respiratory conditions are shown in Table 1.6. Unfit men had an incidence rate ratio for attrition of 1.41 (95% CI 1.17, 1.69). Those at the extremes of BMI had increased incidence of attrition, as did smokers. Black men had lower incidence. A diagnosis of asthma had an incidence rate ratio of 3.99 (2.81, 5.65), while incidence among those with a non-asthma respiratory condition was not significantly different than those with no respiratory condition.

TABLE 1.6 INCIDENCE RATE RATIOS FOR ATTRITION IN THE FIRST 183 DAYS OF SERVICE AMONG WQ MALE ARMS PARTICIPANTS

		Crude IRR	95% CI	Adjusted IRR	95% CI
Step Test Status	Pass		REF		REF
	Fail	1.50	(1.26, 1.79)	1.41	(1.17, 1.69)
BMI	Underweight	1.78	(1.21, 2.61)	1.74	(1.18, 2.55)
	Normal		REF		REF
	Overweight	1.17	(0.97, 1.42)	1.11	(0.91, 1.34)
	Obese	1.61	(1.29, 2.02)	1.51	(1.20, 1.90)
Age (years)	18-19		REF		REF
	20-24	1.13	(0.95, 1.35)	1.08	(0.91, 1.29)
	≥ 25	0.98	(0.75, 1.28)	0.93	(0.71, 1.22)
Smoker	No		REF		REF
	Yes	1.30	(1.09, 1.54)	1.28	(1.07, 1.53)
Race	White		REF		REF
	Black	0.76	(0.57, 1.00)	0.72	(0.54, 0.96)
	Other	0.90	(0.71, 1.13)	0.89	(0.71, 1.12)
Respiratory Condition	No Resp/Asthma		REF		REF
	Resp (No Asthma)	1.01	(0.86, 1.20)	0.97	(0.82, 1.15)
	Asthma	4.22	(2.99, 5.95)	3.99	(2.81, 5.65)

*Adjusted for step test status, BMI, age, smoking, and race

Discussion

These analyses indicate that being unfit is a moderately strong risk factor for asthma, as that cohort had an incidence rate about twice the fit cohort. Having a diagnosis of asthma was very strongly associated with attrition, with a crude relative risk of 3.77 and an adjusted incidence rate ratio of 3.99. Being unfit was also associated with attrition, with an adjusted incidence rate ratio of 1.41.

Other common, important, and modifiable risk factors for attrition included smoking, with adjusted incidence rate ratio of 1.28 and obesity with an adjusted incidence rate ratio of 1.51. Although underweight men were also at increased risk for attrition, this was a relatively rare risk factor.

Additional research is required to determine if targeted interventions are possible to reduce the risk of asthma among men in training, as it is a very strong risk factor for attrition.

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Associations between Physical Conditioning TAPAS Scores and Overuse Musculoskeletal Injuries

Background

The basic training environment requires that the heterogeneous population of military recruits transform quickly to an acceptable level of physical fitness [1]. Overuse musculoskeletal injuries among military trainees lead to reduction in force readiness, and increases in health care utilization, particularly during the first year of service when new recruits complete intense physical training [1,2]. Individuals with low fitness levels are at increased risk for musculoskeletal injuries and stress fractures [1,3,4,5]. Despite the physical demands placed on new military accessions, there are no current pre-accession screening measures for physical fitness in the Army.

The Tailored Adaptive Personality Assessment System (TAPAS) is a non-cognitive personality test developed by Dragow Consulting Group for the Army Research Institute for the Behavioral and Social Sciences (ARI) that has been used since October 2009 to screen all Army and Air Force applicants for probability of attrition and overall success without relying on cognitive abilities or education level. TAPAS measures fifteen different personality dimensions associated with motivation and job performance in the military. One of the personality dimensions is a military-specific dimension called the physical conditioning dimension, which measures applicants' attitudes about physical activity rather than their actual physical fitness level. High scoring individuals "routinely participate in vigorous sports or exercise and enjoy hard physical work" [6]. ARI has previously found that the physical conditioning dimension predicted Soldiers' self-reported Army Physical Fitness Test (APFT) scores, indicating that the dimension was an accurate reflection of a recruit's physical fitness [6,7].

This project was undertaken to determine if there were associations between physical conditioning dimension scores and overuse musculoskeletal injuries. Since TAPAS is already automated on the Armed Services Vocational Aptitude Battery (ASVAB) testing platform, TAPAS could potentially provide additional pre-accession screening information about a new recruit's risk of injury during training.

Methods

A retrospective cohort study of United States Army accessions was conducted to determine whether the TAPAS physical conditioning dimension score was associated with overuse musculoskeletal injuries during the first year of service.

TAPAS is a self-report measure in which applicants choose between two paired statements chosen from a list of fifteen different personality dimensions (achievement, adjustment, dominance, non-delinquency, even-temperedness, intellectual efficiency, optimism, generosity, cooperation, self-control, sociability, order, tolerance, attention-seeking, and physical conditioning). In order to make TAPAS resistant to faking, the two response pairs address different personality traits and are matched in terms of social desirability [6,8]. The scores for each personality dimension are generated from all the responses.

ARI provided TAPAS dimension scores for 15,082 non-prior service U.S. Army Active Duty accessions who completed TAPAS in fiscal year 2010. These individuals were matched to AMSARA's accession, loss, and ambulatory medical data. The musculoskeletal injuries chosen reflect overuse injuries in the leg, knee, ankle, back, and pelvis [9]. The specific International

Classification of Diseases, 9th Revision (ICD-9) codes chosen are shown in Table 1.7. The most common types of injuries were pain, sprains, and strains.

TAPAS physical conditioning dimension scores were divided into quintiles, with Quintile 1 (Q1) the lowest and Quintile 5 (Q5) the highest scorers to aid in determining potential cut points for screening purposes. We used logistic regression models to determine associations between TAPAS physical conditioning scores and musculoskeletal injuries in the first year of service.

TABLE 1.7 TYPES OF INJURIES DIAGNOSED IN THE FIRST YEAR OF SERVICE

Type of Injury	ICD-9 codes	No. with injury	%
Pain injuries	719.45, 719.46, 719.47, 720.2, 724.2, 724.5, 847.2	4,192	30.4
Sprains and strains	843.0, 843.1, 843.8, 843.9, 844.0-844.3, 844.8, 844.9, 845.00-845.03, 845.09- 845.13, 845.19, 846.0-846.3, 846.8, 846.9, 847.3, 847.4, 847.9	2,092	17.9
Tendinitis	726.61, 726.64, 726.71, 726.72, 727.06	340	3.4
Stress Fractures	733.93-733.99	310	3.1
Arthropathies	715.96, 716.85- 716.87, 716.95-716.97, 717.7, 719.06-719.07, 719.65, 719.85- 719.87, 719.95-719.97, 727.83	133	1.4
Fasciitis	726.5, 726.60, 726.62, 726.63, 726.65, 726.69, 726.70, 726.79, 728.71	85	0.9

ICD-9: International Classification of Diseases, ninth revision

Results

Table 1.8 shows the demographic and pre-accession medical characteristics of the study population in total and for those with overuse injuries. The study population was primarily male, high school graduates, under age 25, and white, with a BMI in the normal or overweight categories. Individuals aged 17 – 20 years and whites had higher TAPAS physical conditioning dimension scores compared to other groups. Lower TAPAS scores were also associated with female sex, medical diagnosis at application for service, and accession conduct waivers.

A total of 5,497 (36.4%) recruits suffered at least one overuse musculoskeletal injury during the first year of service. As shown in Table 2, the injury rate among women (61.2%) is nearly double that of men (32.8%). Injury rates increased with increasing age and with decreased with increasing AFQT scores. There was no difference in injury rates in those with medical waivers compared to those without or among individuals with disqualifying conditions.

When injuries were examined by physical conditioning score, there was a significant linear trend ($p < 0.0001$) for decreasing rate of injury with increasing physical conditioning score as shown in Table 1.9. When stratified by sex the same trend was found in both men and women ($p < 0.0001$). An adjusted model, which included significant covariates only, showed that TAPAS scorers in the lowest quintile had 58% higher odds of having an overuse musculoskeletal injury in the first year of service compared to scorers in the highest quintile (OR, 1.58; 95% CI, 1.41-1.76). Age at accession was also significant across all variable levels, showing that odds of injury increased with increasing age.

TABLE 1.8 DEMOGRAPHIC AND PRE-ACCESSION MEDICAL CHARACTERISTICS OF THE STUDY POPULATION

	No. with injuries	% with injuries	Total
Sex			
Females	1,186	61.2	1,937
Males	4,311	32.8	13,145
Race			
White	4,204	35.7	11,761
Black	758	42.2	1,797
Other	535	35.1	1,524
Age			
17-20	2,599	33.9	7,676
21-25	1,932	37.0	5,216
26-30	574	41.1	1,395
>30	392	49.3	795
BMI			
Underweight	79	42.0	188
Normal	2,455	35.7	6,882
Overweight	2,152	36.4	5,918
Obese	811	38.7	2,094
Education			
Alternate credentials	282	38.4	734
HS Diploma	4,098	35.8	11,449
Some College	716	40.8	1,755
Bachelor's and above	401	35.1	1,144
AFQT			
93-99	400	31.8	1,257
65-92	1,891	35.6	5,315
50-64	1,258	36.2	3,474
30-49	1,861	38.6	4,824
11-29	87	41.0	212
Disqualifying Conditions			
No condition	4,900	36.4	13,457
Has a condition	597	36.7	1,625
Medical Waivers			
No Waiver	5,184	36.5	14,210
Has a waiver	313	35.9	872
Moral Waivers			
No waiver	5,100	36.2	14,077
Waiver	397	39.5	1,005
Total	5,497	36.4	15,082

AFQT: Armed Forces Qualification Test; BMI: Body Mass Index

TABLE 1.9 INJURIES BY PHYSICAL CONDITIONING QUINTILES, OVERALL AND STRATIFIED BY SEX

TAPAS Quintile	Overall		Men		Women	
	No. with injuries (%)	Total	No. with injuries (%)	Total	No. with injuries (%)	Total
Q1 (low)	1,333 (44.4)	3,001	931 (38.7)	2,408	402 (67.8)	593
Q2	1,215 (39.9)	3,043	930 (35.7)	2,605	285 (65.1)	438
Q3	1,006 (34.5)	2,912	805 (31.6)	2,547	201 (55.1)	365
Q4	1,064 (33.7)	3,154	879 (31.2)	2,821	185 (55.6)	333
Q5 (high)	879 (29.6)	2,972	766 (27.7)	2,764	113 (54.3)	208
Total	5,497 (36.4)	15,082	4,311 (32.8)	13,145	1,186 (61.2)	1,937

Tests of linear trends: all p-values <0.001

Discussion

Using the non-cognitive test TAPAS to measure self-reported perceptions about physical fitness may be a good proxy measure for actual physical fitness and fitness for duty in the Army. Individuals who scored higher on the physical conditioning measure were less likely to suffer from overuse musculoskeletal injuries during the first year of service than applicants with lower scores. Body mass index was less predictive of overuse injuries, as only those who were obese were at significantly greater odds of having an injury compared to those in the normal BMI category.

Other self-report measures have shown that there is some correlation between reported fitness levels and actual fitness, [10] but with the military applicant population motivated to appear qualified for service, TAPAS potentially provides a way of quantifying self-reported fitness while also incorporating measures to reduce faking. Although TAPAS shows promise as a fitness screening tool, additional research is required to fully evaluate its potential use.

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USMEPCOM Omaha 5 Questionnaire Data Quality Assessment: Initial Findings

Background

Despite the United States military's trials with various behavioral health screening programs from World War I to present, mental disorders presenting during recruit training and the first tour of duty remain one of the leading causes of morbidity and discharge among recruits [1-4]. Most screening tools use self-report methods, which can lead to failures to disclose conditions or concealment of conditions. The latest screening tool, the "Omaha 5" questionnaire, allows the providers at the Military Entrance Processing Stations (MEPS) to conduct brief interviews with applicants regarding certain key behavioral areas. The "Omaha 5" are a selection of standard questions that the Omaha MEPS Chief Medical Officer identified to the Accession Medical Standards Working Group (AMSWG) as the most pertinent to behavioral health interviews at the Omaha MEPS. These questions have not been independently validated as predictors of behavioral health problems, military success, or any other endpoint.

Prior to the implementation of the Omaha 5 Questionnaire, a Supplemental Health Screening questionnaire (Form 40-1-15-1-E) was filled out by applicants and then responses were reviewed by a physician during the medical interview with the applicant. Specialty physician consultations were recommended based on the applicants' responses and the examining physicians' clinical judgment. Concerns were raised that behavioral health was not accurately being disclosed by applicants and that the consultation process was labor-intensive. To reduce the burden of unnecessary mental health consultations, a plan for face-to-face interviews for behavioral health assessments was developed, with framework questions to ask, known as the "Omaha 5." Training occurred in May 2011 at the USMEPCOM Annual Medical Training Conference. Chief Medical Officers (CMOs)/Assistant Chief Medical Officers (ACMOs)/Fee-Basis Providers (FBPs) were asked to complete scannable forms. The deployment date for Omaha 5 was July 1, 2011.

AMSARA was tasked by the AMSWG with evaluating the Omaha 5 program implementation at the MEPS, having previously conducted studies on non-cognitive tests adapted for behavioral health screening [5,6]. Here we report our initial findings evaluating the data quality for applicants evaluated using the framework.

Methods

The "Omaha 5" Questionnaire asks applicants to respond to questions about five framework areas: encounters with law enforcement, school authority, and behavioral health professionals, self-mutilation, and, home environment. During the interview with the provider, applicants are asked each of the "Omaha 5" questions. After the applicant interview, the provider determines whether to recommend a behavioral health consult based on the applicant's answers. The provider's recommendations are captured in a second question block, which is also filled out by the provider. A provider will only check "Yes" for the behavioral health consult field if the consult was recommended on the basis of the "Omaha 5" responses only.

USMEPCOM provided records of applicants who were evaluated under the Omaha 5 Questionnaire (N=279,608). The data contain social security numbers (SSNs), provider identifications, MEPS identifications, exam dates, answers to the Omaha 5 questions, answers to three provider response questions, service, sex, and answers to supplemental health screening questions.

Basic quality problems were assessed by identifying the number of valid SSNs in the population. This included identifying counts of records with missing or incomplete SSNs. Exam dates were restricted to include only individuals with exam dates on or after July 1, 2011 when “Omaha 5” was fully implemented. Records through the end of fiscal year (FY) 2012 were included but the number of records tapered off significantly in September 2012 due to incomplete data capture during that month.

In order to evaluate the utility of “Omaha 5” as a screening tool, the quality of data by provider were evaluated, assessing each provider’s completeness of responses for both question blocks. Unique provider identifications (IDs) were created using a provider’s initials and the MEPS ID. Using these unique provider IDs, each provider was evaluated on the basis of three criteria (see Table 1.10) in order to select a population of applicants reviewed by providers who met these criteria. For each provider we calculated the total number of applicants seen, the percentage of applicants missing all “Omaha 5” questions, and the percentage of applicants with “No” for all five questions.

TABLE 1.10 PROGRAM EVALUATION METRICS FOR “OMAHA 5” TOOL

Criteria used to evaluate each provider:	To evaluate a provider’s:
1. Total number of applicants evaluated by a provider	Frequency of application of tool
2. Percentage of a provider’s applicants who were missing all 5 answers to the “Omaha 5”	Completeness of data collected
3. Percentage of a provider’s applicants who answered “No” to all five “Omaha 5” questions	Application of the tool

Results

In total 279,608 records of applicants who were evaluated under the Omaha 5 Questionnaire system in 2011 and 2012 were received from USMEPCOM. Since social security number (SSN) is essential for merging the USMEPCOM “Omaha 5” dataset with other AMSARA data, we first determined the number of valid SSNs in the study population.

Table 1.11 shows the number of records with invalid SSN data. A total of 7,381 records were removed from the study population due to missing SSNs, errors in data imputation, invalid SSNs, and duplicate records for SSNs. Prior to removing individuals with invalid exam dates, any record with a missing exam date was backfilled from the scan date, the date when the data were entered.

TABLE 1.11 QUALITY AND COMPLETENESS OF ESSENTIAL DATA FIELDS

Total Records: 279,608			
Included Records	No. of records	Excluded Records	No. of Records
SSN with nonmissing values	278,283	Missing SSNs	1,325
SSN without * or blanks	274,210	SSN with * or blanks	4,073
SSN with valid number sequences	274,156	SSN containing too many 0s	57
Exam date 7/1/2011 – 9/30/2012	273,433	Exam date before 7/1/2011	723
Single record for each SSN	272,230	Duplicate records	1,203
Total Individuals with valid SSNs and exam dates: N = 272,230			

When the provider selection criteria were applied to the study population, outlined in Figure 1, a study sample of 208,601 applicants was chosen. Among the 272,230 applicants with valid SSNs, 6,297 were excluded from the study sample selection because of missing provider ID and/or MEPS ID. The first criterion was used to identify providers who had evaluated the fewest number of applicants, which removed 2,601 applicants who were administered the “Omaha 5” questionnaire by a provider in the lowest percentile. Applying the second criterion, the top percentile of providers who were missing all responses was excluded, resulting in 2,611 applicants removed from the study population. Providers in the lowest and highest deciles for answering all “No’s” for their applicants were excluded, removing 52,120 applicants from the population. After applying all three criteria, a total of 208,601 applicants remained in the population.

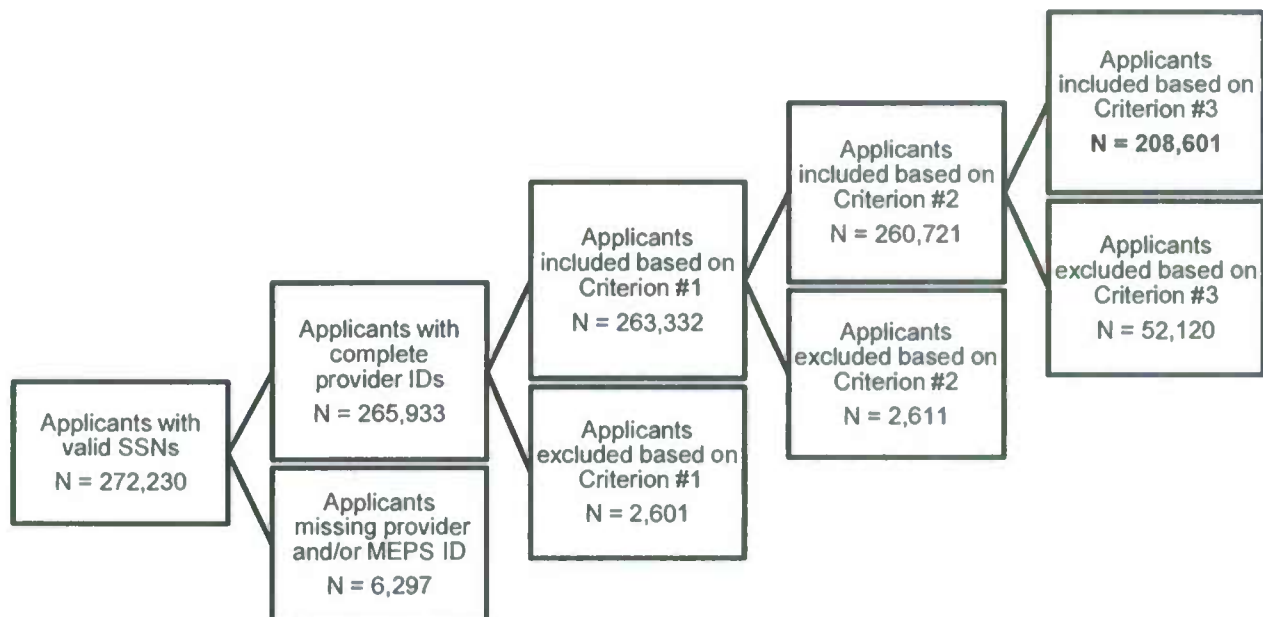


FIGURE 1.5 STUDY POPULATION SELECTION BASED ON PROVIDER EVALUATION CRITERIA

Table 1.12 shows the effects of the study population selection process on the "Omaha 5" response data quality. The application of the three criteria decreased the number of applicants with missing "Omaha 5" answers for all five questions.

TABLE 1.12 COMPARISON OF "OMAHA 5" QUESTIONNAIRE RESPONSES BEFORE AND AFTER APPLYING THE PROVIDER SELECTION CRITERIA.

"Omaha 5" Question		Missing/Errors N (%)	Yes N (%)	No N (%)
Law Enforcement	Before	4,315 (1.6)	84,347 (31.0)	183,568 (67.4)
	After	435 (0.2)	67,450 (32.3)	140,716 (67.5)
School Authority	Before	4,428 (1.6)	30,709 (11.3)	237,093 (87.1)
	After	521 (0.3)	24,351 (11.7)	183,729 (88.1)
Behavioral Health Professionals	Before	4,559 (1.7)	10,106 (3.7)	257,565 (94.6)
	After	573 (0.3)	7,247 (3.5)	200,781 (96.3)
Self-Mutilation	Before	4,735 (1.7)	1,917 (0.7)	265,578 (97.6)
	After	818 (0.4)	1,449 (0.7)	206,334 (98.9)
Home Environment	Before	5,370 (2.0)	5,212 (1.9)	261,648 (96.1)
	After	1,537 (0.7)	3,876 (1.9)	203,188 (97.4)

Table 1.13 is the behavioral health consult rate before and after provider selection. Prior to applying the provider selection criteria, the behavioral health consult rate reported by providers had two times as many missing values as consults. After applying the criteria, the number of missing entries for behavioral health consults decreased by 50% but the consult rate did not change.

TABLE 1.13 COMPARISON OF BEHAVIORAL HEALTH CONSULT RATE BEFORE AND AFTER APPLYING THE PROVIDER SELECTION CRITERIA

	Without provider selection		After provider selection	
	N	%	N	%
No BHC referral	264,180	97.0	204,125	97.9
BHC referral	3,047	1.1	2,564	1.2
Missing field	5,003	1.8	1,912	0.9
Total	272,230	100.0	208,601	100

Discussion

There were some data quality issues with the "Omaha 5" dataset. Of the total records received, approximately 2% (n=5,455) of applicants had to be removed from the population due to invalid SSN data. While these individuals may have complete "Omaha 5" and behavioral health consult data, it would be extremely difficult to match them to other AMSARA databases for further analysis. Once individuals with invalid SSNs were removed from the population, there still remained the issue of missing behavioral health consult data. Since this is the only way of measuring the impact of "Omaha 5" on the behavioral health consult rate, it is vital that providers consistently fill out this field.

Creating criteria for provider data quality allowed us to select applicants evaluated by providers who had frequently assessed applicants based on "Omaha 5", who completed their scannable forms consistently, and who appropriately applied the "Omaha 5" tool. By attempting to identify providers with good data capture, the number of applicants in the study sample with missing behavioral health consult entries was decreased. Overall the data quality was somewhat improved by the removal of outliers in provider responses.

Although we were able to select a study sample with fewer missing entries, the large proportion of missing behavioral health consult data in the overall population complicates the evaluation of "Omaha 5." In order to have an accurate measure of the impact of "Omaha 5" on the behavioral health consult rate, providers need to consistently complete this field, otherwise the number of behavioral health consults performed as a result of the "Omaha 5" questionnaire cannot be determined. Data capture for the behavioral health consults recommended based on "Omaha 5" responses must be improved before a more thorough evaluation of "Omaha 5" can be completed.

References

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2. DESCRIPTIVE STATISTICS FOR APPLICANTS AND ACCESSIONS FOR ENLISTED SERVICE

The characteristics of the source populations applying for enlisted service in the active duty, reserve, and National Guard components of the military are described from fiscal year 2007 to fiscal year 2012. The characteristics of the accessed populations are compared. For active duty accessions only, subsequent attritions are also shown. Individuals identified as having prior service in any U.S. military component are excluded. An enlistee *applicant* is the individual who presents to a Military Entrance Processing Station (MEPS) for evaluation for acceptance into military service. An enlistee *accession* is the individual who has signed his or her oath of enlistment.

Except where otherwise noted, the following conventions apply:

- All references to year refer to fiscal year (FY).
- The "Accessions" shown in the following tables are from among the "Applicants" shown in the relevant preceding column. For example, columns showing fiscal year 2012 accessions are summarizing accessions only among individuals who applied for service in fiscal year 2012. Notation is made when complete follow-up is not available.
- Only data through fiscal year 2012 are included. Therefore, numbers and percentages gained (i.e. accessions) among applicants in 2012 refer only to those gained through September 30, 2012. For legitimate comparison of accession among applicants in 2012 and the previous five years, we calculated a within-fiscal year accession rate, which takes into account only accessions that occurred in the same fiscal year as the MEPS physical. Therefore, when 2012 and 2007-2011 figures are compared, the follow up time for observing accessions will be comparable.
- To derive percentages and rates, data sets were merged at the individual level by Social Security Number (SSN). For example, in determining the percentage of individuals gained in 2012 who received a discharge, only discharges with a SSN matching a 2012 accession record SSN were included.
- Under the subsections titled "Active Duty Applicants and Accessions," "Reserve Applicants and Accessions," "National Guard Applicants and Accessions," and "Medical Waivers," education level and age were obtained at the time of MEPS application because MEPS data are the only source of these variables for applicants. For subsections titled "Hospitalizations," "Attrition," "EPTS Discharges," and "Disability Discharge Considerations with an Accession Record," age, education level, and Armed Forces Qualification Test (AFQT) score at time of accession are used. Under the Delayed Entry Program, the application process can occur up to 2 years before the actual accession takes place.
- Temporary medical disqualifications are for conditions that can be corrected, such as being overweight or recently using marijuana; these individuals may enter the military without a waiver after the condition is corrected. Permanent medical disqualifications are for all other disqualifying conditions described in DoD Instruction 6130.03.

- Beginning in the FY 2008 Annual report, the way International Classification of Diseases, 9th revision (ICD-9) codes are summarized was revised in order to establish more uniform granularity over the range of ICD-9 codes reported for MEPS disqualification and waivers. This was done by selecting a subset of codes based on expert opinion that were exceptionally broad and reporting them to four digits rather than three (summarized in Table 2.1). For example, 493 is specific to asthma whereas 733 denotes a diverse array of bone and cartilage disorders, which include osteoporosis, pathologic fractures, bone cysts, and aseptic necrosis. Please note, when a majority of codes examined out to the fourth digit do not have a fourth digit (either due to insufficient information at time of coding or to errors) it is possible to have a three-digit code appear in the leading 20 medical conditions tables, even though the raw codes were examined out to the fourth digit. Such codes are treated as a distinct category and are in no case to be considered a parent term if a more specific code is present. For example, the ICD-9 groups specified by 785 and 785.0 are mutually exclusive categories and the latter is not a subset of the former.

TABLE 2.1 LIST OF ICD-9 CODING GROUPS SUMMARIZED TO THE FOURTH DIGIT

ICD-9 [†]	Condition
305	Nondependent abuse of drugs
306	Physiological malfunction arising from mental factors
307	Special symptoms or syndromes, not elsewhere classified
718	Other derangement of joint
719	Other and unspecified disorders of joint
724	Other and unspecified disorders of back
726	Peripheral enthesopathies and allied syndromes
733	Other disorders of bone and cartilage
746	Other congenital anomalies of heart
754	Certain congenital musculoskeletal deformities
756	Other congenital musculoskeletal anomalies
780	General symptoms
783	Symptoms concerning nutrition, metabolism, and development
784	Symptoms involving head and neck
785	Symptoms involving cardiovascular system
795	Other and nonspecific abnormal cytological, histological, immunological and DNA test findings
796	Other nonspecific abnormal findings

[†] Differences in the level of coding specificity (3-digit vs. 4-digit) over time can lead to misleadingly large disparities in the incidence estimates for particular disease or condition categories when comparing current year data to the previous 5-year period. For example, if the code 305.0 is used in 2006 and 2007 where previously 305 was used, the leading twenty condition categories for 2008 would appear to indicate that nondependent alcohol abuse is an emerging vs. established problem.

Active Duty Applicants and Accessions

Tables 2.2 through 2.5 describe the population of applicants who received a medical examination and subsequent accessions for active duty enlisted service in the Army, Navy, Marine Corps and Air Force. Individuals were counted once, either in the component and service in which they access, or for applicants, in the service and component applied to on their most recent date of application. Applicants for enlisted service who subsequently accessed as officers (as indicated by a pay grade of O01-06), were included as applicants, but excluded from accessions. The number of applicants and the percentage of subsequent accession for these applicants from 2007 to 2011 and 2012 are shown in Table 2.2. The percentages of accessions are shown in two ways: 1) total accession through the end of 2011 and 2) accessions occurring in the same fiscal year as application. Presentation of the average 'within fiscal year' accession rate is provided for the years of 2007-2011 as a basis of comparison to the 'within fiscal year' accession rate for 2012.

The average within fiscal year accession rate decreased in the Army, increased in the Navy and remained relatively consistent across the Marine Corps and Air Force in 2012 compared to 2007-2011. For the Army, the within fiscal year accession rate was 37.1% in 2012, lower than the rate for the Army in 2007-2011 (46.3%). The within fiscal year accession rate for the Navy increased in 2012, to 37.6% from 31.8% in 2007-2011. In 2012 the within fiscal year accession rate for the Marine Corps (32.6%) decreased relative to the previous five years (37.9%) and Air Force (39.4%) was similar to the within fiscal year accession rate from 2007 to 2011 (37.9% and 38.5%, respectively). Overall accession rates were highest in the Air Force, where 79.1% of applicants accessed.

TABLE 2.2 ACCESSIONS FOR ENLISTED ACTIVE DUTY APPLICANTS AT MEPS WHO RECEIVED A MEDICAL EXAMINATION BY SERVICE IN 2007-2011 vs. 2012

Service	2007 – 2011			2012	
	Applicants	Accession rate within fiscal year	Accession rate overall	Applicants	Accession rate within fiscal year
Army	458,799	46.3	71.8	70,772	37.1
Navy	249,941	31.8	71.3	48,630	37.6
Marine Corps	235,169	37.9	72.0	40,649	32.6
Air Force	183,958	38.5	79.1	36,195	39.4
Total	1,127,867	-	-	196,246	-

Table 2.3 shows the number of applicants for enlisted service by year for 2007-2012 and the associated accession counts and rates within one year and within two years following application. Regulations state that accessions must occur within one year of application, although it is fairly common for applicants to request and to be granted a one-year extension. Due to the lack of full two-year follow-up data for 2011 applicants and one year follow-up for 2012 applicants, the corresponding accession rates were underestimated (see note below Table 2.3). The accession rates within one and two years of application for 2009-2011 are slightly lower than the rates for 2007-2008.

TABLE 2.3 ACCESSIONS WITHIN ONE AND TWO YEARS OF APPLICATION FOR ENLISTED ACTIVE DUTY APPLICANTS AT MEPS WHO RECEIVED A MEDICAL EXAMINATION IN 2007-2012

Year of exam	Applicants	No. within 1 year of application	% within 1 year of application	No. within 2 years of application	% within 2 years of application
2007	206,512	144,457	70.0	153,769	74.5
2008	238,786	164,731	69.0	175,864	73.6
2009	261,595	171,798	65.7	187,649	71.7
2010	217,531	142,422	65.5	157,243	72.3
2011	203,443	136,586	67.1	146,041	71.8 [†]
2012	196,246	72,041	36.7 [†]	72,041	-
Total	1,324,113	832,035	-	892,607	-

[†] The proportion of applicants who accessed was underestimated due to a lack of sufficient follow-up data since only accessions through 2012 are reported in the above table.

Table 2.4 shows demographic characteristics (at time of application) and accession rates for the applicant pools in 2007-2011 and 2012. Most applicants in 2012 were male (81.7%), aged 17-20 years (69.5%), and white (71.8%). In 2012, nearly two-third of applicants had a high school diploma (65.7%) and almost three-quarters of applicants scored in the 50th percentile or higher for Armed Forces Qualification Test (AFQT) score (74.2%). Fully qualified applicants made up 82.8% of the 2012 applicant population. The distribution of sex among applicants and accessions in 2012 was similar to that observed in 2007-2011. The percentage of applicants between the ages of 17 and 20 was slightly larger in 2012 than in 2007-2011 (69.5% and 65.1%, respectively). In 2012, a smaller percentage of whites applied for service than in previous years (71.8% versus 75.3% in 2007-2011). Approximately one-fifth (20.5%) of applicants in 2012 had not completed high school at the time of application compared to less than one-seventh (13.4%) the previous five years; most were in the Delayed Entry Program (DEP) and completed high school prior to accession. In 2012 a smaller percentage of applicants scored in the lowest half of the distribution for AFQT score (22.2%) as compared to the previous 5-year period (27.6%). The percentage of temporary disqualifications in 2012 was 3.8%, lower than 7.0% observed in 2007-2011. Demographic distributions of accessions largely reflect the applicant population with regard to gender, age, and race. Graduation from high school prior to accession among applicants who were high school seniors at the time of application accounts for much of the difference in education noted when comparing 2012 applicants and accessions. The observed difference in proportions between fully qualified accessions (90.4%) and applicants (82.8%) in 2012 corresponded to a drop in both permanent medically disqualified accessions (7.0%) and temporary medically disqualified accessions (2.6%) relative to applicants from the same year (13.4% and 3.8% respectively).

TABLE 2.4 DEMOGRAPHIC CHARACTERISTICS OF ENLISTED ACTIVE DUTY APPLICANTS WHO RECEIVED A MEDICAL EXAMINATION IN 2007-2011 VS. 2012

	2007 – 2011				2012			
	Applicants		Accessions		Applicants		Accessions	
	Count	%	Count	%	Count	%	Count	%
Sex*								
Male	925,977	82.1	689,495	83.8	160,070	81.7	59,565	82.7
Female	201,580	17.9	133,140	16.2	35,927	18.3	12,476	17.3
Age Group at MEPS*								
17 – 20	734,582	65.1	555,736	67.6	136,403	69.5	50,328	69.9
21 – 25	290,706	25.8	205,331	25.0	46,995	23.9	17,359	24.1
26 – 30	67,266	6.0	41,848	5.1	9,627	4.9	3,269	4.5
> 30	31,140	2.8	16,046	2.0	2,892	1.5	774	1.1
Race*								
White	848,819	75.3	628,929	76.5	141,001	71.8	51,251	71.1
Black	170,920	15.2	125,132	15.2	33,403	17.0	12,973	18.0
Other	97,276	8.6	68,185	8.3	20,752	10.6	7,772	10.8
Education*								
Below HS Senior†	10,157	0.9	6,024	0.7	68	0.0	17	0.0
HS Senior	150,831	13.4	93,699	11.4	40,187	20.5	6,737	9.4
HS Diploma	818,033	72.5	626,833	76.2	128,936	65.7	55,915	77.6
Some College	73,765	6.5	54,768	6.7	12,828	6.5	5,482	7.6
Bachelor's and above	75,081	6.7	41,312	5.0	14,227	7.2	3,890	5.4
AFQT Score*								
93 – 99	73,357	6.5	56,418	6.9	13,107	6.7	4,857	6.7
65 – 92	417,523	37.0	319,838	38.9	78,127	39.8	30,248	42.0
50 – 64	290,072	25.7	217,337	26.4	54,332	27.7	21,381	29.7
30 – 49	291,616	25.9	210,892	25.6	42,044	21.4	14,792	20.5
11 – 29	19,114	1.7	6,960	0.8	1,668	0.8	93	0.1
< 11**	340	0.0	26	0.0	45	0.0	2	0.0
Missing	35,845	3.2	11,165	1.4	6,923	3.5	668	0.9
Medical status								
Fully Qualified	901,758	80.0	707,833	86.0	162,450	82.8	65,144	90.4
Permanent DQ	146,923	13.0	71,142	8.6	26,338	13.4	5,041	7.0
Temporary DQ	79,186	7.0	43,661	5.3	7,458	3.8	1,856	2.6
Total	1,127,867	100.0	822,636	100.0	196,246	100.0	72,041	100.0

* Some individuals with a missing values are not included in the table.

† Encompasses the following: 1) those pursuing completion of the GED or other test-based high school equivalency diploma, vocational school, or secondary school, etc; 2) those not attending high school and who are neither a high school graduate nor an alternative high school credential holder; 3) one who is attending high school and is not yet a senior.

** individuals scoring in the 10 percentile or lower are prohibited from applying, therefore, the observed accessions most likely reflect data capture errors.

Reserve Applicants and Accessions

Tables 2.5 through 2.7 describe the characteristics of applicants for the enlisted Reserves of the Army, Navy, Marines, and Air Force. Data on Reserve applicants who underwent medical examinations at any MEPS are shown for the period from FY 2007 to FY 2011 in aggregate and separately for FY 2012. These results include only civilians with no prior service applying for the Reserves and do not include direct accessions from Active Duty military. Individuals were counted only once, either in the component and service in which they access, or for applicants, in the service and component applied to on their most recent day of application. Reserve applicants who subsequently accessed as officers (as indicated by a pay grade at gain of O01-06), were included as applicants, but excluded from accessions.

The within fiscal year accession rate increased in the Army, decreased in the Navy and remained relatively consistent across the Marine Corps and Air Force in 2012. The within fiscal year accession rate in the Army was 72.8% in 2012, higher than the rate for the Army in 2007-2011 (68.2%). The largest decrease in the within fiscal year accession rate in 2012 was observed in the Navy, where the within fiscal year accession rate was 18.4% in 2012 compared to 31.5% in 2007-2011. The overall accession rate during 2007-2011 is highest among the Army, lowest in the Navy and similar among the Marines and Air Force.

TABLE 2.5 ACCESSIONS FOR ENLISTED RESERVE APPLICANTS AT MEPS WHO RECEIVED A MEDICAL EXAMINATION BY SERVICE IN 2007-2011 vs. 2012

Service	2007 – 2011			2012	
	Applicants	Accession rate within fiscal year	Accession rate overall	Applicants	Accession rate within fiscal year
Army	115,106	68.2	75.0	15,566	72.8
Navy	24,421	31.5	55.9	3,750	18.4
Marine Corps	40,770	35.9	65.1	7,039	36.2
Air Force	23,744	51.5	65.2	5,840	52.8
Total	204,041	-	-	32,195	-

Table 2.6 shows the number of applicants for the Reserves by year for 2007-2012 and the associated accession counts and rates within one year and within two years following application. Regulations state that accessions must occur within one year of application, although it is fairly common for applicants to request and to be granted a one-year extension. Due to the lack of full two-year follow-up data for 2012 applicants and one year follow-up for 2012 applicants, the corresponding accession rates were underestimated (see note below Table 2.6). The accession rates within one and two years of application were lowest during 2007 and 2010 and highest during 2008-2009 and 2011.

TABLE 2.6 ACCESSIONS WITHIN ONE AND TWO YEARS OF APPLICATION FOR ENLISTED RESERVE APPLICANTS AT MEPS WHO RECEIVED A MEDICAL EXAMINATION IN 2007-2011

Year of exam	Applicants	No. within 1 year of application	% within 1 year of application	No. within 2 years of application	% within 2 years of application
2007	38,885	25,426	65.4	26,280	67.6
2008	44,433	30,944	69.6	31,886	71.8
2009	47,449	32,086	67.6	33,239	70.1
2010	35,598	23,104	64.9	24,124	67.8
2011	37,676	25,902	68.7	26,457	70.2 [†]
2012	32,195	17,898	55.6 [†]	17,899	55.6 [†]
Total	236,236	155,360	-	159,885	-

[†] The proportion of applicants who accessed was underestimated due to a lack of sufficient follow-up data since only accessions through 2012 are reported in the above table.

Table 2.7 describes the demographic characteristics of Reserve applicants at MEPS. Most Reserve applicants in 2012 were male (76.9%), between the ages of 17 and 20 (65.9%), and white (69.7%, excluding applicants who declined to provide their racial status and those with missing records). In 2012, 60.6% of applicants had a high school diploma and most applicants scored in the 65th to 92nd percentile for Armed Forces Qualification Test (AFQT) score (38.2%). The demographic profile of Reserve applicants in 2012 was consistent with that observed, in aggregate, over the past five years, and similar to the demographic profile of Reserve accessions over the same time periods. The proportion of Reserve applicants in 2012 who were classified as having an education beyond high school was greater than the previous five years; both in the category 'some college' (9.7% versus 8.7% in 2007-2011) and the category 'Bachelor's or higher' (6.7% versus 5.7% in 2007-2011). These increases in the percent of applicants with education beyond high school corresponded to a drop in the percentage of applicants with no high school diploma in 2012 (0.1%) relative to the previous five years (1.1%). The distribution of educational categories among Reserve accessions reflected the applicant population. AFQT percentile scores in 2012 were slightly higher than those observed in prior years. In 2012 a smaller percentage of applicants (29.6%) and accessions (29.6%) scored lower than the 50th percentile relative to the previous five years (33.3% of applicants, 32.1% accessions). Reserve accessions in both periods had an AFQT score distribution similar to that among applicants. The percentage of fully qualified applicants and accessions in 2012 is higher than the percentage observed from 2007 to 2011. In 2012 (82.1%) of applicants were considered fully medically qualified compared to (78.5%) from the previous five years; this increase corresponded to a decrease in the percent of applicants who were temporarily disqualified in 2012 (4.4%) relative to the previous five years (8.0%). This change in the distribution of applicants resulted in a significant decrease in the proportion of accessions with a medical disqualification in 2012.

TABLE 2.7 DEMOGRAPHIC CHARACTERISTICS OF ENLISTED RESERVE APPLICANTS WHO RECEIVED A MEDICAL EXAMINATION IN 2007-2011 VS. 2012

	2007 – 2011				2012			
	Applicants		Accessions		Applicants		Accessions	
	Count	%	Count	%	Count	%	Count	%
Sex*								
Male	155,043	76.0	108,772	76.6	24,763	76.9	13,831	77.3
Female	48,939	24.0	33,249	23.4	7,416	23.0	4,068	22.7
Age Group at MEPS*								
17 – 20	130,666	64.0	94,555	66.6	21,212	65.9	12,189	68.1
21 – 25	45,578	22.3	30,440	21.4	7,483	23.2	4,038	22.6
26 – 30	14,922	7.3	9,267	6.5	2,212	6.9	1,066	6.0
> 30	11,425	5.6	6,560	4.6	1,162	3.6	491	2.7
Race*								
White	149,224	73.1	106,824	75.2	22,442	69.7	12,901	72.1
Black	38,894	19.1	26,286	18.5	6,913	21.5	3,683	20.6
Other	13,963	6.8	8,849	6.2	2,773	8.6	1,314	7.3
Education*								
Below HS Senior†	2,224	1.1	1,607	1.1	35	0.1	20	0.1
HS Senior	43,143	21.1	34,207	24.1	7,343	22.8	4,374	24.4
HS Diploma	129,166	63.3	87,036	61.3	19,519	60.6	10,641	59.5
Some College	17,847	8.7	12,303	8.7	3,139	9.7	1,911	10.7
Bachelor's and above	11,661	5.7	6,868	4.8	2,159	6.7	953	5.3
AFQT Score*								
93 – 99	12,389	6.1	8,541	6.0	2,039	6.3	1,127	6.3
65 – 92	71,380	35.0	51,180	36.0	12,289	38.2	6,969	38.9
50 – 64	51,469	25.2	36,439	25.7	8,086	25.1	4,490	25.1
30 – 49	61,857	30.3	43,507	30.6	8,979	27.9	5,250	29.3
11 – 29	5,653	2.8	2,014	1.4	530	1.6	36	0.2
< 11**	415	0.2	203	0.1	31	0.1	20	0.1
Medical status								
Fully Qualified	160,236	78.5	121,092	85.3	26,425	82.1	15,992	89.3
Permanent DQ	27,565	13.5	11,866	8.4	4,365	13.6	1,382	7.7
Temporary DQ	16,240	8.0	9,063	6.4	1,405	4.4	525	2.9
Total	204,041		142,021		32,195		17,899	

Some individuals with a missing values are not included in the table.

† Encompasses the following: 1) those pursuing completion of the GED or other test-based high school equivalency diploma, vocational school, or secondary school, etc; 2) those not attending high school and who are neither a high school graduate nor an alternative high school credential holder; 3) one who is attending high school and is not yet a senior.

** Individuals scoring in the 10 percentile or lower are prohibited from applying, therefore, the observed accessions most likely reflect data capture errors.

Army and Air National Guard Applicants Accessions

Tables 2.8 through 2.10 describe the characteristics of applicants in the enlisted National Guard of the Army and Air Force. The Navy and Marines do not have a National Guard component. Data on National Guard applicants who received a medical examination at MEPS are shown for the period from FY 2007 through FY 2011 (in aggregate) and separately for FY 2012. These results include only civilians with no prior service applying for the National Guard and do not include direct accessions from Active Duty military. Individuals were counted only once, either in the component and service in which they access, or for applicants, in the service and component applied to on their most recent day of application. National Guard applicants who subsequently accessed as officers (as indicated by a pay grade at gain of O01-06), were included as applicants, but excluded from accessions.

The within fiscal year accession rate in 2012 among the Army and Air National Guard was nearly the same as the within fiscal year accession rate for 2007-2011. For the Army, the rate was 75.2% in 2012 compared to 71.8% in 2007-2011. The within fiscal year accession rate for the Air National Guard in 2012 (61.6%) was similar to the rate from 2007 to 2011 (59.4%). Despite dissimilar within fiscal year accession rates for the Army as compared to the Air National Guard, the overall accession rates in the two services for 2007-2011 are similar (77.5% and 71.3%, respectively).

TABLE 2.8 ACCESSIONS FOR ENLISTED NATIONAL GUARD APPLICANTS AT MEPS WHO RECEIVED A MEDICAL EXAMINATION BY SERVICE IN 2007-2011 VS. 2012

Service	2007 – 2011			2012	
	Applicants	Accession rate within fiscal year	Accession rate overall	Applicants	Accession rate within fiscal year
Army	249,239	71.8	77.5	44,175	75.2
Air Force	31,504	59.4	71.3	6,685	61.6
Total	280,743	-	-	50,860	-

Table 2.9 shows the number of applicants for the National Guard by year for 2007-2012 and the associated accession counts and rates within one year and within two years following application. Regulations state that accessions must occur within one year of application, although it is fairly common for applicants to request and to be granted a one-year extension. Due to the lack of full two-year follow-up data for 2011 applicants and one year follow-up for 2012 applicants, the corresponding accession rates were underestimated (see note below Table 2.9). The accession rates within one and two years of application were similar throughout the period 2007-2012, with the highest number of National Guard applicants in 2008.

TABLE 2.9 ACCESSIONS WITHIN ONE AND TWO YEARS OF APPLICATION FOR ENLISTED NATIONAL GUARD APPLICANTS AT MEPS WHO RECEIVED A MEDICAL EXAMINATION IN 2007-2011

Year of exam	Applicants	No. within 1 year of application	% within 1 year of application	No. within 2 years of application	% within 2 years of application
2007	56,538	43,443	76.8	44,241	78.3
2008	63,784	48,956	76.8	49,737	78.0
2009	58,770	42,534	72.4	43,541	74.1
2010	55,157	41,241	74.8	42,088	76.3
2011	46,494	35,626	76.6	36,063	77.6 [†]
2012	50,860	37,327	73.4 [†]	-	-
Total	331,603	249,127	-	252,997	-

[†] The proportion of applicants who accessed was underestimated due to a lack of sufficient follow-up data since only accessions through 2012 are reported in the above table.

Table 2.10 describes the demographic characteristics of National Guard applicants for the year 2012 relative to the aggregate demographic characteristics of applicants between 2007 and 2011. In 2012, most applicants and accessions were male, aged 17-20, and white, with at least a high school diploma. Distribution of sex in the applicant and accessed National Guard populations was similar with that observed, in aggregate, over the previous five years. However, in 2012 the percentage of applicants and accessions between the ages of 17 and 20 was slightly larger than in 2007-2011. In 2012, a smaller percentage of whites applied and accessed for service than in previous years. Whites comprised 76.7% of the applicant population in 2012 and 78.4% of the accessed population as compared to 80.5% of the applicants and 83.0% of accessions in the previous five year period. In 2012, a lower percentage of applicants and accessions to National Guard had no high school diploma relative to the previous five year period (1.3% of applicants and 0.7% of accessions in 2012 versus 5.5% applicants and 5.1% accessions in 2007-2011). This decrease corresponded to an increase in the percent of applicants and accessions who were high school seniors in 2012.

The proportion of applicants and accessions who scored below the 50th percentile on the AFQT (36.4% and 33% respectively) in 2012 was similar to the percentage of applicants and accessions scoring below the 50th percentile in the previous five year period (35.8% and 33% respectively). Most applicants and accessions in 2012 were classified as medically qualified (79.9% and 89.5% respectively) in 2012 an increase from the proportion of the applicant and accessed population deemed medically qualified in the previous five years. In 2012, of those who were disqualified based on a medical condition, the proportion of applicants with a permanent disqualification was (12.9%) and temporary disqualification was (7.2%). This change in the distribution of applicants resulted in a significant increase in the proportion of fully qualified accessions in 2012 to 89.5% from 82.5% during the prior five year period.

TABLE 2.10 DEMOGRAPHIC CHARACTERISTICS OF ENLISTED NATIONAL GUARD APPLICANTS WHO RECEIVED A MEDICAL EXAMINATION IN 2007-2011 VS. 2012

	2007 – 2011				2012			
	Applicants		Accessions		Applicants		Accessions	
	Count	%	Count	%	Count	%	Count	%
Sex*								
Male	221,447	78.9	171,453	79.5	39,525	77.7	29,289	78.5
Female	59,204	21.1	44,247	20.5	11,321	22.3	8,038	21.5
Age Group at MEPS*								
17 – 20	175,560	62.5	139,718	64.8	34,079	67.0	25,953	69.5
21 – 25	66,319	23.6	48,700	22.6	11,283	22.2	7,779	20.8
26 – 30	21,315	7.6	15,060	7.0	3,529	6.9	2,336	6.3
> 30	14,852	5.3	9,617	4.5	1,632	3.2	926	2.5
Race*								
White	225,987	80.5	178,934	83.0	39,024	76.7	29,249	78.4
Black	39,720	14.1	29,372	13.6	9,288	18.3	6,560	17.6
Other	10,795	3.8	7,236	3.4	2,424	4.8	1,508	4.0
Education*								
Below HS Senior [‡]	15,436	5.5	11,031	5.1	686	1.3	255	0.7
HS Senior	62,501	22.3	53,232	24.7	13,692	26.9	11,119	29.8
HS Diploma	171,070	60.9	128,252	59.5	30,243	59.5	21,474	57.5
Some College	18,793	6.7	14,335	6.6	3,586	7.1	2,665	7.1
Bachelor's and above	12,943	4.6	8,851	4.1	2,653	5.2	1,814	4.9
AFQT Score*								
93 – 99	15,173	5.4	12,193	5.7	2,986	5.9	2,296	6.2
65 – 92	92,641	33.0	75,425	35.0	17,073	33.6	13,524	36.2
50 – 64	70,973	25.3	56,850	26.4	12,045	23.7	9,155	24.5
30 – 49	90,186	32.1	68,326	31.7	16,038	31.5	11,581	31.0
11 – 29	10,468	3.7	2,719	1.3	2,469	4.9	740	2.0
< 11 ^{**}	220	0.1	32	0.0	39	0.1	0	0.0
Medical status								
Fully Qualified	206,646	73.6	177,951	82.5	40,629	79.9	33,394	89.5
Permanent DQ	39,806	14.2	16,664	7.7	6,547	12.9	2,256	6.0
Temporary DQ	34,291	12.2	21,086	9.8	3,684	7.2	1,677	4.5
Total	280,743		215,701		50,860		37,327	

* Some individuals with a missing value are not included in the table.

[‡] Encompasses the following: 1) those pursuing completion of the GED or other test-based high school equivalency diploma, vocational school, or secondary school, etc; 2) those not attending high school and who are neither a high school graduate nor an alternative high school credential holder; 3) one who is attending high school and is not yet a senior.

^{**} Individuals scoring in the 10 percentile or lower are prohibited from applying, therefore, the observed accessions most likely reflect data capture errors.

Medical Disqualifications among Applicants for First-Time Active Duty Enlisted Service

Table 2.11 shows the medical disqualifications among applicants for active duty enlisted service during the period between 2007 and 2011, and separately for 2012 according to the ICD-9 code assigned to each disqualifying condition. Within this table, the number of disqualifications for a given condition is provided along with the percentage of disqualified individuals receiving the disqualification and the prevalence of the disqualification among all MEPS applicants. These conditions are ranked according to the number of disqualifications in 2012. Some disqualified individuals have more than one disqualifying medical condition; therefore, the number of disqualifications is greater than the number of disqualified individuals.

The most frequent disqualifying condition in 2012 was disorder of refraction and accommodation, a permanent disqualification that requires an accession medical waiver. Disorders of refraction and accommodation accounted for a notably larger proportion of disqualifications in 2012 applicants (13.7%) as compared to applicants in the previous five years (7.2%). The prevalence of disqualifications for disorders of refraction and accommodation was also higher in 2012 (2,352 per 100,000 applicants) compared to applicants in the previous five years (1,436 per 100,000 applicants). The next most common condition was overweight and obesity (9.0% of disqualifications), a temporary condition, which decreased in prevalence among applicants by nearly 50% in 2012 relative to the previous five years to 1,557 per 100,000 applicants. Certain adverse effects not elsewhere classified, including allergies and anaphylaxis, was the third most common disqualification in 2012 accounting for 6.2% of disqualifications, up from 2.0% in 2007-2011. The prevalence of abnormal loss of weight/underweight also increased from 643 per 100,000 applicants in 2007-2011 to 1,068 per 100,000 applicants in 2012. Disqualifications for *Cannabis* abuse (3.8% in 2012) continued to decline with a prevalence that decreased by close to 50% in 2012 relative to the previous five years.

TABLE 2.11 MEDICAL DISQUALIFICATION OF FIRST-TIME ACTIVE DUTY ENLISTED APPLICANTS BY ALL ICD-9 CODES IN 2007–2011 VS. 2012: ALL SERVICES

Condition [†]	2007-2011			2012		
	n	% of DQ apps [‡]	n / 100k apps [§]	n	% of DQ apps [‡]	n / 100k apps [§]
Disorders of refraction and accommodation	16,198	7.2	1,436	4,615	13.7	2,352
Overweight, obesity and other hyperalimentation	38,016	16.8	3,371	3,056	9.0	1,557
Certain adverse effects not elsewhere classified	4,441	2.0	394	2,096	6.2	1,068
Abnormal loss of weight and underweight	7,248	3.2	643	1,918	5.7	977
Hyperkinetic syndrome of childhood	4,603	2.0	408	1,400	4.1	713
Nondependent cannabis abuse	16,591	7.3	1,471	1,296	3.8	660
Hearing loss	10,315	4.6	915	1,260	3.7	642
Anxiety, dissociative, and somatoform disorders	5,820	2.6	516	1,093	3.2	557
Asthma	7,588	3.4	673	1,093	3.2	557
Other joint derangement not elsewhere classified	1,864	0.8	165	995	2.9	507
Total applicants at MEPS	1,127,867			196,246		
Total of disqualified applicants	226,109			33,796		

[†] Condition categories are not mutually exclusive.

[‡] Indicates the percentage of medically disqualified MEPS applicants for the specified condition.

[§] Indicates the number of individuals with the specified condition for every 100,000 applicants screened at MEPS

Table 2.12 shows the medical disqualifications among applicants for Active Duty enlisted service during the period between 2007 and 2011, and separately for 2012 according to Objective Medical Findings (OMF) codes provided by US Military Entrance Processing Command (USMEPCOM). These conditions are ranked according to the number of disqualifications in 2012. Some disqualified individuals have more than one disqualifying medical condition; therefore, the number of disqualifications is greater than the number of individuals disqualified.

Weight and body build is the leading category for disqualification in 2012, accounting for (15.9%) of disqualified individuals, which is down from (21.6%) in 2007 through 2011. This is generally considered a temporary disqualifying condition that can be remediated by the applicant without need for an accession medical waiver. Refraction is the second most common medical disqualification observed, with (12.5%) of individuals disqualified for this reason in 2012, and a prevalence that decreased by nearly 50% relative to the previous five years (6.5%). Psychiatric conditions was the third most common disqualification category in 2012 accounting for 12.3% of disqualifications, up from 9.7% in 2007-2011. The ninth most common condition, nondependent abuse of cannabis, was approximately half as frequent in 2012 as compared to 2007-2011, when it was the third most common disqualification.

TABLE 2.12 MEDICAL DISQUALIFICATION OF FIRST-TIME ACTIVE DUTY ENLISTED APPLICANTS BY ALL LISTED USMEPCOM FAILURE CODES IN 2007–2011 VS. 2012: ALL SERVICES

Condition [†]	2007-2011			2012		
	n	% of DQ apps [‡]	n / 100k apps [§]	n	% of DQ apps [‡]	n / 100k apps [§]
Weight, body build	48,845	21.6	4,331	5,374	15.9	2,738
Refraction	14,670	6.5	1,301	4,240	12.5	2,161
Psychiatric	22,035	9.7	1,954	4,149	12.3	2,114
Skin, Lymphatic, Allergies	13,649	6.0	1,210	3,107	9.2	1,583
Lower extremities (except feet)	13,175	5.8	1,168	2,474	7.3	1,261
Upper extremities	10,732	4.7	952	2,168	6.4	1,105
Lungs and chest (includes breasts)	12,733	5.6	1,129	2,143	6.3	1,092
External genitalia (genitourinary)	7,455	3.3	661	1,331	3.9	678
Cannabis test positive	15,733	7.0	1,395	1,194	3.5	608
Audiometer (hearing)	9,777	4.3	867	1,176	3.5	599
Total applicants at MEPS	1,127,867			196,246		
Total of disqualified applicants	226,109			33,796		

[†] Condition categories are not mutually exclusive.

[‡] Indicates the percentage of medically disqualified MEPS applicants for the specified condition.

[§] Indicates the number of individuals with the specified condition for every 100,000 applicants screened at MEPS.

Accession Medical Waivers

Applicants who receive a permanent medical disqualification at the MEPS may be granted an accession medical waiver for the disqualifying condition(s) from a service-specific waiver authority. This section summarizes waiver considerations that occurred between fiscal years 2007 to 2012. Part I examines all waiver considerations for enlisted waiver applicants, regardless of whether or not there is a corresponding Defense Manpower Data Center (DMDC) accession record. Because waivers are granted prior to accession by each service, no distinction between components is made at the time of waiver application. Some waiver applicants with prior military service but no prior approved medical waiver may also be included in Part I. Individuals applying to multiple waiver authorities may appear more than once in Part I. Thus, this section addresses the spectrum of enlisted waiver applications seen by the waiver authorities. In addition, the waiver conditions most frequently applied for and the most frequently waived conditions for each service's waiver applicants are shown. Part II examines only those approved waiver records from Part I for which there is an Active Duty accession record, and the individual has no prior service as defined elsewhere in this report. Note that in both, Part I and II, the large apparent decrease in Marine waivers is associated with missing waiver records in 2010 and 2011.

Part I: Medical waivers irrespective of an accession record

Table 2.13 shows the number of waiver considerations and approval percentages by branch of service and year of waiver decision from 2007 to 2012. Multiple waiver considerations by the same waiver authority most frequently reflect resubmissions for the same condition, perhaps with additional information. Multiple waiver records are counted in each year and in each service in which they were considered. Approval percentages represent the proportion of the total waivers considered by each service that year, listed in the table as "Count", who had a waiver approved in each service by 2012. Waiver considerations in the Army generally increased through 2009, but have declined since 2010 and have been accompanied by a decrease in waiver approval rates. In the Navy and Air Force the number of waiver considerations was relatively consistent in the period from 2007 to 2011, but has increased sharply in 2012. Overall approval rates in the Navy and Air Force continued to decline in 2012 as observed in previous years. Marine Corps waiver data were incomplete in 2010 and 2011 but appear to be complete in 2012. However, the number of waiver considerations in the Marine Corps in 2012 has decreased compared to 2007 to 2011 overall and the approval rate has increased.

TABLE 2.13 ALL COMPONENT WAIVER CONSIDERATIONS BY YEAR AND SERVICE : 2007-2012

Year	Army		Navy		Marine Corps		Air Force	
	Count	% Approved	Count	% Approved	Count	% Approved	Count	% Approved
2007	14,617	63.8	5,241	81.1	4,704	70.4	2,115	52.5
2008	18,967	69.3	5,304	65.9	4,726	68.8	2,354	61.1
2009	18,591	65.3	4,775	65.4	3,852	71.1	3,214	69.1
2010	15,698	58.3	4,763	60.4	2,189 ^{**}	68.6	3,264	67.2
2011	14,887	56.3	5,171	59.6	805 ^{**}	73.4	2,892	62.0
2012	14,241	55.1	6,101	57.4	2,365	88.0	4,060	56.2
Total	97,001	-	31,355	-	18,641	-	17,899	-

* Applicants may be counted more than once per year and in multiple services.

** Value undercounted due to missing Marine waiver records from 2011 and 2012.

Table 2.14 describes all waiver considerations by service, including the number of considerations per individual, and the frequency with which applicants have multiple conditions. The Army had the highest number of waiver applications and applicants in the period from 2007 to 2012 (97,001 applicants; 90,409 accessions) followed by the Navy (31,355 applicants; 30,803 accessions). On average, most waiver applications did not apply for waivers more than once within a given service. In all services the average number of waiver considerations per applicant was approximately one. Most applicants had a single condition regardless of service (75%-82%). The highest percentage of applicants with more than one condition (24.5%) was found in the Air Force.

TABLE 2.14 ALL COMPONENT WAIVER CONSIDERATION COUNTS : 2007-2012

	Army	Navy	Marine Corps	Air Force
All waiver considerations	97,001	31,355	18,641	17,899
Individuals	90,409	30,803	17,438	17,564
Average number of considerations per applicant	1.07	1.02	1.07	1.02
Applicants with a single condition	79,379 (81.8%)	24,152 (77.0%)	15,227 (81.7%)	13,429 (75.0%)
Applicants with multiple conditions	17,585 (18.1%)	6,099 (19.5%)	3,399 (18.2%)	4,386 (24.5%)
Applicants with missing conditions	37 (0.04%)	1,104 (3.5%) [†]	15 (0.08%)	84 (0.47%)

* Applicants can be counted in multiple services.

** Value undercounted due to missing Marine waiver records from 2010 and 2011.

† In 2007, 56% of Navy waiver records were missing a diagnosis. In 2007-2011, about 5% of records were missing a diagnosis on average.

Tables 2.15 through 2.18 show the medical conditions for which waivers were most frequently applied and the approval rate for individuals with these conditions, for each branch of service in 2007-2012. Waiver considerations from the years 2007 to 2011 are shown in aggregate to facilitate the comparison of waivers in 2012 to previous years.

Enlisted medical accession waiver considerations and approvals for the Army are shown in Table 2.15. Disorders of refraction and accommodation were the most common medical disqualification for which waivers were sought in 2012. The percentage of applied (14.5%) waivers for disorders of refraction and accommodation increased by approximately one third from the previous five year rate; this waiver also has the highest approval rate in both 2012 (22.7%) and 2007-2011 (12.4%). Certain adverse affects not elsewhere classified, including unspecified allergies and history of anaphylaxis, was the second most common waiver application (5.9%) and approval (9.2%) waiver in 2012, increasing relative to the previous five year period.

Enlisted medical accession waiver considerations and approvals for the Navy are shown in Table 2.16. In 2012, the most commonly sought waivers were for astigmatism (11.6%) and myopia (8.9%). Astigmatism waiver applications and approvals increased significantly in 2012 relative to the previous five year period. Small decreases in the percentage of waiver applications and approvals for myopia were observed in the 2012 as compared to 2007 to 2011. Allergic manifestations were the third most common condition among waiver applications and approvals accounting for 12.1% of waiver approvals and 8.6% of applications, an increase from 2007-2011.

Table 2.17 shows the enlisted medical accession waiver considerations and approvals for the Marine Corps. The most commonly sought waivers in 2012 were for disorders of refraction and accommodation (24.4%), other nonspecific abnormal findings (19.2%), and certain adverse effects not elsewhere classified (9.3%). An increase can be seen in the proportion of waivers sought for disorders of refraction and accommodation, other nonspecific abnormal findings and certain adverse effects not elsewhere classified compared to previous years. Compared to previous years, there was a notable decrease in waivers for hearing loss in 2012. However, 2010 and 2011 waiver applications were under-reported by the Marine Corps. Applications that were received may not be representative of the Marine Corps waiver applicant population.

Table 2.18 shows the enlisted medical accession waiver considerations and approvals for the Air force waiver authority in 2012 and in aggregate for 2007 to 2011. Disorders of refraction and accommodation were the most common condition for waiver applicants in 2012 (15.8%) and makes up an increasing percentage of waiver applicants and approvals in 2012 relative to previous years. Hyperkinetic syndrome of childhood was the second most common waiver application and approval (~8% of each population) and also represented a larger proportion of total waivers in 2012 than in previous years.

TABLE 2.15 LEADING CONDITIONS FOR ENLISTED ACCESSION WAIVERS CONSIDERED IN 2007–2011 VS. 2012:
ARMY

Condition [†]	2007-2011				2012			
	Applied		Approved		Applied		Approved	
	Count	% of all apps [‡]	Count	% of apprvd apps [§]	Count	% of all apps [‡]	Count	% of apprvd apps [§]
Disorders of refraction and accommodation	7,896	9.5	6,462	12.4	2,066	14.5	1,784	22.7
Certain adverse effects not elsewhere classified ^{††}	2,222	2.7	1,821	3.5	847	5.9	723	9.2
Hearing loss	6,829	8.3	3,072	5.9	775	5.4	251	3.2
Attention deficit with hyperactivity	1,526	1.8	855	1.6	648	4.6	354	4.5
Anxiety, dissociative, and somatoform disorders	3,084	3.7	1,035	2.0	620	4.4	59	0.8
Other joint derangement not elsewhere classified	836	1.0	626	1.2	520	3.7	401	5.1
Asthma	2,953	3.6	1,373	2.6	502	3.5	186	2.4
Internal derangement of knee	1,243	1.5	720	1.4	342	2.4	214	2.7
Depression, not elsewhere classified	1,097	1.3	342	0.7	269	1.9	9	0.1
Disturbance of conduct, not elsewhere classified	1,238	1.5	581	1.1	250	1.8	81	1.0
Contact dermatitis and other eczema	1,389	1.7	1,048	2.0	249	1.7	170	2.2
Total considerations*	82,760				14,241			
Total of approved applicants*	52,129 (63.0%)				7,845 (55.1%)			

[†] Condition categories are not mutually exclusive.

[‡] Indicates the percentage of waiver applicants for the specified condition category, among total waivers considered.

[§] Indicates the percentage of approved waiver applicants for the specified condition category, among total approved waivers.

^{††} Codes in this category typically include unspecified allergies and anaphylactic shock.

* This category includes waiver applicants with missing condition values.

TABLE 2.16 LEADING CONDITIONS FOR ENLISTED ACCESSION WAIVERS CONSIDERED IN 2007–2011 VS. 2012:
NAVY

Condition [†]	2007-2011				2012			
	Applied		Approved		Applied		Approved	
	Count	% of all apps [‡]	Count	% of apprvd apps [§]	Count	% of all apps [‡]	Count	% of apprvd apps [§]
Astigmatism	777	3.1	607	3.6	706	11.6	528	15.1
Myopia	2,515	10.0	1,658	9.9	544	8.9	279	8.0
Allergic Manifestations	727	2.9	610	3.6	522	8.6	424	12.1
Hearing deficiency	1,782	7.1	595	3.5	350	5.7	36	1.0
Attention deficit with hyperactivity	545	2.2	379	2.3	267	4.4	126	3.6
Asthma	1,322	5.2	916	5.4	239	3.9	96	2.7
Shoulder dislocations, recurrent	274	1.1	246	1.5	186	3.0	163	4.7
Injury of bone or joint (lower extremity)	205	0.8	140	0.8	148	2.4	81	2.3
Curvature of spine	474	1.9	169	1.0	145	2.4	35	1.0
Adverse food reactions, not elsewhere classified	497	2.0	439	2.6	137	2.2	91	2.6
Depression, not elsewhere classified	517	2.0	325	1.9	125	2.0	36	1.0
Total considerations*	25,254				6,101			
Total of approved applicants*	16,831 (66.6%)				3,503 (57.4%)			

[†] Condition categories are not mutually exclusive.

[‡] Indicates the percentage of waiver applicants for the specified condition category, among total waivers considered.

[§] Indicates the percentage of approved waiver applicants for the specified condition category, among total approved waivers.

* This category includes waiver applicants with missing condition values.

**TABLE 2.17 LEADING CONDITIONS FOR ENLISTED ACCESSION WAIVERS CONSIDERED IN 2007–2011 vs. 2012:
MARINE CORPS**

Condition [†]	2007-2011				2012			
	Applied		Approved		Applied		Approved	
	Count	% of all apps [‡]	Count	% of apprvd apps [§]	Count	% of all apps [‡]	Count	% of apprvd apps [§]
Disorders of refraction and accommodation	1,569	9.6	1,273	11.2	578	24.4	533	25.6
Other nonspecific abnormal findings	1,770	10.9	1,271	11.2	453	19.2	398	19.1
Certain adverse effects not elsewhere classified ^{**}	609	3.7	526	4.6	219	9.3	216	10.4
Attention deficit with hyperactivity	482	3.0	365	3.2	145	6.1	129	6.2
Asthma	1,129	6.9	801	7.0	122	5.2	114	5.5
Late effects of musculoskeletal and connective tissue injuries	277	1.7	211	1.9	95	4.0	92	4.4
Anxiety, dissociative, and somatoform disorders	766	4.7	548	4.8	73	3.1	64	3.1
Hearing deficiency	1234	7.6	683	6.0	73	3.1	29	1.4
Contact dermatitis and other eczema	351	2.2	268	2.4	59	2.5	51	2.4
Curvature of spine	284	1.7	104	0.9	57	2.4	27	1.3
Certain congenital musculoskeletal deformities	125	0.8	85	0.7	49	2.1	46	2.2
Total considerations*	16,276				2,365			
Total of approved applicants*	11,394 (70.0%)				2,082 (88.0%)			

[†] Condition categories are not mutually exclusive.

[‡] Indicates the percentage of waiver applicants for the specified condition category, among total waivers considered.

[§] Indicates the percentage of approved waiver applicants for the specified condition category, among total approved waivers.

^{**} Codes in this category typically include unspecified allergies and anaphylactic shock.

* This category includes waiver applicants with missing condition values.

TABLE 2.18 LEADING CONDITIONS FOR ENLISTED ACCESSION WAIVERS CONSIDERED IN 2007–2011 VS. 2012:
AIR FORCE

Condition [†]	2007-2011				2012			
	Applied		Approved		Applied		Approved	
	Count	% of all apps [‡]	Count	% of apprvd apps [§]	Count	% of all apps [‡]	Count	% of apprvd apps [§]
Disorders of refraction and accommodation	1,788	12.9	1,159	13.2	643	15.8	467	20.5
Attention deficit with hyperactivity	706	5.1	532	6.1	323	8.0	184	8.1
Certain adverse effects not elsewhere classified ^{**}	159	1.1	134	1.5	307	7.6	221	9.7
Asthma	770	5.6	388	4.4	234	5.8	108	4.7
Anxiety, dissociative, and somatoform disorders	374	2.7	272	3.1	179	4.4	91	4.0
Episodic mood disorders	599	4.3	410	4.7	153	3.8	48	2.1
Hearing deficiency	652	4.7	75	0.9	118	2.9	9	0.4
Contact dermatitis and other eczema	388	2.8	155	1.8	115	2.8	31	1.4
Bulbus cordis anomalies and anomalies of cardiac septal closure	291	2.1	214	2.4	88	2.2	69	3.0
Recurrent dislocation of joint	196	1.4	169	1.9	79	1.9	61	2.7
Congenital anomalies of genital organs	164	1.2	134	1.5	72	1.8	63	2.8
Total considerations*	13,839				4,060			
Total of approved applicants*	8,755 (63.3%)				2,281 (56.2%)			

[†] Condition categories are not mutually exclusive.

[‡] Indicates the percentage of waiver applicants for the specified condition category, among total waivers considered.

[§] Indicates the percentage of approved waiver applicants for the specified condition category, among total approved waivers.

^{**} Codes in this category typically include unspecified allergies and anaphylactic shock.

* This category includes waiver applicants with missing condition values.

Tables 2.19 through 2.22 show the most frequently approved waiver conditions ranked by waiver consideration approval percentage for 2012, sorted in descending order by overall approval rate. The same population of considerations was used as in Tables 2.23 to 2.26. Note that all conditions are not mutually exclusive and an individual may appear in the table in multiple condition rows.

In Table 2.19, among Active Duty Army applicants, waivers for disorders of refraction and accommodation (88.0%) had the highest proportion of approved applicants in 2012. The next most common condition was disorders of lipid metabolism (86.5%) which showed a notable decrease in the proportion of approved waiver applications in 2012 when compared to the prior five year period. Adverse effect not elsewhere classified, including unspecified allergies and anaphylaxis (84.2%) and strabismus (83.0%) were the third and fourth most commonly waived conditions.

Table 2.20 shows little change in the approval rates among the conditions with the highest approval rates when comparing 2012 to the previous five years. Dislocation of the shoulder (90.4%) had the highest approval rates in 2012 followed by instability of any major joint (89.7%), allergic manifestations (86.3%), and anterior cruciate ligament injury (85.7%).

Table 2.21 shows that among Marine Corps enlistees, the conditions with the highest approval rates were certain adverse effects not elsewhere classified, including allergic reactions and history of anaphylaxis (99.5%), certain musculoskeletal deformities (97.8%), and late effects of musculoskeletal and connective tissue injuries (97.4%). The Marine Corps waiver authority approval rates were generally higher in 2012 than in prior years. The largest increase in approval rates was for asthma (95.5% in 2012, 72.1% in 2007-2011). However, Marine Corps waiver data were under-reported in 2010 and 2011 and data from these years may not be representative of the waiver population.

Table 2.22 shows that among Air Force enlistees, the conditions with the highest proportion of approved applications generally had a low number of applicants. Waiver approvals were most common among applications for congenital anomalies of genital organs (91.0%), cardiac anomalies (83.3%), other joint derangements (82.7%), and recurrent joint dislocations (80.6%).

TABLE 2.19 CONDITION-SPECIFIC CATEGORIES FOR THOSE ACCESSION MEDICAL WAIVERS WITH THE HIGHEST PROPORTION OF APPROVED APPLICATIONS AMONG ARMY ENLISTEES: 2007–2011 VS. 2012

Condition [†]	Total		2007-2011		2012	
	Count	% Granted	Count	% Granted	Count	% Granted
Disorders of refraction and accommodation	8,109	85.1	6,350	84.3	1,759	88.0
Disorders of lipid metabolism	3,785	93.0	3,657	93.2	128	86.5
Certain adverse effects not elsewhere classified ^{††}	2,322	84.2	1,633	84.2	689	84.2
Strabismus and other disorders of binocular eye movements	363	82.9	275	82.8	88	83.0
Shoulder Dislocation	757	77.4	622	77.7	135	76.3
Other joint derangement not elsewhere classified	947	75.9	572	76.3	375	75.3
Deviation or curvature of the spine	797	68.8	641	67.5	156	75.0
Congenital anomalies of genital organs	872	83.3	704	87.0	168	70.6
Other specified nonteratogenic anomalies	317	54.8	220	51.3	97	65.1
Contact dermatitis and other eczema	1,131	74.3	980	76.1	151	64.5

[†] Condition categories are not mutually exclusive.

^{††} Codes in this category typically include unspecified allergies and anaphylactic shock.

TABLE 2.20 CONDITION-SPECIFIC CATEGORIES FOR THOSE ACCESSION MEDICAL WAIVERS WITH THE HIGHEST PROPORTION OF APPROVED APPLICATIONS AMONG NAVY ENLISTEES: 2007–2011 VS. 2012

Condition [†]	Total		2007-2011		2012	
	Count	% Granted	Count	% Granted	Count	% Granted
Shoulder Dislocation	372	90.3	222	90.2	150	90.4
Shoulder Instability	392	91.2	296	91.6	96	89.7
Allergic manifestations	946	86.4	555	86.4	391	86.3
Anterior cruciate ligament injury, knee	180	83.3	120	82.2	60	85.7
Keratorefractive surgery	497	91.2	433	93.3	64	79.0
Astigmatism	1094	79.0	585	80.1	509	77.7
Adverse food reactions, not elsewhere classified	494	86.5	411	90.7	83	70.3
Injury of bone or joint	183	68.8	121	71.2	62	64.6
Myopia	1775	65.3	1539	67.0	236	56.1
Attention deficit w/hyperactivity	435	67.7	327	73.6	108	54.3

[†] Condition categories are not mutually exclusive.

TABLE 2.21 CONDITION-SPECIFIC CATEGORIES FOR THOSE ACCESSION MEDICAL WAIVERS WITH THE HIGHEST PROPORTION OF APPROVED APPLICATIONS AMONG MARINE CORPS ENLISTEES: 2007–2011 vs. 2012

Condition [†]	Total		2007-2011		2012	
	Count	% Granted	Count	% Granted	Count	% Granted
Certain adverse effects not elsewhere classified ^{††}	662	89.7	465	86.1	197	99.5
Certain congenital musculoskeletal deformities	108	74.0	63	63.0	45	97.8
Late effects of musculoskeletal and connective tissue injuries	237	82.3	163	76.9	74	97.4
Asthma	855	72.1	749	69.7	106	95.5
Contact dermatitis and other eczema	285	76.6	240	74.1	45	93.8
Disorders of refraction and accommodation	1785	84.4	1,254	81.4	531	92.3
Other nonspecific abnormal findings	1,393	76.4	1,083	72.8	310	92.0
Disturbance of emotions specific to childhood and adolescence	223	67.6	192	64.9	31	91.2
Attention deficit with hyperactivity	429	80.6	305	77.8	124	88.6
Anxiety, dissociative and somatoform disorders	558	72.3	493	70.6	65	87.8

[†] Condition categories are not mutually exclusive.

^{††} Codes in this category typically include unspecified allergies and anaphylactic shock.

TABLE 2.22 CONDITION-SPECIFIC CATEGORIES FOR THOSE ACCESSION MEDICAL WAIVERS WITH THE HIGHEST PROPORTION OF APPROVED APPLICATIONS AMONG AIR FORCE ENLISTEES: 2007–2011 vs. 2012

Condition [†]	Total		2007-2011		2012	
	Count	% Granted	Count	% Granted	Count	% Granted
Congenital anomalies of genital organs	188	85.8	127	83.6	61	91.0
Bulbus cordis anomalies and anomalies of cardiac septal closure	265	76.4	205	74.5	60	83.3
Other joint derangement not elsewhere classified	261	86.7	175	88.8	86	82.7
Recurrent dislocation of joint	226	85.9	168	88.0	58	80.6
Disorders of refraction and accommodation	1,561	67.1	1,114	64.8	447	73.8
Certain adverse effects not elsewhere classified	318	77.6	121	87.1	197	72.7
Anxiety, dissociative and somatoform disorders	297	73.2	220	78.0	77	62.1
Attention deficit with hyperactivity	605	73.0	449	79.3	156	59.3
Asthma	450	49.4	354	49.6	96	48.7
Episodic mood disorders	346	65.5	312	72.4	34	35.1

[†] Condition categories are not mutually exclusive.

Part II: Medical waivers with an accession record

Table 2.23 shows the numbers of enlisted active duty applicants who were granted accession medical waivers who had a MEPS physical examination record indicating no prior service. Individuals are counted once, in the most recent year of waiver consideration. Results are shown for each year from 2007 to 2012 for all service branches combined. Also shown are the numbers and percentages of these individuals who were subsequently gained onto enlisted active duty service within one and two years of their most recent MEPS visit. The proportion of individuals granted waivers who subsequently become accessions within one and two years of their MEPS physical has decreased in the period from 2007 to 2012.

TABLE 2.23 ACTIVE DUTY ACCESSIONS WITHIN ONE AND TWO YEARS OF PHYSICAL EXAMINATION FOR ENLISTED APPLICANTS WHO RECEIVED A WAIVER IN 2007–2012[†]: BY YEAR

Year of waiver consideration	Applicants with waivers granted	Applicants who accessed within 1 year of application		Applicants who accessed within 2 years of application	
		Count	%	Count	%
2007	11,832	8,895	75.2	9,824	83.0
2008	13,811	10,382	75.2	11,443	82.9
2009	14,115	9,545	67.6	11,093	78.6
2010*	11,694	7,668	65.6	9,352	80.0
2011*	10,546	7,150	67.8	8,511	80.7
2012 [‡]	12,896	4,559	35.4	5,257	40.8

[†] Considers accessions among only those applicants with both a MEPS physical examination for Active Duty service record and an approved waiver.

* Value undercounted due to missing Marine waiver records from 2011 and 2012.

[‡] The accession rate was underestimated due to a lack of sufficient follow up time.

Table 2.24 describes the characteristics of applicants who were granted waivers from all branches of service. Individuals with a corresponding MEPS active duty application record as well as subsequent accessions are shown for 2007–2011 and separately for 2012. Total numbers of records used in calculating percents vary slightly depending upon the completeness of data on the demographic factor being considered. For example, an individual with missing data on sex, but not race, will be included in the description of race of applicants but not in the description of sex.

Individuals who accessed with waivers in 2012 were similar to the waiver applicant population with respect to sex, age, and race. Sex, age, and race distribution of waiver applicants in 2012 were similar to the waiver applicant population in 2007–2011 regardless of accession. In 2012, there was a higher prevalence of education beyond high school senior in both applicants and those that accessed than in the prior five year period. AFQT scores in 2012 appear to be higher among enlisted waiver applicants compared to the previous five years. 99% of applicants and accessions approved for a waiver have a permanently disqualified status with relatively few fully qualified or temporarily disqualified individuals seeking one. The proportion of permanently disqualified individuals among those receiving waivers was similar in 2012 as compared to prior years.

TABLE 2.24 DEMOGRAPHIC CHARACTERISTICS OF ALL ACTIVE DUTY ENLISTED APPLICANTS WHO RECEIVED AN ACCESSION MEDICAL WAIVER COMPARED TO ONLY THOSE WAIVED PERSONNEL WHO BEGAN ACTIVE DUTY SERVICE: 2007-2011 VS. 2012

	2007- 2011				2012			
	All waivers		Accessed only		All waivers		Accessed only	
	Count	%	Count	%	Count	%	Count	%
Sex								
Male	50,798	81.9	41,904	83.2	10,735	83.2	4,445	84.2
Female	11,193	18.1	8,460	16.8	2,160	16.7	831	15.8
Age at Walver								
17 – 20	20,112	32.4	20,112	39.9	2,386	18.5	2,386	45.2
21 – 25	21,281	34.3	21,281	42.3	2,270	17.6	2,270	43.0
26 – 30	5,964	9.6	5,964	11.8	527	4.1	527	10.0
> 30	2,713	4.4	2,713	5.4	70	0.5	70	1.3
Missing /Unsure	11,928	19.2	294	0.6	7,643	59.3	23	0.4
Race								
White	48,155	77.7	39,623	78.7	9,781	75.8	4,042	76.6
Black	7,975	12.9	6,448	12.8	1,739	13.5	709	13.4
Other	5,394	8.7	4,278	8.5	1,348	10.5	524	9.9
Missing/Declined	474	0.8	15	0.0	28	0.2	1	0.0
Education Level								
Below HS senior [*]	512	0.8	347	0.7	2	0.0	1	0.0
HS senior	5,877	9.5	4,111	8.2	1,912	14.8	389	7.4
HS diploma	45,912	74.1	38,216	75.9	9,031	70.0	4,040	76.6
Some college	5,274	8.5	4,296	8.5	1069	8.3	488	9.2
Bachelor's and higher	4,423	7.1	3,394	6.7	882	6.8	358	6.8
AFQT Score								
93-99	5,696	9.2	4,683	9.3	1227	9.5	491	9.3
65-92	24,737	39.9	20,340	40.4	5,594	43.4	2,367	44.9
50-64	15,707	25.3	12,766	25.3	3,597	27.9	1,463	27.7
30-49	14,824	23.9	11,938	23.7	2445	19.0	947	17.9
11-29	599	1.0	376	0.7	28	0.2	8	0.2
<11	20	0.0	2	0.0	0	0.0	0	0.0
Missing	415	0.7	259	0.5	5	0.0	0	0.0
Medical Status								
Fully Qualified	435	0.7	345	0.7	78	0.6	30	0.6
Permanent DQ	61,222	98.7	49,732	98.7	12,789	99.2	5,225	99.0
Temporary DQ	341	0.6	287	0.6	29	0.2	21	0.4
Total[†]	61,998	-	50,364	-	12,896	-	5,276	-

[†] Some Individuals with a missing value for gender are included in the total.

^{*} Encompasses the following three cases: 1) one who is pursuing completion of the GED or other test-based high school equivalency diploma, vocational school, or secondary school, etc.; 2) one who is not attending high school and who is neither a high school graduate nor an alternative high school credential holder; 3) one who is attending high school but is not yet a senior

Hospitalizations

This section summarizes hospitalization records of service members admitted to any military treatment facility. Part I summarizes all hospitalization records, regardless of whether AMSARA has an accession record corresponding to the hospitalized individual. Part II summarizes only hospitalization records among Active Duty enlistees who began service during FY 2007-2012 and for whom AMSARA has a corresponding Active Duty accession record. This section accordingly examines hospitalization among Active Duty enlistees early in service.

Part I: Hospitalizations irrespective of an accession record

Table 2.25 shows the overall hospitalization counts and percentages during the first and second years of service as well as counts of hospitalizations at all lengths of service. Results are shown for active duty enlistees separately for 2012 and the previous five-year period. For the Army and Marine Corps, the percent of hospitalizations occurring in the first year of service is lower than the corresponding percent for the previous five years. In the Navy and Air Force the percent of all hospitalizations occurring in the first year is similar to the previous five years. The percent of Active Duty hospitalizations occurring in the second year of service appear to be similar across all military services in 2012 when compared to previous years.

TABLE 2.25 HOSPITALIZATIONS IN 2007 – 2012 BY SERVICE AND YEARS OF SERVICE: ACTIVE DUTY

Service	Years of service	2007-2011		2012	
		Count	Percent ^a	Count	Percent ^a
Army	<1	14,662	11.4	2,094	9.3
	1 – <2	19,185	14.9	3,103	13.8
	All	129,040	-	22,545	-
Navy	<1	2,238	4.4	434	4.5
	1 – <2	6,322	12.4	1,041	10.8
	All	50,930	-	9,656	-
Marine Corps	<1	2,735	8.4	407	6.9
	1 – <2	5,979	18.3	922	15.6
	All	32,674	-	5,894	-
Air Force	<1	1,633	5.4	342	6.4
	1 – <2	2,587	8.5	427	8.0
	All	30,373	-	5,320	-

^a Percent of all hospitalizations that occur within each time period

Table 2.26 shows hospitalizations among the Reserves. For all services, the percentage of hospitalizations occurring in the first year for 2012 was similar to 2007-2011, while the percentage occurring in the second year increased significantly compared to the previous five year period. For the Army, the percentage of hospitalizations occurring in the first year is consistently greater than the in second year. For the Navy and Marine Corps, the percentage of hospitalizations occurring in the second year is considerably greater than the first year for 2012, but similar over the previous five year period for hospitalizations occurring within less than one year of service. Hospitalizations, for the Navy and Marines, occurring in the second year of service in 2012 are considerably higher than in the prior five year period. The percentages of hospitalizations occurring in 2012 for the first and second year in the Air Force seem to be similar to the previous five year period.

TABLE 2.26 HOSPITALIZATIONS IN 2007 – 2012 BY SERVICE AND YEARS OF SERVICE: RESERVES

Service	Years of service	2007-2011		2012	
		Count	Percent ^a	Count	Percent ^a
Army	<1	1,322	22.7	205	24.9
	1 – <2	486	8.3	92	11.2
	All	5,834	-	822	-
Navy	<1	26	2.8	4	3.3
	1 – <2	53	5.7	11	9.1
	All	938	-	121	-
Marine Corps	<1	29	4.8	5	5.7
	1 – <2	62	10.2	21	24.1
	All	607	-	87	-
Air Force	<1	43	7.6	7	8.0
	1 – <2	31	5.5	4	4.5
	All	566	-	88	-

^a Percent of all hospitalizations that occur within each time period

Table 2.27 shows hospitalizations for the National Guard. In the Army National guard, most hospitalizations occurred in the first year of service, while in the Air Force National Guard, most occurred in the second year of service. In 2012 hospitalizations in the first year of service increased in the Army as compared to hospitalizations within the first year of service in the previous five years. Hospitalizations among second-year service members represented a greater percentage of all hospitalizations among the Army and Air Force National Guard in 2012 than in the previous five year period.

TABLE 2.27 HOSPITALIZATIONS IN 2007 – 2012 BY SERVICE AND YEARS OF SERVICE: NATIONAL GUARD

Service	Years of service	2007-2011		2012	
		Count	Percent ^a	Count	Percent ^a
Army	<1	2,185	21.9	347	26.5
	1 – <2	981	9.8	173	13.2
	All	9,988	-	1,309	-
Air Force	<1	27	3.9	4	2.8
	1 – <2	42	6.1	15	10.6
	All	690	-	141	-

^a Percent of all hospitalizations that occur within each time period

Hospitalizations for active duty enlisted service members by condition category and service are shown in Table 2.28 for the years 2007 to 2011 in aggregate and separately for 2012 irrespective of length of service. For each service, complications of pregnancy were the most common conditions for which hospitalizations occurred in 2007-2011 and in 2012. The percentage of hospitalizations in 2012 attributable to this category was lower in the Marine Corps (15.7%) and Army (17.6%) than in the Navy (31.4%) and Air Force (32.5%). Among enlisted Army members, the next most common categories for hospitalizations in 2012 included neurotic or personality disorders (9%), fractures (5.0%), and injuries (4.7%). The percentage of injuries has dropped from the prior five year period when 7.1% of hospitalizations were due to injury and the number of neurotic or personality disorders has increased from the 2007-2011 period when 8.2% of hospitalizations were attributed to these conditions. Among enlisted Navy members in 2012, complications in pregnancy (31.4%) was followed by neurotic or personality disorders (10.8%), other psychoses (4.3%), and fractures (3.1%) as the most common causes of hospitalizations. The percentage of neurotic or personality disorders has increased to 10.8% from the prior 2007-2011 6.3%. Among the Marine Corps, complications of pregnancy (15.7%), neurotic or personality disorders (12.2%), fractures (6.0%), and injuries (5.0%) were the most common hospitalizations in 2012. Complications of pregnancy (32.5%), neurotic or personality disorders (4.1%), appendicitis (3.8%), and nonspecific symptoms (3.7%) were the most common hospitalizations among enlisted Air Force members in 2012. The distribution of causes of hospitalization among Marines and Air Force members in 2012 was similar to the distribution in 2007-2011.

TABLE 2.28 DISTRIBUTION OF PRIMARY CAUSE CATEGORIES FOR HOSPITALIZATIONS IRRESPECTIVE OF LENGTH OF SERVICE AMONG ACTIVE DUTY ENLISTEES IN 2006–2010 VS. 2012: BY SERVICE

Category	Army		Navy		Marine Corps		Air Force	
	*2007-2011	*2012	*2007-2011	*2012	*2007-2011	*2012	*2007-2011	*2012
Complications of pregnancy, childbirth, and the puerperium	15.2	17.6	33.6	31.4	15.2	15.7	33.8	32.5
Neurotic or personality disorders	8.2	9.9	6.3	10.8	8.5	12.2	3.3	4.1
Injuries	7.1	4.7	2.8	2.1	8.1	5.0	2.6	1.9
Fracture	6.8	5.0	3.4	3.1	8.2	6.0	2.8	2.5
Other Psychoses	4.3	3.9	4.1	4.3	4.9	4.1	2.5	2.7
Nonspecific symptoms	3.7	3.9	3.0	2.9	1.7	1.8	4.0	3.7
Infections of skin and subcutaneous tissue	2.9	2.1	2.4	2.0	3.8	3.1	1.9	1.6
Dorsopathies	2.6	3.0	2.1	1.9	1.4	2.1	2.4	3.1
Appendicitis	2.3	2.6	3.4	3.0	3.8	3.3	3.5	3.8
Pneumonia and influenza	2.0	1.4	0.7	0.7	1.3	1.0	0.7	0.6
Other diseases of digestive system	1.8	2.1	2.2	2.2	1.3	1.5	2.1	2.2
Total hospitalizations	144,862	24,676	51,868	9,777	33,281	5,981	31,629	5,549

*% of total hospitalizations

Table 2.29 shows the percentage of hospitalized by primary cause and component of service in aggregate for 2007-2011 and separately for 2012. The Navy and Marine Corps do not have a National Guard component. In 2012, complications of pregnancy (23.1%) were the most common reason for hospitalizations among active duty members followed by neurotic or personality disorders (9.7%), fractures (4.4%), and other psychoses (3.9%). Among Reservists, the most common causes of hospitalizations in 2012 were neurotic or personality disorders (9.3%), complications of pregnancy (6.3%), injuries (5.1%), and nonspecific symptoms (5.1%). For the National Guard, the most common hospitalization causes in 2012 were neurotic or personality disorders (8.8%), fractures (6.4%), injuries (5.3%), and nonspecific symptoms (4.3%). In general, the contribution of each category to the sum of all hospitalizations within a service was similar when comparing 2012 and 2007-2011, except for the increase in proportion of neurotic or personality disorders and the reduction in the proportion of injuries and fractures in 2012 compared to the previous five year period for all components.

TABLE 2.29 DISTRIBUTION OF PRIMARY CAUSE CATEGORIES FOR HOSPITALIZATIONS IRRESPECTIVE OF LENGTH OF SERVICE AMONG ACTIVE DUTY ENLISTEES IN 2007–2011 VS. 2012: BY COMPONENT

Category	Active Duty		Reserves		National Guard	
	*2007-2011	*2012	*2007-2011	*2012	*2007-2011	*2012
Complications of pregnancy, childbirth, and the puerperium	22.4	23.1	5.4	6.3	3.1	3.9
Neurotic or personality disorders	7.4	9.7	5.7	9.3	7.0	8.8
Injuries	5.8	3.7	5.5	5.1	7.4	5.3
Fracture	5.7	4.4	5.8	3.8	7.0	6.4
Other Psychoses	4.1	3.9	4.0	4.0	4.1	3.4
Nonspecific symptoms	3.2	3.3	6.1	5.1	5.7	4.3
Appendicitis	2.9	3.0	2.2	1.7	2.2	2.0
Infections of skin and subcutaneous tissue	2.7	2.1	3.4	2.3	4.0	3.0
Dorsopathies	2.3	2.6	2.9	3.5	2.7	3.1
Other diseases of digestive system	1.8	2.0	2.5	2.3	2.3	3.2
Arthropathies and related disorders	1.6	1.0	2.3	1.9	1.6	2.1
Total hospitalizations	243,017	43,415	7,945	1,118	10,678	1,450

*% of total hospitalizations

Part II: Hospitalizations among personnel with an accession record, Active Duty enlistees only

Hospitalization records of active duty enlistees who began service during 2007-2012 and for whom AMSARA has a corresponding accession record are summarized in this section. Relative risks are used to compare the risk of hospitalization across demographic groups. The comparison group chosen for each comparison depends on the factor being considered. For factors with some inherent order (e.g. age group, which ranges from older to younger) it is the first or last group in that order, as appropriate. Otherwise, the comparison group is generally the largest group.

Table 2.30 shows the hospitalizations and individuals hospitalized among those who accessed during each year from 2007-2012. Hospitalizations are separated into two groups: one that includes hospitalizations occurring in the same year as accession and one that includes hospitalizations occurring within one year of active duty service. The former provides a basis for appropriate comparison for those who accessed in 2012, because hospitalization data were available only through 2012 in this report, allowing less than a full year of follow-up for this group. Because multiple hospitalizations can occur per person, results are shown both in terms of hospitalizations ("Admissions") and individuals hospitalized ("Individuals"). The proportion of individuals hospitalized (% of individuals) is relatively stable from 2007-2012.

TABLE 2.30 ACTIVE DUTY HOSPITALIZATIONS IN 2007- 2012: BY YEAR

Year	Total accessed	Within same gain year			Within one year of service		
		Admissions	Individuals	% of Individuals	Admissions	Individuals	% of Individuals
2007	158,595	3,662	3,314	2.1	7,034	6,076	3.8
2008	162,816	3,446	3,126	1.9	6,367	5,583	3.4
2009	161,073	3,283	2,966	1.8	5,437	4,740	2.9
2010	159,747	2,840	2,578	1.6	4,872	4,282	2.7
2011	152,649	2,827	2,557	1.7	4,632	4,092	2.7
2012	155,591	2,248	2,059	1.3	2,248	2,059	1.3*
Total	950,471	18,306	16,600	-	30,590	26,832	-

* May be underestimated due to lack of follow-up time.

Table 2.31 shows that the risk of hospital admission within one year of accession for enlisted personnel varies by service. Army enlistees had the highest risk of hospitalization in the first year following accession. Navy enlistees had the lowest risk of hospitalization among the services. The demographic characteristics of enlistees within one year of accession show that the risk of hospitalization was greatest for women, enlistees in the over 30 age group, white enlistees, those who had less than a high school diploma, and enlistees with an AFQT score in the lowest percentile group, 11-29. By medical disqualification status, the risk of hospitalization is significantly higher among the two disqualified groups compared to the fully qualified group. Enlistees with permanent disqualifications have the highest risk of hospitalization.

**TABLE 2.31 HOSPITAL ADMISSIONS WITHIN ONE YEAR OF ACCESSION FOR ACTIVE DUTY ENLISTED PERSONNEL ACCESSED IN 2007
– 2012: BY SERVICE**

	Total accessed	Admissions	Individuals hospitalized			
			Count	%	Relative risk	95% CI
Service						
Army	373,294	16,264	14,165	3.8	1.00	-
Navy	208,917	2,550	2,219	1.1	0.28	(0.27, 0.29)
Marine Corps	195,506	7,553	6,703	3.4	0.90	(0.88, 0.93)
Air Force	172,754	4,223	3,745	2.2	0.57	(0.55, 0.59)
Sex						
Male	796,172	24,274	21,373	2.7	1.00	-
Female*	154,298	6,316	5,459	3.5	1.32	(1.28, 1.36)
Age at Accession						
17 – 20	610,452	19,451	17,149	2.8	1.00	-
21 – 25	263,396	8,071	7,049	2.7	0.95	(0.93, 0.98)
26 – 30	53,370	1,874	1,632	3.1	1.09	(1.04, 1.14)
> 30	18,962	1,064	887	4.7	1.67	(1.56, 1.78)
Race						
White	722,120	24,324	21,311	3.0	1.00	-
Black	146,222	4,366	3,853	2.6	0.89	(0.86, 0.92)
Other	81,665	1,888	1,656	2.0	0.69	(0.65, 0.72)
Education Level						
Below HS graduate	3,433	190	158	4.6	1.00	-
HS diploma	825,021	26,526	23,300	2.8	0.61	(0.53, 0.71)
Some college	76,433	2,722	2,357	3.1	0.67	(0.57, 0.78)
Bachelor's or higher	45,491	1,149	1,015	2.2	0.48	(0.41, 0.57)
AFQT Score						
93 – 99	64,505	1,728	1,535	2.4	1.00	-
65 – 92	371,719	11,192	9,847	2.6	1.11	(1.06, 1.17)
50 – 64	254,177	8,452	7,380	2.9	1.22	(1.16, 1.29)
30 – 49	243,821	8,749	7,672	3.1	1.32	(1.25, 1.40)
11 – 29	8,377	416	350	4.2	1.76	(1.57, 1.97)
Medical Status						
Fully Qualified	819,225	25,189	22,187	2.7	1.00	-
Temporary DQ	80,922	3,126	2,711	3.4	1.24	(1.19, 1.29)
Permanent DQ	50,324	2,275	1,934	3.8	1.42	(1.36, 1.49)
Total	950,471	30,590	26,832			

* Hospitalizations for pregnancy/childbirth are included.

** Encompasses the following three cases: 1) one who is pursuing completion of the GED or other test based high school equivalency diploma, vocational school, or secondary school, etc.; 2) one who is not attending high school and who is neither a high school graduate nor an alternative high school credential holder; 3) one who is attending high school but is not yet a senior

Table 2.32 shows the most common hospital diagnoses within one year and two years of accession. During the first year of service, neurotic and personality disorders are the most frequent medical conditions leading to a hospitalization. Pneumonia and influenza are the second leading diagnosis category, followed by infections of the skin and subcutaneous tissue, other psychoses, and fracture. The reduced number of hospitalizations for neurotic and personality disorders and other psychoses in the second year may reflect the fact that most enlistees who experience a serious episode related to mental illness early in training are discharged soon after. The lower number of hospitalizations for pneumonia and influenza may be related to a reduction in group-living situations after basic training. Other conditions occur more frequently in the second year of service. Admissions for complications of pregnancy increase dramatically in the second year, which is not surprising given that pregnancy is a temporary medical disqualification at MEPS and a cause for discharge during Basic Combat Training (BCT). The number of admissions for injuries also increases after the first year of service, which may be deployment-related.

TABLE 2.32 HOSPITAL ADMISSIONS AND PERSON HOSPITALIZED WITHIN ONE AND TWO YEARS OF SERVICE FOR ACTIVE DUTY ENLISTED PERSONNEL ACCESSED IN 2007-2012: BY MEDICAL CATEGORY

Category	Within one year of accession		Within two years of accession	
	Hospital Admissions	Persons Hospitalized	Hospital Admissions	Persons Hospitalized
Neurotic or personality disorders	5,946	5,153	9,307	7,647
Pneumonia and influenza	3,017	2,842	3,191	2,988
Infections of skin and subcutaneous tissue	2,328	2,205	2,914	2,720
Other Psychoses	1,664	1,290	2,988	2,036
Fractures	1,594	1,447	3,321	2,651
Nonspecific symptoms	1,567	1,333	2,400	1,948
Injuries	1,081	961	2,697	2,099
Appendicitis	990	955	1,735	1,657
Alcohol and drug dependence	664	556	1,427	1,106
Complications of pregnancy, childbirth, and the puerperium	531	455	8,391	7,240
Others	11,215	9,634	16,999	13,790
Total hospitalizations	30,597	26,831	55,370	45,882

Attrition

Attrition is one of the key outcomes of interest to AMSARA. This section provides a description of attrition among first-time Active Duty enlisted accessions into the Army, Navy, Marine Corps, and Air Force from fiscal year 2007 through fiscal year 2012. Attritions were defined as separations from service for reasons other than those listed in Table 2.33. In this section, the probability of service member attrition at 90, 180, 365, and 730 days following accession onto Active Duty by service, year of accession, gender, race, age at accession, education, AFQT percentile score at accession, and medical disqualification status. Censoring may result from a lack of full follow-up or from certain DMDC transactions that result in the generation of a loss date but are not considered adverse events (i.e. events associated with Interservice Separation Codes listed in Table 2.33). The most common cause of non-attrition loss was expiration of term of service (1001), followed by disability with severance pay (1011) and other early releases (1008). Loss records generated for these events, noted in Table 2.33, were not counted among the attritions reported in the following figures. Totals may vary from figure to figure due to missing variable values.

TABLE 2.33 LOSS CATEGORIES EXCLUDED FROM ACTIVE DUTY ATTRITION BY ISC CODE

ISC Code	Description	ISC Code	Description
1000	Unknown or Invalid	1082	Unsuitability (reason unknown)
1001	Expiration of Term of Service	1088	Unsatisfactory Performance of Ready Reserve Obligation
1003	Early Release - To Attend School	1093	Marriage
1004	Early Release – Police Duty	1050	Retirement, 20-30 yrs of Service
1005	Early Release - In the National Interest	1051	Retirement, Over 30 yrs of Service
1006	Early Release – Seasonal Employment	1052	Retirement, Other Categories
1007	Early Release – To Teach	1062	Enuresis
1008	Early Release - Other (incl RIF/VSI/SSB)	1066	Shirking
1011	Disability - Severance Pay	1068	Financial Irresponsibility
1012	Permanent Disability - Retired	1069	Lack of Dependent Support
1013	Temporary Disability - Retired	1070	Unsanitary Habits
1014	Disability - Non EPTS - No Severance Pay	1082	Unsuitability (reason unknown)
1015	Disability - Title 10 Retirement	1088	Unsatisfactory Performance of Ready Reserve Obligation
1030	Death, Battle Casualty	1093	Marriage
1031	Death, Non-Battle - Disease	1099	Other
1032	Death, Non-battle - Other	1100	Immediate Reenlistment
1033	Death, NS	1103	Record Correction
1040	Officer Commissioning Program	1104	Dropped from Strength as MIA/POW
1041	Warrant Officer Program	1105	Dropped from Strength, Other
1042	Military Service Academy		

ISC: Interservice Separation Code; RIF: Reduction in force; VSI: voluntary separation initiative; SSB: special separation benefit; MIA: missing in action; POW: prisoner of war

Figure 2.1 shows the percent of Active Duty accessions gained in 2007-2012 who were lost to attrition at specified days of follow-up after accession. Compared to all other services, the proportion of accessions that subsequently attrited was consistently lower at all points of follow-up for the Air Force. During the first 90 days of service, the Navy had the highest percentage of attrition (9.0%). At 180 days, the percent of attrition was similar across services, with Navy having the highest (10.5%), followed by the Army and Marine Corps (9.9% and 9.7%) and the Air Force having the lowest attrition rate (8.4%). At two years of service, the percent attrition was highest among the Army (19.8%) followed by the Navy (17.8%), Marines (16.0%), and Air Force (15.6%).

Figure 2.2 describes the attrition profile of all active duty enlisted accessions by year of accession. Between 2007 and 2011, the attrition rate decreases slightly by year of accession with 2007 and 2008 having the highest rates at each follow-up interval.

Figures 2.3 through 2.8 describe the attrition profile for all Active Duty enlistees by sex, race, age at accession, education at accession, AFQT score at accession, and medical disqualification status. Figure 2.3 shows the proportion of accessions lost is consistently higher at all points of follow-up for females relative to males. Attrition was comparable for all categories of race (Figure 2.4). However, whites had the highest proportion of losses among accessions at all points of follow up, from 90 days (7.2%) through 2 years (18.1%).

Attrition was comparable for all categories of race (Figure 2.4). However, whites had the highest proportion of losses among accessions at all points of follow up, from 90 days (7.2%) through 2 years (18.1%).

Figure 2.5 shows cumulative attrition was similar across all age categories, although the over 30 age group tended to have the highest rates of attrition closely followed by the 17-20 age group. Attrition at all points of follow-up was lowest for those in the 21-25 age group.

Figure 2.6 shows when attrition was examined by education level it was found that enlistees with higher levels of education had lower rates of attrition. Those with a bachelor degree and above consistently had the lowest proportion of losses among accessions at all points of follow-up.

Figure 2.7 presents data on the attrition profile of accessions by AFQT percentile score group. The proportion lost at all points of follow-up was lowest for the highest percentile score group (93-99) and generally increased for progressively lower scoring categories.

Figure 2.8 compares attrition among fully qualified enlistees with those who had either a permanent or temporary disqualification. At all points of follow up, the attrition rates were lowest among fully qualified and highest among permanently disqualified individuals.

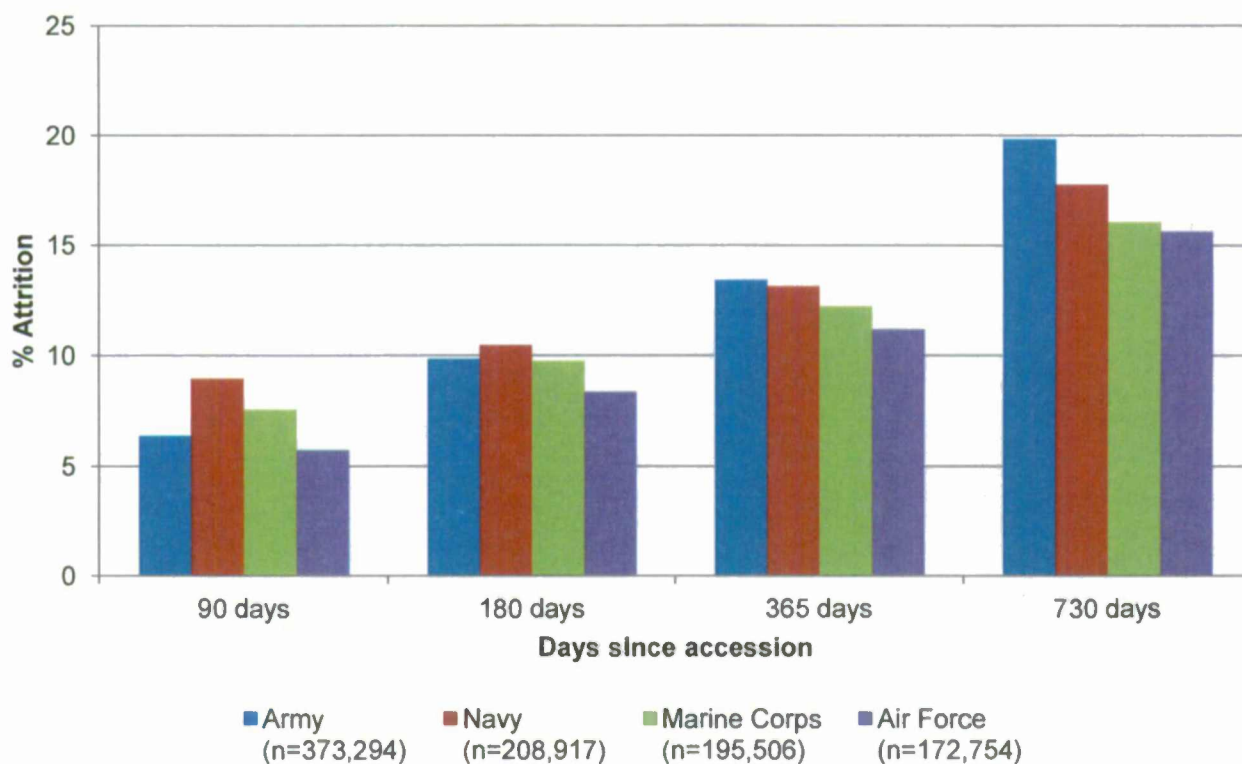


FIGURE 2.1 ATTRITION AMONG FIRST-TIME ACTIVE DUTY ACCESSIONS IN 2007-2012 AT 90, 180, 365, AND 730 DAYS FOLLOWING ACCESSION BY SERVICE

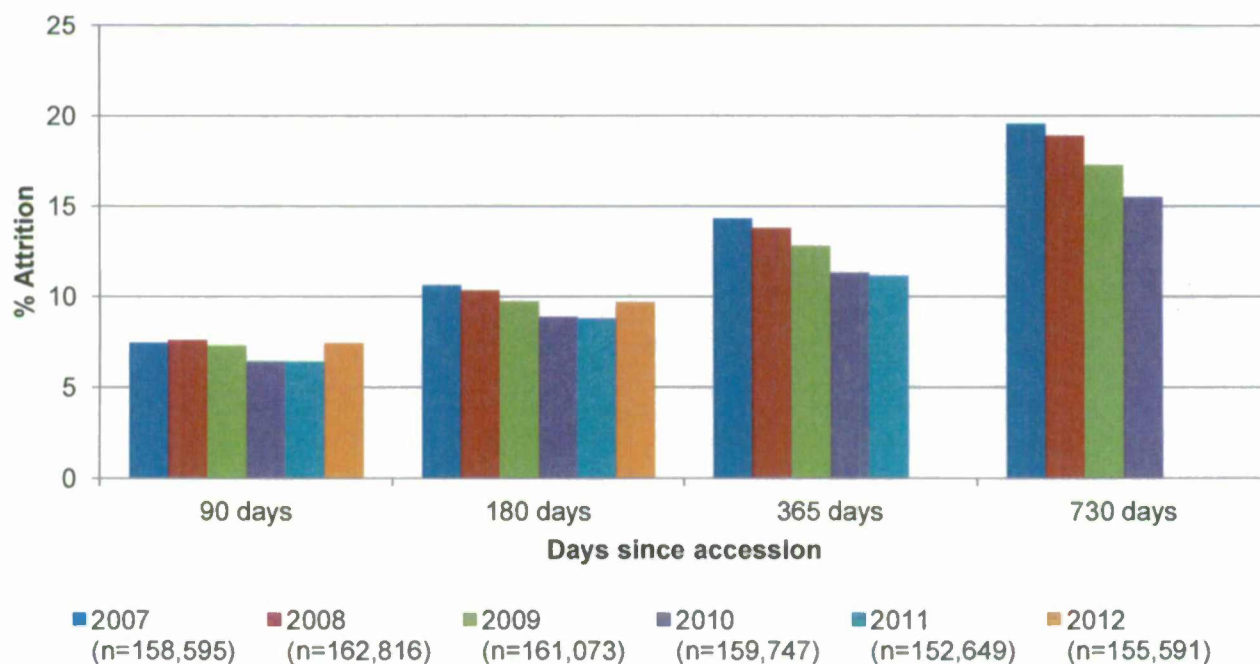


FIGURE 2.2 ATTRITION AMONG FIRST-TIME ACTIVE DUTY ACCESSIONS IN 2007-2012 AT 90, 180, 365, AND 730 DAYS FOLLOWING ACCESSION BY YEAR OF ACCESSION

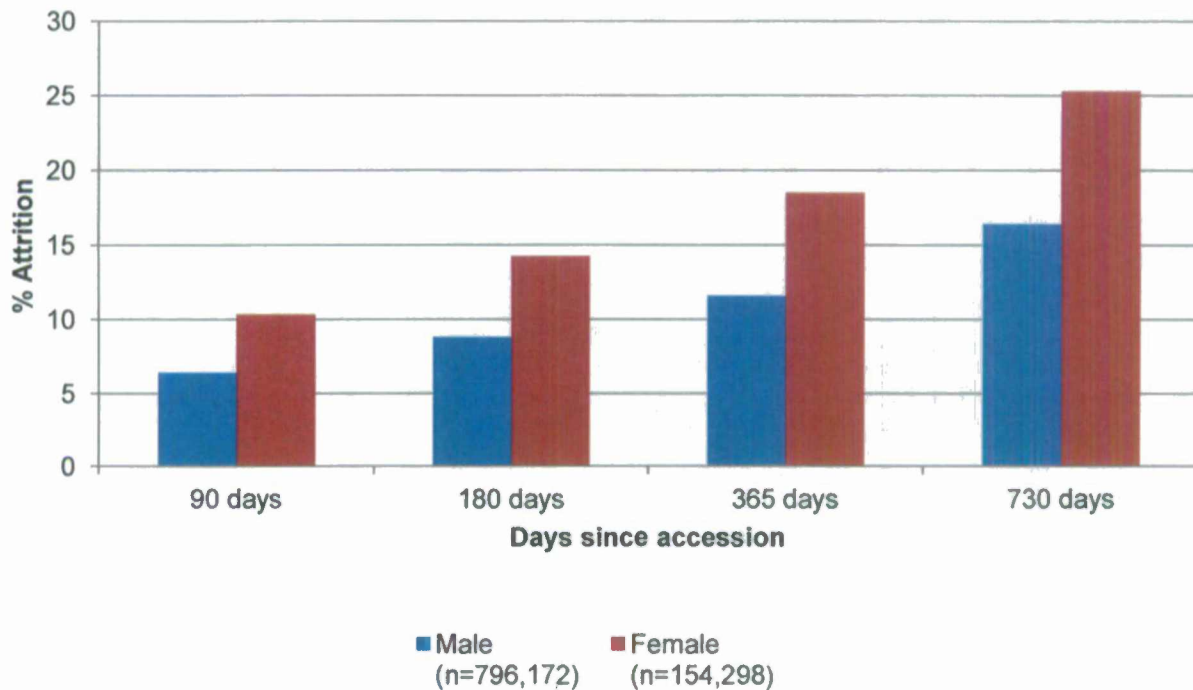


FIGURE 2.3 ATTRITION AMONG FIRST-TIME ACTIVE DUTY ACCESSIONS IN 2007-2012 AT 90, 180, 365, AND 730 DAYS FOLLOWING ACCESSION BY YEAR OF ACCESSION BY SEX

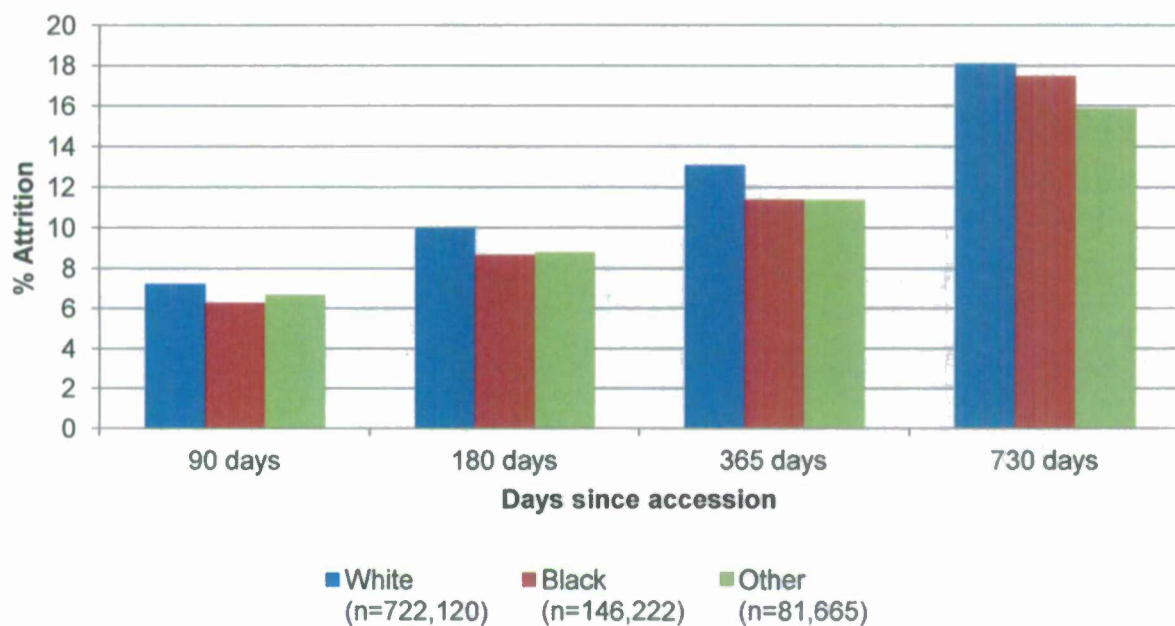


FIGURE 2.4 ATTRITION AMONG FIRST-TIME ACTIVE DUTY ACCESSIONS IN 2007-2012 AT 90, 180, 365, AND 730 DAYS FOLLOWING ACCESSION BY YEAR OF ACCESSION BY RACE

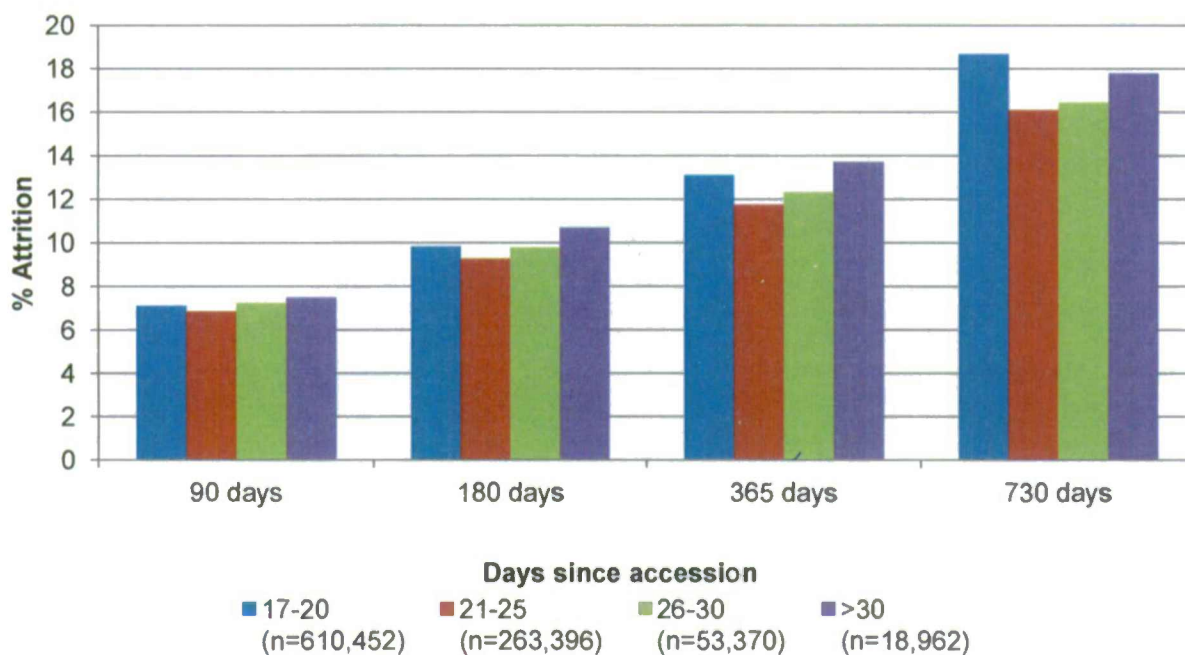


FIGURE 2.5 ATTRITION AMONG FIRST-TIME ACTIVE DUTY ACCESSIONS IN 2007-2012 AT 90, 180, 365, AND 730 DAYS FOLLOWING ACCESSION BY YEAR OF ACCESSION BY AGE AT ACCESSION

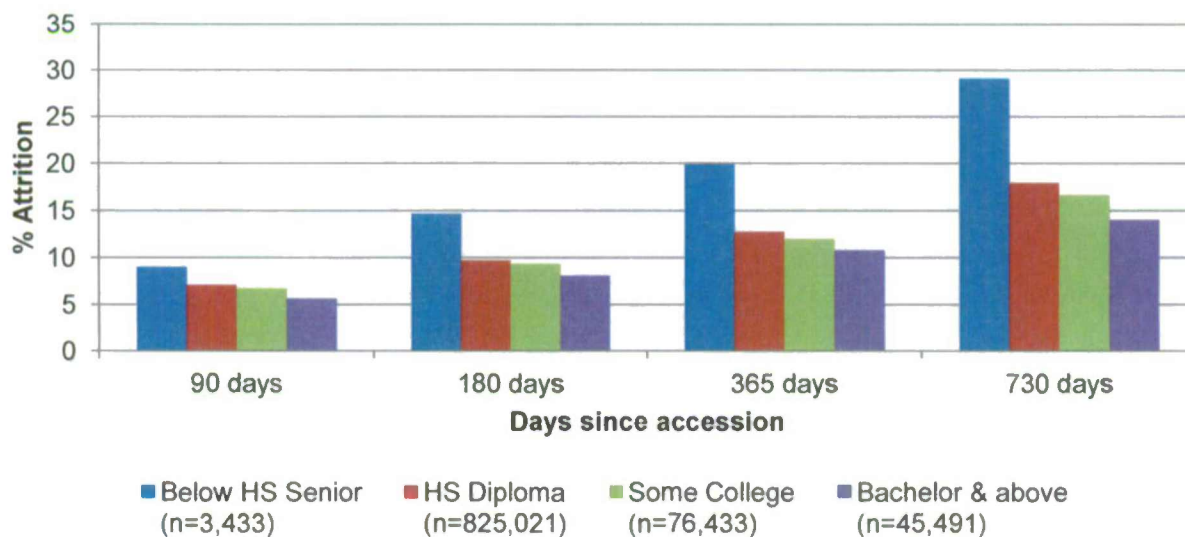


FIGURE 2.6 ATTRITION AMONG FIRST-TIME ACTIVE DUTY ACCESSIONS IN 2007-2012 AT 90, 180, 365, AND 730 DAYS FOLLOWING ACCESSION BY YEAR OF ACCESSION BY EDUCATION

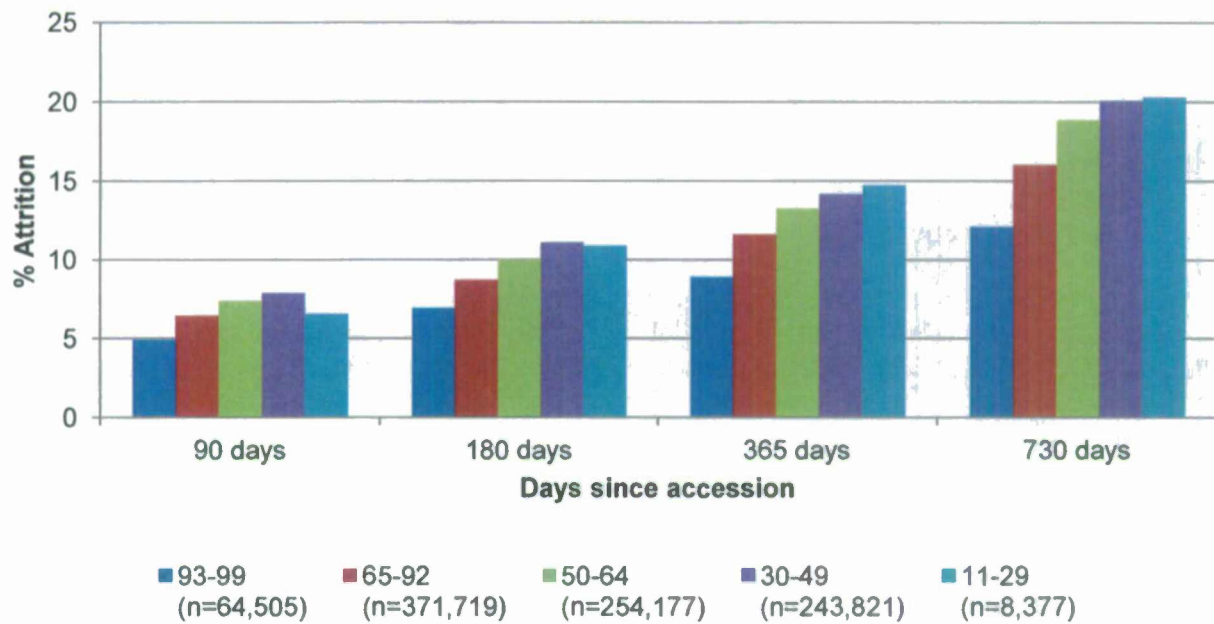


FIGURE 2.7 ATTRITION AMONG FIRST-TIME ACTIVE DUTY ACCESSIONS IN 2007-2012 AT 90, 180, 365, AND 730 DAYS FOLLOWING ACCESSION BY YEAR OF ACCESSION BY AFQT SCORE

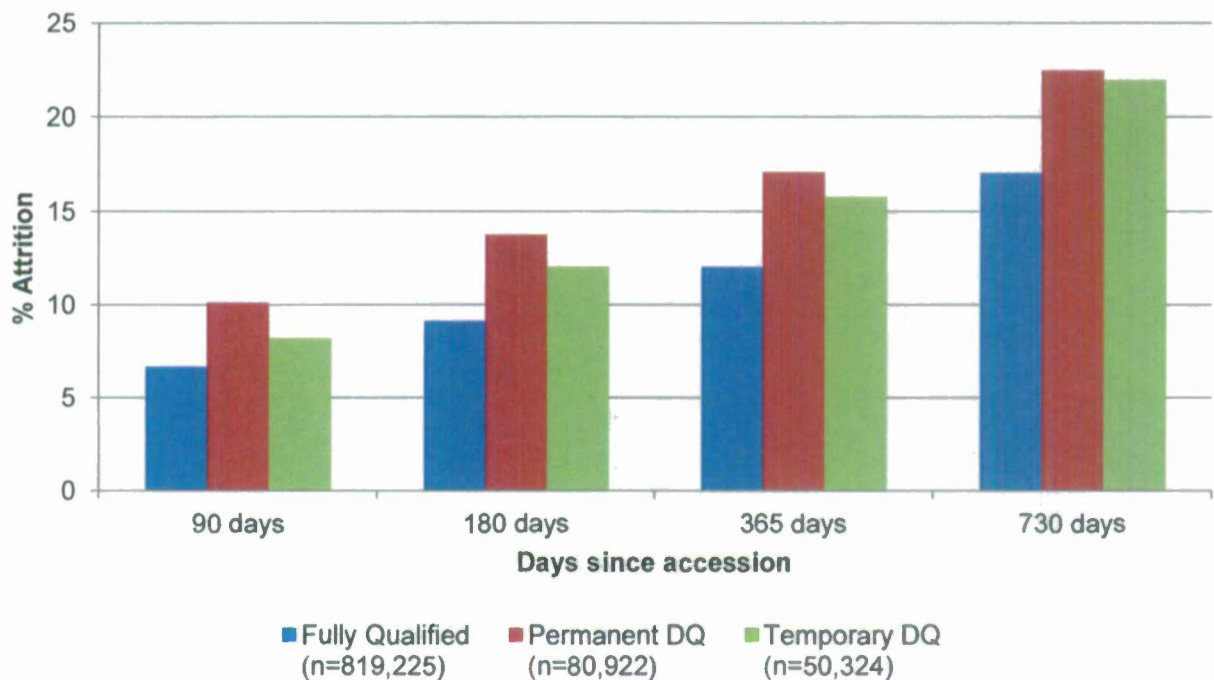


FIGURE 2.8 ATTRITION AMONG FIRST-TIME ACTIVE DUTY ACCESSIONS IN 2007-2012 AT 90, 180, 365, AND 730 DAYS FOLLOWING ACCESSION BY YEAR OF ACCESSION BY QUALIFICATION STATUS

EPTS Discharges

Discharges for medical conditions Existing Prior to Service (EPTS) are of vital interest to AMSARA. A discharge can be classified as EPTS if the condition was verified to have existed before the recruit began service and if the complications leading to discharge arose no more than 180 days after the recruit began duty. EPTS data reporting has varied by site and over time – see Data Sources section for details (Table 3.1).

Part I summarizes the EPTS records provided to AMSARA, regardless of whether a corresponding accession record is available. EPTS records for active duty, reserves, and National Guard members are included. Part II only summarizes records for which a corresponding active duty accession record is available. Due to the significant differences in the population between active duty and reserves, only active duty discharges are included.

Part I: EPTS discharges irrespective of accession record

The number of EPTS discharge records by service branch, component, and year of discharge are shown for the period between 2007 and 2011 in Table 2.34. Numbers for each service and component often differ considerably from year to year. Fluctuations in the numbers of reported EPTS discharges are also apparent for active duty Marine Corps and Air Force. For example, Air Force reported EPTS discharges ranged from 568 in 2009 to 1,117 in 2007. Marine Corps EPTS discharge counts vary from 714 in 2009 to 1,209 in 2007.

TABLE 2.34 EPTS DISCHARGES IN 2007 – 2011 BY SERVICE, COMPONENT, AND YEAR

Service	Component	2007	2008	2009	2010	2011	Total
Army	Active Duty	1,493	1,965	1,430	1,528	1,820	8,236
	National Guard	503	712	658	666	918	3,457
	Reserves	316	357	262	207	276	1,418
Navy	Active Duty	1,727	1,700	1,420	1,447	1,384	7,678
	Reserves	167	187	112	83	120	669
Marine Corps	Active Duty	1,209	1,177	714	667	757	4,524
	Reserves	158	119	90	105	102	574
Air Force	Active Duty	1,117	1,040	568	597	555	3,877
	National Guard	5	6	7	5	4	27
	Reserves	70	77	60	79	96	382
Total		6,765	7,340	5,321	5,384	6,032	30,842

Table 2.35 shows EPTS discharges between 2007 and 2011 for each branch of service by medical categories defined by USMEPCOM. The results are sorted according to the numbers of discharges from the Army, the largest service with the most reported EPTS discharges. Psychiatric discharges were the most common cause of EPTS discharges in the Army, accounting for 29.6% of all EPTS discharges, and in the Marine Corps, accounting for 43.3% of all EPTS discharges. Psychiatric discharges are the second most common cause of EPTS discharge in the Navy, accounting for 11.1% of discharges, with other orthopedic conditions being slightly more common at 15.0% of discharges. However, psychiatric EPTS discharges accounted for less than 1% of all EPTS discharges from the Air Force. The leading cause of EPTS discharge in the Air Force was asthma, accounting for 16.4 % of discharges; asthma is also the second most common cause of discharge from the Marine Corps 10.7%. As a group, orthopedic conditions, including knee, back, feet, and other, account for 33.8% of discharges from the Army. All orthopedic conditions were also leading causes of EPTS discharge in the Navy 36.5%, Marine Corps 15.9%, and Air Force 48.7%. The observed differences in EPTS discharge category frequencies may be due in part to differences in how each service categorizes and reports EPTS discharges, particularly discharges for psychiatric conditions (Army and Air Force). Accordingly, differences across services may reflect procedural differences more than true EPTS rates, and any comparisons across services should be made cautiously.

TABLE 2.35 EPTS DISCHARGES IN 2007–2011 BY CATEGORY

Condition	Army		Navy		Marine Corps		Air Force	
	Count	%	Count	%	Count	%	Count	%
Psychiatric - other	3,883	29.6	924	11.1	2,207	43.3	23	0.5
Ortho - other	1,572	12.0	1,253	15.0	343	6.7	455	10.6
Ortho - back	1,199	9.1	697	8.4	214	4.2	342	8.0
Ortho - knee	1,056	8.1	774	9.3	189	3.7	619	14.4
Asthma	1,023	7.8	861	10.3	547	10.7	704	16.4
Other - general	834	6.4	674	8.1	485	9.5	295	6.9
Ortho - feet	608	4.6	320	3.8	66	1.3	672	15.7
G-U (Incl. pregnancy)	540	4.1	453	5.4	178	3.5	136	3.2
Neurology - other	358	2.7	551	6.6	229	4.5	412	9.6
Abdomen and viscera	344	2.6	288	3.5	106	2.1	158	3.7
All other categories	1,577	12.0	1,522	18.2	470	9.2	418	9.8
Other/Missing	117	0.9	30	0.4	64	1.3	52	1.2
Total	13,111		8,347		5,098		4,286	

Table 2.36 shows the 10 most common conditions leading to EPTS discharge from the Army for active duty enlistees in 2011, and for comparison gives the prevalence of EPTS discharges due to these conditions in 2007-2010. In 2011, asthma, depressive disorders, lower leg pain, deformities, or disease and back pain were the leading causes of EPTS discharges. The observed prevalence of EPTS discharges for the leading conditions in 2011 was generally similar to the prevalence of conditions observed in the period from 2007 to 2010. However, discharges for asthma increased in prevalence from 7.6% in 2007 to 2010 to 8.4% in 2011, and discharges for anxiety disorder increased from 2.5% of all discharges to 3.5%. EPTS discharges for depressive disorders decreased slightly in prevalence in 2011, to 8.0% of all discharges from 8.4% in 2007 to 2010.

TABLE 2.36 LEADING PRIMARY EPTS DISCHARGE CONDITIONS FOR ACTIVE DUTY ENLISTEES IN 2007-2010 VS. 2011: ARMY

Primary EPTS condition	2007-2010		2011	
	n	%	n	%
Asthma	489	7.6	152	8.4
Depressive disorder, not elsewhere classified	539	8.4	146	8.0
Lower leg pain, deformities, or disease	431	6.7	94	5.1
Back Pain	318	5.0	91	5.0
Adjustment disorders	181	2.8	71	3.9
Anxiety disorder	160	2.5	63	3.5
Mood disorder other and unspecified	131	2.0	55	3.0
Major depression, recurrent	134	2.1	51	2.9
Ankle or foot pain, deformities or disease	198	3.1	42	2.3
Shoulder pain, disease, injury current	161	2.5	41	2.3
All other EPTS discharge conditions	3,674	57.3	1,014	55.7
Total for EPTS discharge conditions	6,416		1,820	

Table 2.37 shows the 10 most common conditions leading to EPTS discharge from the Navy among active duty personnel in 2011, compared to the prevalence of the same conditions in 2007-2010. Asthma (13.2%) was the leading cause of EPTS discharge in 2011, followed by lower leg pain (9.0%), and chest pain (4.9%). The prevalence of EPTS discharges for migraines headaches and recurrent headaches were both higher in 2011 than in previous years.

TABLE 2.37 LEADING PRIMARY EPTS DISCHARGE CONDITIONS FOR ACTIVE DUTY ENLISTEES IN 2007-2010 vs. 2011: NAVY

Primary EPTS condition	2007-2010		2011	
	n	%	n	%
Asthma	632	10.0	182	13.2
Lower leg pain, deformities, or disease	585	9.3	124	9.0
Chest pain	159	2.5	68	4.9
Headaches, migraines	153	2.4	62	4.5
Headache	129	2.1	61	4.4
Back pain	304	4.8	59	4.3
Knee limitation of Motion due to disease	121	1.9	52	3.8
Ankle or foot pain, deformities or disease	156	2.5	43	3.1
Deviation or curvature of spine	143	2.3	36	2.6
Keratoconus of any degree	135	2.1	30	2.2
All other EPTS discharge conditions	3,777	60.0	667	48.2
Total for EPTS discharge conditions	6,294		1,384	

Table 2.38 shows the 10 most common conditions leading to EPTS discharge from the Marine Corps among active duty enlistees in 2011 and the corresponding prevalence for EPTS discharge due to these conditions in 2007-2010. Asthma, depressive disorders and adjustment disorders were the top three reasons for EPTS discharge among Marines in 2011. The observed prevalence of EPTS discharges for the leading conditions in 2011 was generally similar to the prevalence of conditions observed in the period from 2007 to 2010. However, discharges for depressive disorder, not elsewhere classified decreased from 13.0% in 2007 to 2010 to 9.8% in 2011.

TABLE 2.38 LEADING PRIMARY EPTS DISCHARGE CONDITIONS FOR ACTIVE DUTY ENLISTEES IN 2007-2010 vs. 2011: MARINE CORPS

Primary EPTS condition	2007-2010		2011	
	n	%	n	%
Asthma	415	11.0	83	11.0
Depressive disorder, not elsewhere classified	489	13.0	74	9.8
Adjustment disorders	197	5.2	51	6.7
ADD/ADHD	99	2.6	30	4.0
Anxiety disorder	160	4.3	25	3.3
Headaches, migraines	41	1.1	21	2.8
Anaphylaxis to venom, including stinging insects	103	2.7	16	2.1
Lower leg pain, deformities, or disease	78	2.1	15	2.0
Viral Hepatitis chronic, current or carrier state	3	0.1	13	1.7
Headache	56	1.5	13	1.7
All other EPTS discharge conditions	2,126	56.4	416	55.0
Total for EPTS discharge conditions	3,767		757	

Table 2.39 shows the 10 most common conditions leading to EPTS discharge of active duty enlistees from the Air Force in 2011, compared to EPTS discharges in the same categories in 2007-2010. The primary causes for EPTS discharge in 2011 were lower leg pain, deformities, or disease; pes planus, acquired and congenital; asthma; back pain; headaches, migraines; chest pain; pes cavus current or history including Talipes cavus; eczema; shoulder pain, disease, injury current; osteochondritis of the tibial tuberosity, Osgood-Schlatter Disease.

TABLE 2.39 LEADING PRIMARY EPTS DISCHARGE CONDITIONS FOR ACTIVE DUTY ENLISTEES IN 2007-2010 VS. 2011: AIR FORCE

Primary EPTS condition	2007-2010		2011	
	n	%	n	%
Lower leg pain, deformities, or disease	400	12.0	86	15.5
Pes planus, acquired and congenital	338	10.2	83	15.0
Asthma	624	18.8	31	5.6
Back pain	155	4.7	24	4.3
Headaches, migraines	237	7.1	18	3.2
Chest pain	18	0.5	18	3.2
Pes cavus current or history including Talipes cavus	18	0.5	17	3.1
Eczema	25	0.8	11	2.0
Shoulder pain, disease, injury current	45	1.4	10	1.8
Osteochondritis of the tibial tuberosity, Osgood-Schlatter Disease	37	1.1	10	1.8
All other EPTS discharge conditions	1,425	42.9	247	44.5
Total for EPTS discharge conditions	3,322		555	

Part II: EPTS discharges with an accession record

EPTS discharges among enlistees who accessed during 2006-2011 are summarized in Tables 2.40 and 2.41. Note that all references to years refer to the year of accession rather than the year of discharge. Discharge numbers reflect only discharges occurring among individuals with an accession record in the specific year. As mentioned, an EPTS condition must be identified within the first 180 days of service; if the service member is hospitalized at 180 days of service, their EPTS discharge may not occur until after their hospital discharge.

Relative risks are used to compare the likelihood of EPTS discharge between demographic groups. The baseline group chosen for each comparison depends on the factor being considered. For factors with some inherent order (e.g., age group, which ranges from younger to older) it is the first or last group in that order, as appropriate. Otherwise, the baseline group is generally the largest group. All comparisons, particularly those by service branch, should be taken in light of EPTS data reporting fluctuations by service and over time (see "Data Sources" for details).

Table 2.40 shows EPTS discharges reported among individuals accessed into enlisted service during each year from 2007 through 2011. EPTS discharge data for 2011 are not complete due to delays in reporting; therefore the total discharges are less than expected. The number of EPTS discharges reported in 2007 through 2010 is decreasing as well as the percent of accessions receiving an EPTS discharge.

TABLE 2.40 EPTS DISCHARGES BY ACCESSION YEAR

Year of accession	Accessions	Discharges	% Discharged
2007	158,595	5,517	3.5
2008	162,816	5,162	3.2
2009	161,073	3,862	2.4
2010	159,747	3,890	2.4
2011	152,649	4,004	2.6
Total	794,880	22,435	

Characteristics of enlisted accessions that ended in EPTS discharge are shown in Table 3.41. The Marine Corps and Air Force had similar risks of EPTS discharge, which were significantly increased relative to Army. Risk of EPTS discharge among Navy was the highest of any service and significantly elevated relative to the Army. The risk of EPTS discharge is significantly higher among females relative to males. Relative to whites, the risk of EPTS discharges among all other racial groups was significantly lower. EPTS discharge risk is also significantly elevated in the oldest age group relative to the youngest age group. Enlistees entering onto active duty service with education beyond high school were at significantly decreased risk for EPTS discharge as compared to enlistees with a high school diploma. All of those scoring in the lowest percentile for AFQT had a significantly higher risk of EPTS discharge relative to the highest scoring group, with a general trend of lower risk corresponding with higher AFQT score. Both disqualified groups had a significantly higher risk of EPTS discharge relative to accessions who were fully medically qualified. For definitions of permanent and temporary disqualification see Part III, Data Sources.

TABLE 2.41 CHARACTERISTICS OF ENLISTED ACCESSIONS IN 2007-2011 ENDING IN EPTS DISCHARGE

	Accessions	Discharged	% Discharged	Relative Risk	95% CI
Service					
Army	314,376	7,516	2.4	1.00	-
Navy	172,015	7,051	4.1	1.71	(1.66, 1.77)
Marine Corps	164,680	4,180	2.5	1.06	(1.02, 1.10)
Air Force	143,809	3,688	2.6	1.07	(1.03, 1.12)
Sex					
Male	665,815	16,232	2.4	1.00	-
Female	129,064	6,203	4.8	1.97	(1.92, 2.03)
Age at Accession					
17 – 20	508,804	14,701	2.9	1.00	-
21 – 25	220,528	5,872	2.7	0.92	(0.89, 0.95)
26 – 30	44,872	1,208	2.7	0.93	(0.88, 0.99)
> 30	17,094	560	3.3	1.13	(1.04, 1.23)
Race					
White	607,489	17,379	2.9	1.00	-
Black	120,127	3,308	2.8	0.96	(0.93, 1.00)
Other	66,887	1,733	2.6	0.91	(0.86, 0.95)
Education Level					
Below HS graduate [†]	5,017	190	3.8	1.31	(1.14, 1.50)
HS diploma	673,311	19,522	2.9	1.00	-
Some college	33,401	832	2.5	0.86	(0.80, 0.92)
Bachelor's or higher	24,439	345	1.4	0.49	(0.44, 0.54)
AFQT Score					
93 – 99	53,067	1,044	2.0	1.00	-
65 – 92	306,305	7,894	2.6	1.31	(1.23, 1.40)
50 – 64	209,107	6,354	3.0	1.54	(1.45, 1.65)
30 – 49	211,654	6,905	3.3	1.66	(1.55, 1.77)
11 – 29	8,139	234	2.9	1.46	(1.27, 1.68)
Missing	6,577	4	0.1	0.03	(0.01, 0.08)
Medical Status					
Fully Qualified	682,187	17,485	2.6	1.00	-
Temporary DQ	45,269	1,525	3.4	1.31	(1.25, 1.38)
Permanent DQ	67,424	3,425	5.1	1.98	(1.91, 2.05)
Total	794,880	22,435	2.8		

[†] Encompasses the following three cases: 1) one who is pursuing completion of the GED or other test-based high school equivalency diploma, vocational school, or secondary school, etc.; 2) one who is not attending high school and who is neither a high school graduate nor an alternative high school credential holder; 3) one who is attending high school but is not yet a senior. Individuals scoring in the 10th percentile or lower are prohibited from applying, although some exceptions have been noted.

Disability Discharge Evaluations with an Accession Record

Table 2.42 through 2.47 describe disability evaluations within first year of military service among enlisted, active duty, Army, Navy, Marine Corps, and Air Force personnel who accessed during fiscal year 2007 to 2012. Relative risks are used to compare the likelihood of having a disability evaluation among demographic groups. The baseline group chosen for each comparison depends on the factor being considered. For factors with some inherent order (e.g. age group which ranges from younger to older) it is first or last group in that order as appropriate. Otherwise, the baseline group is generally the largest group.

Table 2.42 presents the number of disability evaluations reported among individuals that accessed into the Army, Navy, Marine Corps and Air Force enlisted service during 2007 to 2012. Results are shown for each year of accession. The highest rate of disability evaluations within the first term of service (0.72%) occurred in 2007 and 2008. The number of disability evaluations for accessions in 2012 is underestimated due to an incomplete follow up time.

TABLE 2.42 DISABILITY EVALUATIONS FOR ACTIVE DUTY WITHIN ONE YEAR OF SERVICE IN 2007–2012: BY YEAR

Year of accession	Total accessed	Evaluated within one year of accession	
		Count	%
2007	158,595	1,139	0.72
2008	162,816	1,168	0.72
2009	161,073	854	0.53
2010	159,747	689	0.43
2011	152,649	526	0.34
2012*	155,591	109	0.07

* The rate of disability evaluation is underestimated due to lack of follow up data on individuals accessed in 2012.

Table 2.43 shows demographic characteristics, the total number of accessions, and the relative risk of having a disability evaluation within the first year of service among Active Duty enlistees in the Army, Navy, Marine Corps and the Air Force. Relative to the Army, disability evaluations within the first year of service was significantly less likely among military enlistees from all other services. Females were 2.40 times more likely to undergo a disability evaluation within the first year of service compared to males. Risk also increased significantly with increasing age. Being any race other than white showed decreased risk of having a disability evaluation within the first year of service after accession.

In regards to education level, personnel who had not finished high school at the time of accession were 1.78 times, and those with some college education were 1.35 times, more likely to have a disability evaluation within the first year of service compared to individuals with a high school diploma. Personnel with a Bachelor or above degree were less likely to have a disability evaluation in the first year of service. Comparing AFQT score percentiles, the rate of disability evaluations was significantly higher for individual who scored lower than the 93th to 99th percentile in all percentile groups with the exception of the 30th to 49th percentile, where the increased risk of having a disability evaluation was not statistically significant. The rate of disability evaluation for 2007 to 2012 accessions was also higher among individuals with a disqualification status compared to fully qualified individuals.

TABLE 2.43 DISABILITY EVALUATIONS FOR ACTIVE DUTY WITHIN ONE YEAR OF SERVICE IN 2007–2012: BY SERVICE

	Total accessions	Evaluated within one year of accession			
		Count	%	Relative risk	95% CI
Service					
Army	373,294	2654	0.71	1.00	
Navy	208,917	284	0.14	0.20	(0.18, 0.23)
Marine Corps	195,506	830	0.43	0.61	(0.52, 0.60)
Air Force	172,754	717	0.42	0.60	(0.34, 0.41)
Sex					
Male	796,172	3072	0.39	1.00	-
Female	154,298	1413	0.92	2.40	(2.38, 2.42)
Age at Accession					
17 – 20	610,452	2477	0.41	1.00	-
21 – 25	263,396	1351	0.51	1.25	(1.17, 1.33)
26 – 30	53,370	394	0.74	1.80	(1.62, 1.88)
> 30	18,962	248	1.31	3.19	(2.80, 3.62)
Race					
White	722,120	3742	0.52	1.00	-
Black	146,222	468	0.32	0.62	(0.57, 0.68)
Other	81,665	275	0.34	0.65	(0.59, 0.74)
Education Level					
Below HS graduate [†]	3,433	28	0.82	1.78	(1.50, 2.49)
HS diploma	825,021	3810	0.46	1.00	-
Some college	76,433	476	0.62	1.35	(1.29, 1.40)
Bachelor's or higher	45,491	171	0.38	0.82	(0.76, 0.88)
AFQT Score					
93 – 99	64,505	272	0.42	1.00	-
65 – 92	371,719	1766	0.48	1.13	(1.01, 1.29)
50 – 64	254,177	1281	0.50	1.20	(1.05, 1.37)
30 – 49	243,821	1106	0.45	1.08	(0.94, 1.23)
11 – 29*	8,377	55	0.66	1.56	(1.20, 2.02)
Medical Status					
Fully Qualified	819,225	3498	0.43	1.00	-
Temporary DQ	80,922	592	0.73	1.70	(1.54, 1.85)
Permanent DQ	50,324	395	0.78	1.83	(1.67, 2.01)

[†] Encompasses the following three cases: 1) one who is pursuing completion of the GED or other test-based high school equivalency diploma, vocational school, or secondary school, etc.; 2) one who is not attending high school and who is neither a high school graduate nor an alternative high school credential holder; 3) one who is attending high school but is not yet a senior.

* Individuals scoring in the 10th percentile or lower are prohibited from applying, although some exceptions have been noted.

Table 2.44 shows the leading ten diagnoses for Army personnel evaluated for a disability within the first year of service for FY 2007-2012. Nearly 82% of Army enlistees evaluated within the first year of service were diagnosed with conditions falling within two musculoskeletal diagnostic categories: impairment, limitation and ankylosis of the joint, spine, skull limbs and extremities followed by prosthetic implants, and diseases of the musculoskeletal system. 5% of personnel evaluated had disability diagnoses not listed within the leading ten categories.

TABLE 2.44 DIAGNOSIS CATEGORIES FOR DISABILITY EVALUATIONS AMONG FIRST-TIME ACTIVE DUTY PERSONNEL WITHIN THE FIRST YEAR OF SERVICE FOR 2007-2012: ARMY

Diagnosis category	2007-2012	
	Count	%
Impairment, limitation and ankylosis of joints, spine, skull, limbs and extremities	1,486	47.8
Prosthetic implants and diseases of the musculoskeletal system	1,054	33.9
Diseases of the peripheral nerves	104	3.3
Affective and non-psychotic mental disorders	83	2.6
Muscle Injuries	53	1.7
Diseases of the endocrine system	47	1.5
Diseases of the trachea and bronchi	39	1.3
Miscellaneous neurological disorders	33	1.1
Schizophrenia and other psychotic disorders	28	0.9
Diseases of the respiratory system	19	0.6
Other	154	5.0
Total Individuals	3,100	

Represents the proportion of individuals evaluated for disability who were evaluated for each disability type.

Table 2.45 shows the leading diagnoses for disability evaluation in the Navy within the first year of service for FY 2007-2012. During this time period the leading disability diagnosis was impairment, limitation and ankylosis of the joint, spine, skull limbs and extremities (31.4%) followed by prosthetic implants and diseases of the musculoskeletal system (16.9%). 7.2% of personnel evaluated, had disability diagnoses not listed within the leading ten categories.

TABLE 2.45 DIAGNOSIS CATEGORIES FOR DISABILITY EVALUATIONS AMONG FIRST-TIME ACTIVE DUTY PERSONNEL WITHIN THE FIRST YEAR OF SERVICE FOR 2007- 2012: NAVY

Diagnosis category	2007-2012	
	Count	%
Impairment, limitation and ankylosis of joints, spine, skull, limbs and extremities	74	31.4
Prosthetic implants and diseases of the musculoskeletal system	46	19.5
Affective and non-psychotic mental disorders	26	11.0
Convulsive disorders	24	10.2
Diseases of the peripheral nerves	18	7.6
Schizophrenia and other psychotic disorders	13	5.5
Organic diseases of the Central Nervous system	8	3.4
Diseases of the endocrine system	4	1.7
Diseases of the trachea and bronchi	3	1.3
Miscellaneous neurological disorders	3	1.3
Other	17	7.2
Total individuals	236	

Represents the proportion of individuals evaluated for disability who were evaluated for each disability type.

Table 2.46 shows the leading disability diagnosis categories for evaluations among Marine Corps personnel within one year of service for FY 2007-2011. The largest diagnosis category among first year Marine enlistees was impairment limitation and ankylosis of the joints, spine, skull, limbs and extremities (47.9%). Prosthetic implants and diseases of the musculoskeletal system was the second leading category (18.1%). 9% of personnel evaluated had disability diagnoses not listed in the leading ten categories.

TABLE 2.46 DIAGNOSIS CATEGORIES FOR DISABILITY EVALUATIONS AMONG FIRST-TIME ACTIVE DUTY PERSONNEL WITHIN THE FIRST YEAR OF SERVICE FOR 2007-2012: MARINE CORPS

Diagnosis category	2007-2012	
	Count	%
Impairment, limitation and ankylosis of joints, spine, skull, limbs and extremities	440	47.9
Prosthetic implants and diseases of the musculoskeletal system	166	18.1
Diseases of the peripheral nerves	79	8.6
Organic diseases of the Central Nervous system	29	3.2
Affective and non-psychotic mental disorders	28	3.0
Convulsive disorders	22	2.4
Muscle Injuries	22	2.4
Schizophrenia and other psychotic disorders	18	2.0
Disease of the digestive system	17	1.8
Diseases of the trachea and bronchi	15	1.6
Other	83	9.0
Total individuals	919	

Represents the proportion of Individuals evaluated for disability who were evaluated for each disability type.

Table 2.47 shows the leading diagnoses for disability evaluations in the Air Force among personnel within the first year of service for FY 2007-2011. During this time period, a disability evaluation for impairment, limitation and ankylosis of joints, spine, skull, limbs and extremities (24.4%) was the leading disability diagnosis. This is followed by diseases of the trachea and bronchi (22.4%). 14.3% of personnel evaluated within the first year had diagnoses not listed within the top ten categories.

TABLE 2.47 DIAGNOSIS CATEGORIES FOR DISABILITY EVALUATIONS AMONG FIRST-TIME ACTIVE DUTY PERSONNEL WITHIN THE FIRST YEAR OF SERVICE FOR 2007-2012: AIR FORCE

Diagnosis category	2007-2012	
	Count	%
Impairment, limitation and ankylosis of joints, spine, skull, limbs and extremities	196	24.4
Diseases of the trachea and bronchi	180	22.4
Prosthetic implants and diseases of the musculoskeletal system	84	10.4
Affective and non-psychotic mental disorders	72	9.0
Schizophrenia and other psychotic disorders	47	5.8
Disease of the digestive system	32	4.0
Convulsive disorders	27	3.4
Muscle Injuries	18	2.2
Diseases of the endocrine system	17	2.1
Disease of the heart	16	2.0
Other	115	14.3
Total individuals	804	

Represents the proportion of individuals evaluated for disability who were evaluated for each disability type.

3. DATA SOURCES

The Accession Medical Standards Analysis and Research Activity (AMSARA) requests and receives data from various sources, most of which are the primary collection agencies for the data they provide to AMSARA. Because data are seldom collected with the goal of epidemiologic study, AMSARA coordinates with the appropriate points of contact to ensure that the following major data types needed for AMSARA studies are in an appropriate form for epidemiologic work.

As mentioned under "Charter and Supporting Documents," AMSARA maintains strict confidentiality of all data it receives. No external access to the data is allowed, and internal access is limited to a small number of primary analysts on an as-necessary basis. Research results are provided only at the aggregate level, with no possibility of individual identification.

MEPS

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

The MEPS records provide extensive medical examination information, including date of examination, medical qualification status, medical disqualification codes (where relevant), medical conditions observed by or reported to physicians, and any waiver requirements. Medical conditions among applicants fall into two categories, temporary (condition that can be remediated, e.g., being overweight) or permanent (condition that remains with the applicant, e.g., history of asthma). For those applicants with a permanent disqualification due to a permanent condition, an accession medical waiver from a service-specific waiver authority is required for the applicant to be eligible for accession into the service (see "Waiver"). Results of some specific tests are also extracted from the MEPS records including those for hearing/vision, alcohol/drug use, and measurements of height, weight, and blood pressure.

Gain and Loss Files

The DMDC provides data on individuals entering military service (gain or accession) and on individuals exiting military service (loss or discharge). Gain and loss data, which are AMSARA's primary sources of information about who is, or has been, in the military, include when an individual began duty and when or if an individual exited the military. From this information the length of service can be determined for any individual entering and leaving during the periods studied.

Gain data include approximately 50 variables. Of these, AMSARA has identified 25 of primary interest: personal identifiers (e.g., name and SSN) for linking with other data; demographics such as age, education, and Armed Forces Qualification Test (AFQT) score at the time of

accession; and service information including date of entry, Unit Identification Code (UIC) of initially assigned unit, initially assigned Military Occupation Specialty code (MOS), and Initial Entry Training (IET) site. These data are combined with MEPS data to determine accession percentages among applicants by demographic and other variables. Also, as mentioned under "MEPS," these linked data are used in epidemiologic investigations related to the military's accession medical standards.

Loss data also include approximately 50 variables, many of which are the same as those found in the gain file, although they reflect the individual's status at the time of loss rather than at the time of gain. The variables of primary interest to AMSARA are personal identifiers for linking with other data, the loss date for computing length of service, the UIC and MOS for grouping service members by occupation, and the Inter-service Separation Code (ISC) as a secondary source of the reason for leaving the military. These data serve as the primary source of information on all-cause attrition from the service and are linked with the MEPS and gain data for studies of attrition.

Accession Medical Waiver

AMSARA receives records on all recruits who were considered for an accession medical waiver, i.e., those who received a permanent medical disqualification at the MEPS (see "MEPS") and sought a waiver for that disqualification. Each service is responsible for making waiver decisions about its applicants. Data on these waiver considerations are generated and provided to AMSARA by each service waiver authority. Although the specifics of these data vary by service, they generally contain identifiers (e.g., name and SSN) for linking with other data and information about the waiver consideration including the medical condition(s) for which an individual was seeking a waiver and the final decision of the waiver authority.

Air Force

Air Education and Training Command (Randolph Air Force Base, TX) transmits, upon request, data on all officer and enlisted accession medical waivers. These data include SSN, name, action (e.g., approved, disapproved, other), and date of waiver consideration. In addition, ICD-9 codes are used to define the medically disqualifying condition(s) for which the waiver is being considered.

Army

The U.S. Army Recruiting Command (USAREC, Fort Knox, KY) has provided annual accession medical waiver data since January 1997. Each data record contains name, SSN, action (e.g., approved, disapproved, other), and date of waiver consideration. In addition, ICD-9 codes are used to define the medically disqualifying condition(s) for which the waiver is being considered.

Marine Corps

The U.S. Navy Bureau of Medicine and Surgery (BUMED) in Washington, DC, provides, on request, accession and commissioning medical waiver data for enlisted personnel and officers, along with data from special programs such as Reserve Officers' Training Corps (ROTC) and the Naval Academy. Data include name, SSN, date of waiver consideration, and recommended action (e.g., approved, disapproved, other). In addition, the subset of ICD-9 codes listed in DoD Instruction (DoDI) 6130.03 is used to indicate the medically disqualifying condition(s) for which the waiver is being considered.

Navy

The Office of the Commander, U.S. Navy Recruiting Command (Millington, TN) provides accession medical waiver data on applicants for enlisted service in the Navy since May 2000. Medically disqualifying conditions reported within the Navy waiver data file are recorded using in-house codes indicating which section of the DoDI 6130.03 is the basis for disqualification and waiver.

Hospitalization

Data on hospitalizations are obtained from the Military Health Systems Data Repository annually. These data contain information on admissions of active duty officers and enlisted personnel to any military hospital; this includes individuals in the Reserve and Guard components who are activated or who have been activated within 6 months prior to admission. Information on each visit includes SSN for linking with other data, demographic characteristics (e.g., gender, age, and race), and details about the hospitalization. In particular, the medical diagnosis associated with the hospitalization is coded according to the ICD-9. Date of admission, date of disposition, number of sick days, number of bed days, and indicators of the medical outcome are also included.

EPTS Discharges

Discharges for EPTS medical conditions are of vital interest to AMSARA. A discharge for a medical condition can be classified as an EPTS discharge if the condition was verified to have existed before the recruit began service and if the complications leading to discharge arose no more than 180 days after the recruit began duty. USMEPCOM requests a copy of official paperwork on all EPTS discharges and records certain information about each. This information includes a general medical categorization (20 categories) of the reason(s) for discharge and a judgment on each discharge regarding why (i.e., concealment, waiver, or unawareness) the person was not rejected for service on the basis of the preexisting condition. Beginning in August 1996, this paperwork has been regularly forwarded by USMEPCOM to AMSARA for additional data extraction, including more specific coding of medical conditions leading to discharge.

The primary limitation the EPTS discharge data is completeness. Table 3.1 summarizes the numbers of records provided to AMSARA over 2007-2011. The Marine Corps training site in San Diego has not provided EPTS discharge records since 2006 and is not included in this table. Note that the numbers of records have been unstable over time for nearly all IET sites. While some variability in numbers of EPTS records over time is expected, underreporting is clearly a major source of the fluctuations.

TABLE 3.1 EPTS DISCHARGE DATA REPORTED TO USMEPCOM BY TRAINING SITE AND YEAR[†]

Training Site		Fiscal Year of EPTS Discharge					
		2007	2008	2009	2010	2011 [‡]	Total
Army	Fort Benning	356	861	970	520	866	3,573
	Fort Jackson	994	692	19	606	838	3,149
	Fort Knox	259	346	334	286	138	1,363
	Fort Leonard Wood	422	800	837	804	873	3,736
	Fort Sill	281	335	190	185	299	1,290
Navy	Great Lakes	1,894	1,887	1,532	1,530	1,504	8,347
Marine Corps	Parris Island	1,367	1,296	804	772	859	5,098
	San Diego	0	0	0	0	0	0
Air Force	Lackland AFB	1,192	1,123	635	681	655	4,286
Coast Guard	Cape May	261	316	188	165	219	1,149
Total		7,019	7,026	7,656	5,509	5,549	31,991

[†] Numbers may not sum to totals shown in Section 2 because information from specific training sites is incomplete and other requirements for records are different.

[‡] FY 2011 data are incomplete and represent only records received by AMSARA by 30 April 2012.

Disability Evaluations

Data on disability discharge considerations are compiled separately for each service at its disability agency. The U.S. Army Physical Disability Agency has provided data on Army disability evaluations during 1995–2012 and continues to provide these data. The Air Force Personnel Center has provided data on the first evaluation for all individuals who received a final disposition of separation or retirement (i.e. fit dispositions, retained on the temporary disability retirement list not included) for the first time during the period of 1995–2010, but only provides data on all evaluations from the period of 2007–2012. Data from the Secretary of the Navy, Council of Review Boards, including all disability discharge considerations for the Navy and Marine Corps, are available from 2000 to 2012.

All disability agencies provide information on all disability cases considered, including personal identifiers (e.g., name and SSN), program (e.g., regular enlisted, academy, or officer), date of consideration, and disposition (e.g., permanent disability, separation with or without benefits, temporary disability, or return to duty as fit). For individuals receiving a disability discharge, medical condition codes and degree of disability (rating) are also included. The medical condition(s) involved in each case are described using the condition codes of the Veterans Administration Schedule for Rating Disabilities (VASRD). This set is less comprehensive than the ICD-9 codes. In some cases the disabling condition has no associated code, so the code most closely resembling the true condition is used. AMSARA therefore only uses broad categories of disability condition codes, defined in Table 3.2, rather than attempting to interpret specific codes.

TABLE 3.2 VASRD CODE GROUPINGS

VASRD code	Conditions encompassed	VASRD code	Conditions encompassed
5000 - 5099	Prosthetic Implants and diseases of the musculoskeletal system	7300 - 7399	Diseases of the digestive system
5100 - 5199	Amputation or anatomical loss of upper and lower extremities	7500 - 7599	Diseases of the genitourinary system
5200 - 5299	Impairment, limitation, ankylosis of joints, spine, skull, limbs, and extremities	7600 - 7699	Gynecological conditions and disorders of the breast
5300 - 5399	Muscle injuries	7700 - 7799	The hemic and lymphatic systems
6000 - 6099	Diseases of the Eye or loss of vision	7800 - 7899	Diseases of the skin
6200 - 6269	Diseases of the Ear	7900 - 7999	Diseases of the endocrine system
6270 - 6279	Diseases of other sense organs (smell and taste)	8000 - 8099	Organic Diseases of the Central Nervous System
6280 - 6299	Other and unspecified disorders of the sensory organs	8100 - 8199	Miscellaneous neurological disorders
6300 - 6399	Infectious diseases, immune disorders, and nutritional deficiencies	8200 - 8499	Diseases of the cranial nerves
6500 - 6599	Diseases of the nose and throat	8500 - 8799	Diseases of the peripheral nerves
6600 - 6699	Diseases of the trachea and bronchi	8900 - 8999	Convulsive disorders
6700 - 6799	Tuberculosis	9200 - 9299	Schizophrenia and other psychotic disorders
6800 - 6899	Diseases of the respiratory system	9300 - 9399	Organic psychotic disorders
7000 - 7099	Diseases of the heart	9400 - 9599	Affective and nonpsychotic mental disorders
7100 - 7199	Diseases of the arteries and veins	9900 - 9999	Dental and oral conditions
7200 - 7299	Injury to the mouth, lips, tongue, and esophagus		

Charter and Supporting Documents

HA Control #: NONE
Due Date: NONE

February 28, 1995

ASSISTANT SECRETARY OF DEFENSE
(HEALTH AFFAIRS)
EXECUTIVE SUMMARY/COVER BRIEF

MEMORANDUM FOR THE ASSISTANT SECRETARY OF DEFENSE
(HEALTH AFFAIRS)

THROUGH: *Jm* Dr. Sue Bailey, DASD (CS)
FROM: Action Officer, Colonel Ed Miller
SUBJECT: Accession Medical Standards Analysis and Research
Activity (AMSARA)

PURPOSE:
SIGNATURE--on request that the Assistant Surgeon
General of the Army (Research and Development)
establish an Accession Medical Standards Analysis
and Research Activity (AMSARA).

DISCUSSION:

The Accessions Medical Standards Working Group which met over the summer sponsored through MFIM funding completed a functional economic analysis of the medical accessions examination process. One of the critical recommendations made by the Group was to establish a research activity to provide the Medical Accessions Standards Council (also recommended) with an evidence-based analysis of DoD accessions medical standards. The memorandum tasks the Army with the responsibility of establishing the activity resourced under the Defense Health Program. This has already been staffed with the Assistant Surgeon General of the Army (Research and Development)

RECOMMENDATION:
Sign tasking memorandum to Army Surgeon General.

COORDINATION:
✓ Mr. Conte, PDUSD(P&R)
✓ Mr. Maddy, HB&P: See attached memo
✓ Mr. Richards, EO: _____
Dr. Martin, PDASD: _____

CHARTER AND SUPPORTING DOCUMENTS



HEALTH AFFAIRS

THE ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, D. C. 20301-1200

DEC 08 1995

MEMORANDUM FOR SURGEON GENERAL OF THE ARMY

SUBJECT: Military Medical Standards Analysis and Evaluation Data Set

The personnel community has asked OASD/HA to develop a fact based accessions policy to minimize medical attrition, quantitate risk in medical waivers, and to defend accession decisions when challenged.

The offices of Clinical Services and Military Personnel Policy have worked closely with epidemiologists at Walter Reed Army Institute of Research on the concept of a Military Medical Standard Analysis and Evaluation Data Set (MMSABDS) to apply quantitative analysis to a longitudinal data base.

The Army Center for Health Promotion and Preventive Medicine (CHPPM) maintains a data base of personnel, hospitalization, deployment and separation information for all Services. I would like WRAIR, in coordination with CHPPM, to serve as consultants to the Accession Medical Standard Steering Committee, modify and maintain the data base, and coordinate field research to answer specific questions germane to accession policy.

Therefore, I request that, by the end of December 1995, a proposal be submitted through you from WRAIR, outlining the consultant role and modifications needed to the data base. This should include funding requirements.

Edward D. Martin /br
Stephen C. Joseph, M.D., M.P.H.

cc:
Commander WRAIR

DEPARTMENT OF DEFENSE
ACCESSION MEDICAL STANDARDS
STEERING COMMITTEE

CHARTER

I. ESTABLISHMENT, PURPOSE AND SCOPE

A. ESTABLISHMENT

The Under Secretary of Defense (Personnel and Readiness) establishes a Department of Defense Accession Medical Standards Steering Committee (hereafter referred to as the "Committee".) The Committee shall operate under the joint guidance of the Assistant Secretaries of Defense (Force Management Policy and Health Affairs [FMP & HA].)

B. PURPOSE

The Committee's main objective is to ensure the appropriate use of military members with regard to medical/physical characteristics, assuring a cost-efficient force of healthy members in military service capable of completing initial training and maintaining worldwide deployability. The primary purposes of the Committee are: (1) integrating the medical and personnel communities in providing policy guidance and establishing standards for accession medical/physical requirements, and (2) establishing accession medical standards and policy based on evidence-based information provided by analysis and research.

C. SCOPE OF ACTIVITY

1. The Committee's responsibility involves:

- a. Providing policy oversight and guidance to the accession medical/physical standards setting process.
- b. Directing research and studies necessary to produce evidenced-based accession standards making the best use of resources.
- c. Ensuring medical and personnel coordination when formulating accession policy changes.
- d. Overseeing the common application of the accession medical standards as outlined in DoD Directive 6130.3, "Physical Standards for Appointment, Enlistment, and Induction."

c. Interfacing with other relevant Department of Defense and Department of Transportation organizations.

f. Recommending promulgation of new DoD directives as well as revisions to existing directives.

g. Recommending legislative proposals concerning accession medical/physical processing.

h. Reviewing, analyzing, formulating and implementing policy concerning the accession physical examination.

i. Issuing policy letters or memoranda providing interpretation of provisions of DoD directives.

j. Resolving conflicts of application of accession medical/physical standards and policies among the Military Services and other authorized agents.

k. Maintaining records and minutes of Committee meetings.

II. ORGANIZATION

A. The Committee will be co-chaired by the Deputy Assistant Secretary of Defense (Military Personnel Policy) and the Deputy Assistant Secretary of Defense (Clinical Services). This will facilitate tasking the Deputy Chiefs of Staff for Personnel and the Surgeons General to assign staffers to relevant working groups, and to ensure DCS/Personnel and Surgeon General personal involvement with the various issues. The Committee will convene semiannually, at a minimum, and at the discretion of the Chairpersons.

B. Committee members are appointed by the Under Secretary of Defense (Personnel and Readiness) and provide ongoing liaison with their respective organizations concerning matters of medical/physical accession policy.

C. The Committee shall be composed of representatives from the following:

Office of the Assistant Secretary of Defense (Force Management Policy)

Office of the Assistant Secretary of Defense (Health Affairs)

Office of the Assistant Secretary of Defense (Reserve Affairs)

Office of Service Surgeons General

Office of Service Deputy Chiefs of Staff for Personnel, and Chief of Personnel and Training, HQ U.S. Coast Guard.

D. Representatives from the Office of the Assistant Secretary of Defense (Force Management Policy) and the Office of the Assistant Secretary of Defense (Health Affairs) shall serve as executive secretaries for the Committee, and maintain a working group, composed of representatives from each of the offices mentioned above, to receive and review issues pertinent to accession policy.

E. The Commander, U.S. Military Entrance Processing Command, and the Director, DoD Medical Examination Review Board shall serve as advisors to the Committee.

F. The Committee may invite consultants (i.e., training, recruiting, epidemiology) at the discretion of the Chairpersons.

Approved: JAN 16 1996
Date

A handwritten signature in dark ink, appearing to read 'EDWIN DORN', with a stylized flourish extending to the right.

EDWIN DORN

Frequently Used Acronyms

AFQT	Armed Forces Qualification Test
AIM	Assessment of Individual Motivation
AMSARA	Accession Medical Standards Analysis and Research Activity
AMSWG	Accession Medical Standards Working Group
ARI	Army Research Institute for the Behavioral and Social Sciences
ARMS	Assessment of Recruit Motivation and Strength
BMI	body mass index
BUMED	Navy Bureau of Medicine and Surgery
DMDC	Defense Manpower Data Center
DoD	Department of Defense
DQ	Disqualified
EPTS	Existed Prior to Service
FY	Fiscal Year
IET	Initial Entry Training
ICD-9	<i>International Classification of Diseases, 9th Revision</i>
ISC	Interservice Separation Code
MEPS	Military Entrance Processing Station
MOS	Military Occupation Specialty
OMF	Objective Medical Finding
SSN	Social Security Number
TAPAS	Tailored Adaptive Personality Assessment System
USAREC	U.S. Army Recruiting Command
USMEDCOM	U.S. Medical Command
USMEPCOM	U.S. Military Entrance Processing Command
VASRD	Veterans Administration Schedule for Rating Disabilities
WRAIR	Walter Reed Army Institute of Research



Accession Medical Standards Analysis & Research Activity

Preventive Medicine Program
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