

Temporary Disability Retirement Cases: Variations in Time to Final Disposition and Disability Rating by Service and Medical Condition

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ABSTRACT Objective: Service members undergoing disability evaluation are placed on the temporary disability retirement list (TDRL) when their disabling medical condition(s) may change in severity over time. Information is sparse on the epidemiology of the TDRL population and factors influencing time spent on the TDRL or changes in compensation ratings before final disability outcome. Methods: A cross-sectional study was conducted on U.S. Army, Navy, and Marine Corps personnel placed on the TDRL between fiscal years 2005 to 2009. Results: Approximately 85% of cases were finalized at first re-evaluation and more than 75% were permanently retired. Overall, about 50% of cases retained the same disability rating throughout the process. Cases with medical conditions within two or more body systems were more likely to be permanently retired and receive a change in disability rating than those with medical condition(s) within a single body system. Conclusions: Most cases retained the same disability rating and were permanently retired by the first re-evaluation. Important areas of future research include cost-benefit analyses to determine if length of time currently allowable on the TDRL can be shortened or if repeated evaluations are necessary and exploration of specific medical conditions likely to change in severity over time.

INTRODUCTION

Disability discharges are an issue of increasing importance among U.S. military personnel.¹⁻⁵ From 1981–2005, the annual disability discharge risk in the U.S. Army (including separated with and without benefits and permanent disability retirement) increased by over 600%, with noticeable variations in patterns and reasons for disability discharge over time.^{1,2} In a study of cases from the Army Physical Disability Agency from 1997–2004, risk factors for permanent disability retirement included sex, age, body mass index, Hispanic ethnicity, and military occupation.³ Information is sparse, however, on the epidemiology of the temporary disability retirement list (TDRL) population and the factors influencing time spent on the TDRL or changes in compensation ratings before final disability outcome.

Service members undergoing disability evaluation may be placed on the TDRL when their unfitting medical condition is considered unstable and may change in severity over time. The TDRL was established to ensure that a service member is fairly compensated for disabling conditions which may either improve or worsen within 5 years, with eligibility restricted to those with over 20 years of active military service and those with impairments that are severe enough to be disability rated at 30% or higher.⁶

Service members have reported that the TDRL process is confusing and onerous.⁷ Appointments for medical examinations are scheduled mostly at the discretion of the nearest health care facility, often forcing service members and their family members to miss work and other obligations. Temporary retirees have also stated that information on the TDRL process and the system for rating disabilities are often incomplete and hard to access.⁷ The TDRL process is especially burdensome to those service members who suffer from a neurological or psychiatric condition and may have difficulty remembering what is required of them while retained on the TDRL.⁷

Both the Government Accountability Office and the Department of Defense have previously assessed the TDRL process. The Government Accountability Office reported that TDRL caseloads grew by 43% from fiscal year (FY) 2003 to FY 2007, potentially related to a rise in the number of new disability cases evaluated for injuries or diseases stemming from the military operations in Iraq and Afghanistan. This growth has overburdened the Disability Evaluation System (DES) and has led to delays in processing cases, scheduling periodic (18 month) medical re-evaluations, and assigning final dispositions.⁷ The Department of Defense assessment found that the overwhelming majority of service members retained on the TDRL for 4 to 5 years were permanently retired from calendar years 2000–2007.⁸ These reports recommended shortening the allowed tenure on the TDRL from 5 years to 3 years maximum, to better define the concept of a stable or unstable medical condition, and to provide more information to service members on the TDRL process.

The purpose of this study is to describe the population removed from the TDRL between FY 2005 and FY 2009 in the U.S. Army, Navy, and Marine Corps and to analyze the process of TDRL placement, evaluations, and disposition. By

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examining disability evaluation data, including duration on the TDRL, distribution of final disposition determinations, and changes to disability rating, it may be possible to suggest a more streamlined and cost-effective disability evaluation process both for military personnel and their families.

METHODS

Data Sources

This study involved a review of data collected by the physical disability agencies for Army (U.S. Army Physical Disability Agency) and Navy/Marine Corps (U.S. Navy Council of Review Boards) personnel who underwent evaluation for disability and were subsequently placed on the TDRL.

Service members are referred to their service-specific DES when they develop medical conditions that may negatively impact their ability to perform the normal military duties of their office, grade and military occupation and are not expected to improve within 1 year.⁶ The DES is responsible for evaluating the service member's medical conditions, making determinations on fitness for duty versus separation or retirement, and assigning a disposition and percent rating which correspond to entitlement for disability benefits.⁹

If a service member's medical condition improves and is no longer considered unfitting after placement on the TDRL, the service member receives a final disposition of physically fit to continue service. If the medical condition continues to be unfitting, the service member is either disability retired or separated from military service with or without severance pay based on the severity of the medical condition(s) and whether the condition was incurred or aggravated while the service member was entitled to basic pay or was a proximate result of performing active duty or inactive duty training.^{10,11}

Service members placed on the TDRL with an unfitting condition from FY 2005 to FY 2009 and who received a final disposition were included in this analysis.

Statistical Analysis

Service members must be re-evaluated within 18 months of each previous evaluation and must be removed from the TDRL by the fifth anniversary of placement on the TDRL.⁶ In addition, each referring health care facility must be notified at least 4 months before the date the service member is due for re-evaluation to allow time to contact the ill or injured service member and schedule an examination.¹⁰ In this analysis, 476 Army (4.7%) and 296 Navy/Marine Corps (8.3%) personnel on the TDRL with a time period of less than 1 month or more than 5 years between evaluations were considered to have an error in reporting and were excluded.

Duration on the TDRL and between evaluations was calculated using the date the evaluation was closed. Demographic characteristics, including sex, age, race, component, rank, and whether the unfitting condition was combat related, were based on the record from fiscal year the service member was initially placed on the TDRL. Closure of a case was

established when the service member was assigned a permanent disposition and was removed from the TDRL.

The final disability rating, expressed as a percent, is calculated from the combined disability ratings for each of the unfitting medical conditions of service members deemed unfit for duty and eligible to receive benefits only. Unfitting medical conditions and their corresponding diagnostic codes are listed in the Veterans Administration Schedule for Rating Disabilities (VASRD), and are assigned by a medical provider during the disability evaluation. A service member may be considered unfit for military service because of either one medical condition or the combined effect of two or more conditions. Medical conditions were grouped into the following body system categories: musculoskeletal, nervous system, mental disorders, and all other.

Frequencies were used to describe both the changes in disability rating upon re-evaluation and the distribution of permanent disposition determinations by body system category. Means, medians, and standard deviations were calculated to describe total duration on the TDRL and duration between evaluations. Because the time distributions were not normally distributed, differences between services were assessed using the Wilcoxon two-sample test for median duration. Distributions of the categorical variables final disposition and disability rating were assessed with the χ^2 test.

Army personnel who receive a final disposition of either physically fit to continue service or separated without benefit do not receive a final disability rating and were not counted in the distribution of changes in disability rating (175 cases). In addition, Army personnel given a final disposition of physically fit to continue service do not receive a final medical condition code and were not counted in the distribution of final disposition determinations and rating changes by body system category (172 cases). All statistical analyses were performed using SAS version 9.2, (SAS Institute, Cary, NC). This study was performed under a minimal risk human use protocol reviewed and approved by the Walter Reed Army Institute of Research Institutional Review Board.

RESULTS

A total of 5,588 Army and 3,270 Navy/Marine Corps cases were placed on the TDRL and given a final disposition between FY 2005 and FY 2009. Demographic characteristics of the study population upon first placement on the TDRL are presented in Table I. The majority of the population for both services was active duty enlisted white males in their twenties with noncombat-related medical condition(s). The Navy/Marine Corps population had a higher percentage of cases that were white, active duty and under 30 years of age than the Army population, whereas the Army population had a higher percentage of combat-related medical conditions.

As presented in Table II, total duration on the TDRL was significantly longer for Navy/Marine Corps cases (median = 27.6 months) than Army cases (median = 22.8 months). Approximately 15% of the Army and 37% of the Navy/

TABLE I. Demographics From Date of First Placement on TDRL, by Service FY 2005–2009

	Army ^a (N = 5,588)		Navy/Marine Corps ^b (N = 3,270)	
	Count	Percentage	Count	Percentage
FY				
2005	1453	26.0	964	29.5
2006	1118	20.0	1044	31.9
2007	1157	20.7	739	22.6
2008	1207	21.6	437	13.4
2009	653	11.7	86	2.6
Sex				
Male	4613	82.6	2756	84.3
Female	972	17.4	509	15.6
Missing	3	0.1	5	0.2
Age				
<20	69	1.2	157	4.8
20–24	1254	22.4	1205	36.9
25–29	1336	23.9	831	25.4
30–34	970	17.4	558	17.1
35–39	759	13.6	303	9.3
≥40	1196	21.4	216	6.6
Missing	4	0.1	0	0.0
Race				
White	3748	67.1	2322	71.0
Black	1273	22.8	411	12.6
Other	566	10.1	534	16.3
Missing	1	0.0	3	0.1
Component				
Active	4110	73.5	2954	90.3
Reserves	1478	26.5	316	9.7
Rank				
Enlisted	5185	92.8	3051	93.3
Officer	397	7.1	219	6.7
Missing	6	0.1	0	0.0
Combat Related				
Yes	1949	34.9	790	24.2
No	3638	65.1	2474	75.7
Missing	1	0.0	6	0.2
Service				
Navy	N/A	N/A	1602	49.0
Marine Corps	N/A	N/A	1,668	51.0

^aData provided by the U.S. Army Physical Disability Agency.

^bData provided by the U.S. Navy Council of Review Boards.

Marine Corps cases were re-evaluated a second time with a median duration of approximately 22 months between the first and second re-evaluations. Although only 2% of the Army and 6% of the Navy/Marine Corps cases were

re-evaluated a third time, median duration between the second and third re-evaluations was significantly longer for Army cases (median = 21.0 months) when compared to Navy/Marine Corps (median = 19.4 months). For service members with medical condition(s) within one body system category only, little difference in total duration on the TDRL and duration to the first re-evaluation was seen among service members with a musculoskeletal condition, nervous system condition, mental disorder, or other condition (results not shown).

Significantly more Army cases (84.1%) received their final disposition determination at the first re-evaluation when compared to Navy/Marine Corps (78.4%) (Table III). More than 85% of service members receive their final disposition determination within 48 months of being placed on the TDRL. A final disposition of permanent disability retirement list (PDRL) was assigned to more than 75% of the cases for both services. Significantly more Army cases were placed on the PDRL (84.2%) when compared to Navy/Marine Corps (79.0%), whereas significantly more Navy/Marine Corps cases were separated with severance (21.0% versus 12.6%). No Navy/Marine Corps cases were determined to be physically fit for continued service, whereas 3.1% of Army cases received a final disposition of physically fit for return to active duty.

Service members with medical conditions within two or more body system categories were more likely to be placed on the PDRL than those with medical condition(s) within only a single body system category (Table IV). The majority of cases (80.9% of Army; 73.8% of Navy/Marine Corps) with medical condition(s) within a single body system category were placed on the PDRL regardless of body system category. A higher number of Army cases with medical condition(s) within one of the other body system categories were separated with severance pay when compared to all other Army cases both overall and by each of the other body system categories. For the Navy/Marine Corps, more cases with mental disorder(s) only were placed on the PDRL than all other Navy/Marine Corps cases both overall and by each of the other body system categories.

Overall, about 50% of service members retained the same disability rating throughout the TDRL process (Table V). Significantly more Navy/Marine Corps cases (65.5%) retained the same disability rating than Army cases (41.8%).

TABLE II. Duration on TDRL and Between Re-evaluations

Duration	Navy/Marine Corps				Army			
	Median (months)	Mean (months)	N	Percentage evaluated	Median (months)	Mean (months)	N	Percentage evaluated
To first re-evaluation	24.7*	27.1	3270	100.0	21.1*	22.6	5588	100.0
Between first and second	22.1	22.8	732	37.0	21.9	23.1	889	15.9
Between second and third	19.4*	18.8	120	6.1	21.0*	21.7	98	1.8
Total Duration	27.6*	32.8	3270	100.0	22.8*	26.6	5588	100.0

*Statistically significant difference ($p < 0.05$) between Navy/Marine Corps and Army.

TABLE III. Timing to and Distribution of Final Disability Disposition Determination, by Service

	Army (N = 5,588), (%)	Navy/Marine Corps (N = 3,270), (%)
Final Disposition Received at		
First re-evaluation	84.1*	78.4*
Second re-evaluation	14.2*	18.7*
Third re-evaluation	1.7*	3.6*
Fourth re-evaluation	0.04	0.0
Timing to Final Disposition		
<12 months	2.1*	0.9*
12 to 24 months	53.7*	28.3*
25 to 36 months	24.3*	37.5*
37 to 48 months	12.3	19.7
49 to 60 months	5.7	9.3
>60 months	1.9*	4.4*
Final Disposition Determination		
PDRL	84.2*	79.0*
Separated With Severance Pay	12.6*	21.0*
Physically Fit to Continue Service	3.1	0.0
Separated Without Benefit	0.1	0.1
Transfer to Retired Reserve	0.02	0.0

*Statistically significant difference ($p < 0.05$) between Navy/Marine Corps and Army.

Among those who had a change in percent disability rating, the vast majority of changes occurred during the first re-evaluation for both services. Among Army personnel, 33.2% of the changes were increases, compared to 7.6% of Navy/Marine Corps cases. Approximately one-quarter of the Army and Navy/Marine Corps cases received a decrease in disability rating while on the TDRL.

Army cases with medical conditions within two or more body system categories were more likely to receive a change in disability rating and an increase in rating than those with medical condition(s) in only 1 body system category (Table VI). For the Army, 61.4% of cases with only mental disorder(s) received a change in disability rating, and 50% of these cases received a higher disability rating than when placed on the TDRL. Approximately 30% of Navy/Marine Corps cases received a change in disability rating regardless of the body system category and the number of body system categories. Among the Navy/Marine Corps cases that received a change in disability rating, approximately 30% of those with a mental disorder only or with medical conditions within two or more body system categories and less than 15% of musculoskeletal, other and nervous system categories received a higher disability rating than when placed on the TDRL.

DISCUSSION

From FY 2005 to FY 2009, in both the Army and the Navy/Marine Corps, the majority of temporary retirees were active duty enlisted white males in their twenties with noncombat-related medical conditions. Approximately 80% of TDRL cases were finalized at the first re-evaluation and over 75%

TABLE IV. Distribution of Final Disability Disposition Determination, by Body System Category

	Army ^a %	Navy/Marine Corps %
All Systems		
PDRL	80.9*	73.8*
Separated With Severance Pay	19.0*	26.1*
Separated Without Benefit	0.1	0.1
Total Individuals	2,983	2,380
Musculoskeletal Only		
PDRL	83.8*	70.5*
Separated With Severance Pay	16.2*	29.5*
Separated Without Benefit	0.0	0.0
Total Individuals	717	882
Nervous System Only		
PDRL	84.3*	70.9*
Separated With Severance Pay	15.7*	28.9*
Separated Without Benefit	0.0	0.2
Total Individuals	382	443
Mental Disorders Only		
PDRL	83.8	84.6
Separated With Severance Pay	16.1	14.9
Separated Without Benefit	0.1	0.5
Total Individuals	881	423
All Other Systems		
PDRL	75.1	73.1
Separated With Severance Pay	24.8	26.9
Separated Without Benefit	0.1	0.0
Total Individuals	1,003	632
2+ Body System Categories –		
All Systems		
PDRL	94.3	92.7
Separated With Severance Pay	5.6	7.1
Separated Without Benefit	0.04	0.2
Transfer to Retired Reserve	0.1	0.0
Total Individuals	2,433	888

^aArmy cases given a final disposition of physically fit to continue service do not receive a final medical condition code and were excluded.

PDRL, permanent disability retirement list.

*Statistically significant difference ($p < 0.05$) between Navy/Marine Corps and Army.

were permanently retired. More than 90% of cases received a final disability rating at either the initial evaluation or first re-evaluation. Although significant differences exist for service members placed on the TDRL in the Army compared to those in the Navy/Marine Corps, most (about 80%) attained their final disability compensation rating and received a final disposition determination of placement on the PDRL at the first re-evaluation. Nonetheless, median durations from both the initial medical evaluation to the first re-evaluation and from the first re-evaluation to the second re-evaluation were generally longer than 21 months. A larger proportion of service members with disability medical conditions in two or more body systems were permanently disability retired compared to those with conditions within a single body system, and in the Army, those with conditions in 2 or more body systems resulted in more changes, especially increases, in disability compensation ratings.

TABLE V. Direction and Timing of Percent Disability Rating Changes

	Army (<i>N</i> = 5,413) ^a , (%)	Navy/Marine Corps (<i>N</i> = 3,270), (%)
Direction of Change		
Increase	33.2*	7.6*
No Change	41.8*	65.5*
Decrease	25.0*	26.9*
	Army who changed (<i>N</i> = 3,149), (%)	Navy/Marine Corps who changed (<i>N</i> = 1,130), (%)
Timing of Change		
First re-evaluation	84.2*	75.4*
Second re-evaluation	14.3*	20.8*
Third re-evaluation	1.5*	4.0*
Fourth re-evaluation	0.1	0.0

^aArmy cases given a final disposition of fit or separated without benefit do not receive a final disability rating and were excluded.

*Statistically significant difference (*p* < 0.05) between Navy/Marine Corps and Army.

To our knowledge, this study is the first to describe the TDRL population and review temporary disability retirement in the Army and Navy/Marine Corps disability evaluation systems. Strengths of this study include availability of data on the entire disability population in both the Army and Navy/Marine Corps with demographic characteristics as well

TABLE VI. Rating Change From First Evaluation to Final Disability Evaluation by Body System

Body System Categories	Army (<i>N</i> = 5,413) ^a		Navy/Marine Corps (<i>N</i> = 3,270)	
	Percentage Changed	<i>N</i>	Percentage Changed	<i>N</i>
Musculoskeletal		717		882
Change	50.1*	359	36.5*	322
Increase	52.4*	188	14.6*	47
Nervous System		382		443
Change	43.7*	167	35.4*	157
Increase	47.9*	80	9.6*	15
Mental Disorders		880		423
Change	61.4*	540	31.9*	135
Increase	49.8*	269	31.9*	43
Other		1002		632
Change	43.0	431	38.3	242
Increase	26.0*	112	14.9*	36
Total		2981		2380
Change	50.2*	1497	36.0*	856
Increase	43.4*	649	16.5*	141
Multiple				
Total		2432		888
Change	67.9*	1652	30.7*	273
Increase	69.4*	1147	39.2*	107

^aArmy cases given a final disposition of fit or separated without benefit do not receive a final disability rating and were excluded.

*Statistically significant difference (*p* < 0.05) between Navy/Marine Corps and Army.

as information detailing the disability evaluation process. Limitations of this analysis include the cross-sectional, descriptive design, and the lack of assessment of which medical diagnoses are likely to change in severity with time, requiring placement on the TDRL. VASRD codes are used to ascertain the level of disability for compensation purposes and only roughly reflect specific medical diagnoses.

The TDRL was established under the Career Compensation Act of 1949 to ensure fair compensation for disabling conditions which may improve or worsen in severity over time and to prevent separation of those who may fully recover. Service members placed on the TDRL are provided with compensation until either their medical condition is deemed stable for assignment of a final disposition or the 5-year term limit expires. While retained on the TDRL, the service member loses active duty benefits and must return to the nearest health care facility for re-evaluation at least once every 18 months. This study indicates that many TDRL cases are re-evaluated at intervals greater than 18 months, and the vast majority of cases require only one or two re-evaluations before finalization. Disability evaluation policy review is needed to consider procedures to shorten the duration between re-evaluations by minimizing delays as a result of processing and high caseloads. In addition, because most TDRL cases are closed within about 2 years, decreasing the 5-year term limit may be an option for reducing time and resource expenditures.

This study reveals that the majority of service members placed on the TDRL because of a potentially unstable medical condition retain their initial disability rating upon subsequent re-evaluation, indicating that disabling medical conditions generally do not change in severity over time. However, those service members with multiple, different disability conditions may be at greater risk of changes, especially increases, in compensation rating over time. Further analysis identifying those medical conditions least likely to change in severity over time could lead to improved decision-making regarding which disability cases merit placement and retention on the TDRL. Despite regulations directing that service members must be re-evaluated at least once every 18 months, median durations from the initial medical evaluation to subsequent evaluations were generally longer than 21 months. Additional research, including cost-benefit analyses, is warranted to assess the utility of these repeated medical evaluations.

Service members temporarily retired because of a potentially unstable medical condition generally either retain their initial disability compensation rating upon subsequent re-evaluation or change only at first re-evaluation, spend about 2 years on the TDRL, and receive permanent disability retirement at case closure. More service members with multiple disability conditions falling into more than one body system category are permanently disability retired, and often change compensation percent rating. Changes to disability evaluation policy and procedures, such as more limited time

on the TDRL, may expedite the temporary disability retirement process without compromising disability medical evaluation or compensation. Important areas of future research include cost-benefit analyses of the disability evaluation process and exploration of medical conditions likely to change in severity over time.

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