# VOCATIONAL REHABILITATION AND EMPLOYMENT LONGITUDINAL STUDY

**REPORT TO CONGRESS** 

Annual Report 2015 for FY 2014







## **VBA Longitudinal Studies**

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VR&E Longitudinal Study, Annual Report 2015 for FY 2014

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### **Executive Summary**

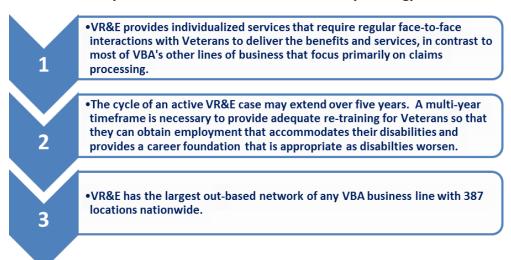
### Overview of the Vocational Rehabilitation and Employment (VR&E) Program

The VR&E program assists Veterans with service-connected disabilities and an employment barrier to prepare for, obtain, and maintain suitable employment. VR&E provides comprehensive services to include vocational assessment, rehabilitation planning and employment services. Guidance and advocacy are provided by a Vocational Rehabilitation Counselor while Veterans complete their training and rehabilitation programs and throughout the job-placement process. VR&E also provides assistance to eligible Veterans with service-connected disabilities seeking to start their own businesses. For Veterans with service-connected disabilities so severe that they cannot immediately consider work, the VR&E program offers services to improve their ability to live as independently as possible in their families and communities.

VR&E also provides benefits and services to eligible family members. VR&E administers Chapter 31, Chapter 36, and Chapter 18 benefits under Title 38 U.S.C. VR&E also provides counseling to dependents eligible for Chapter 35. *Chapter 36, 18, and 35 participants are not represented in the longitudinal study.* 

VR&E administers these four benefits through a decentralized service-delivery network comprised of 387 offices. This network, as of the end of FY 2014, is staffed with a VR&E workforce of 1,346 staff, including Vocational Rehabilitation Counselors, Employment Coordinators, support staff, and managers. The network includes nearly 200 Integrated Disability Evaluation System (IDES) counselors on 71 military installations, 79 VetSuccess on Campus (VSOC) counselors at 94 college locations, and 165 out-based VR&E offices.

Figure E-1. Three Key Features of the VR&E Service-Delivery Strategy



### **VR&E Longitudinal Study**

In 2008, Congress passed the Veterans' Benefits Improvement Act to improve and enhance benefits for Veterans. A section of this legislation requires VA to conduct a 20-year longitudinal study of Veterans who applied for and entered a plan of services in the VR&E program in fiscal year (FY) 2010, FY 2012, and FY 2014. These three cohorts will be followed annually for 20 years, with survey data collection that started in 2012 for the first two cohorts and in 2014 for the last cohort.

•	Cohort I (FY 2010)	10,792 Veteran Members
•	Cohort II (FY 2012)	15,397 Veteran Members
•	Cohort II (FY 2014)	21,082 Veteran members

The primary objective of the longitudinal study of the VR&E program is to determine the long-term post-program outcomes associated with Veterans who establish and participate in a plan of services. Section 334 of Public Law 110-389 requires VA to report to Congress annually on 16 specific data elements. The specific outcomes of interest in the mandate are:

- 1. Employment,
- 2. Income,
- 3. Home ownership, and
- 4. Use of other supplemental programs, measured by receipt of Social Security Disability Insurance (SSDI), Supplemental Security Income (SSI), or unemployment benefits.

The VR&E Longitudinal Study data sources used for analysis include (1) self-reported survey data collected from a sample of cohort members, and (2) VBA administrative data. Details about the survey methodology are included in Appendix B. A total of 8,692 VR&E participants responded to the survey for this year's study.

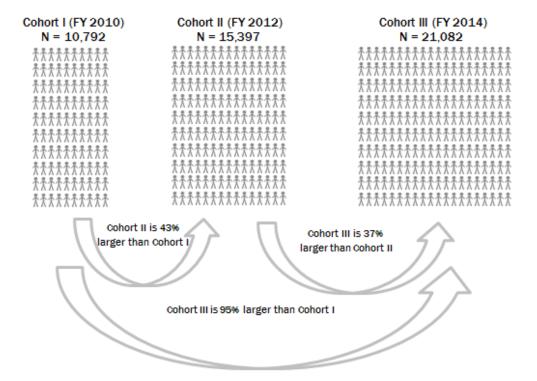
As the majority of cohort members are still persisting in the program, post-program findings are still preliminary at this point in the study.

The results of the study will be used to enhance the services VR&E provides to Veterans.

### **Comparison of Cohort Findings**

The number of participants in the VR&E program has increased with each cohort. Cohort II is nearly 50 percent larger than Cohort I and Cohort III is nearly double the size of Cohort I.

Figure E-2. Comparison of Cohort Size



There are several likely contributing factors to the increase in cohort size, specifically:

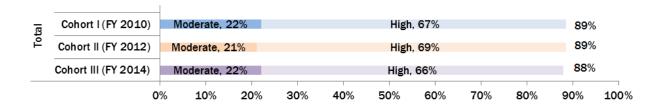
- The number of recently separated Veterans.
- VA's efforts to reduce the disability claims backlog with the additional adjudicated claims, therefore increasing the number of potential eligible Veterans entering the program.
- Recent changes in program eligibility and provisions, such as providing monthly subsistence allowances similar to those paid under the Post-9/11 GI Bill for VR&E program participants who also qualify for Chapter 33 benefits.

Furthermore, the three cohorts are similar demographically; however, as shown in Table E-1, the later cohorts have a slightly larger proportion of female Veterans, are significantly younger, more likely to have served during the Gulf War Era II, and more educated when starting the program. In addition, Cohort II (FY 2012) and III (FY 2014) have higher percentages of Veterans with a PTSD rating compared to Cohort I.

#### **Veteran Satisfaction**

- The majority of all participants for all cohorts reported moderate to high program satisfaction (~90 percent).
- Nearly 70 percent of discontinued participants reported moderate to high satisfaction with the program.

Figure E-3. Percentage of VR&E Participants Reporting Moderate or High Overall Satisfaction with the Program as of end of FY 2014



### **Demographics and Participant Characteristics**

- Approximately three-quarters of cohort members have a serious employment handicap.
- The average age of VR&E participants has decreased over time and more participants are reporting higher levels of prior education at program entry.
- The majority of cohort members served in the Gulf war era.
- Women make up a larger percentage of the program participants (17 20 percent) than the overall Veteran population (9 percent).

- On average, cohort members have a combined disability rating of nearly 60 percent.
   Comparing combined disability ratings for cohort members with that of overall Veterans with a service-connected disability reveal that VR&E participants have a higher combined disability rating than the average Veteran with a service-connected disability.
- Relative to persisting and discontinued participants, participants who have achieved rehabilitations have served more months on active duty.
- Almost one quarter or more of participants in each cohort have a primary rating of PTSD.
- Cohort members use VA-provided health care services on average more frequently than the overall Veteran population.

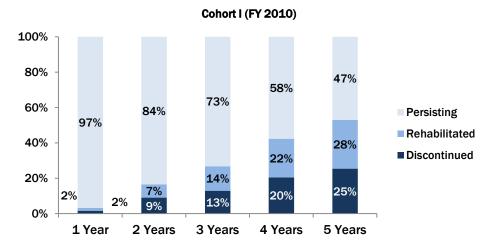
Table E-1. Comparison of all three Cohorts of VR&E Participants on Selected Demographic Characteristics as of end of FY 2014

Characteristic at Cohort Entry	Cohort I (FY 2010)	Cohort II (FY 2012)	Cohort III (FY 2014)
Percentage of female Veterans	17%	18%	20%
Percentage of Veterans with a SEH	75%	76%	72%
Percentage of Veterans under 45 years of age at Program Entry	57%	60%	65%
Percentage of Veterans from the Gulf War Era II	45%	61%	72%
Percentage of Veterans with at least some college education	54%	62%	68%
Percentage of Veterans diagnosed with PTSD	24%	29%	28%
Average Combined Disability Rating	~60%	~60%	~60%
Percentage of Veterans in an Employment Plan	84%	88%	93%
Percentage of Veterans in an Independent Living Plan	8%	5%	2%
Average Months Served on Active Duty	74.8	77.0	78.7

### **Program Outcomes (Rehabilitation and Discontinuation)**

- Successful completion of the program takes time. 15% of Veterans pursuing employment goals achieve rehabilitation in the first three years. This grows to 28% by the fifth year.
- 75 percent of Cohort I continue to persist in meeting their objectives to achieve rehabilitation or have successfully completed the program.

Figure E-4. Cumulative Percentage of Cohort I Participants who have Achieved Rehabilitation, Discontinued, or are Still Persisting as of each Study Year



- The majority of Cohort members pursuing an Independent Living plan achieve rehabilitation within 3 years of entering the program.
- Comparisons of cohorts for the same period of program tenure reveal that participants exit the program at similar rates.
- A higher proportion of persisting Veterans were enrolled in an institution of higher learning
  in the past 12 months, relative to either Veterans who have achieved rehabilitation or
  discontinued from the program.

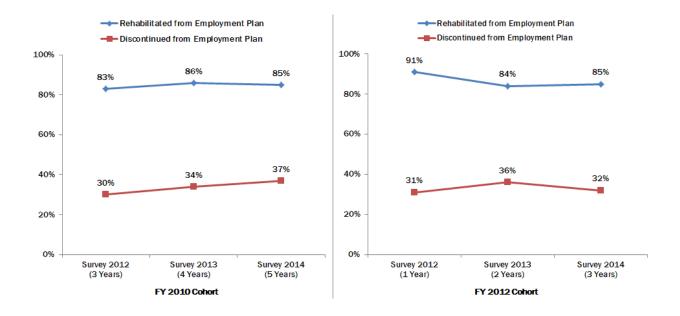
### **Employment and Standard of Living Outcomes**

All employment and standard of living outcomes concentrate only on those outcomes experienced by cohort members who have achieved rehabilitation or who have discontinued. The primary focus

of the Longitudinal Study is on the long-term outcomes for VR&E participants after they exit the program.

- Employment and standard of living outcomes among cohorts improve over time as VR&E
  participants have more time to complete training and enhance their economic opportunities.
- Compared to those who have discontinued, participants who have achieved rehabilitation report more positive economic outcomes, including higher:
  - o Employment rates
- o Household income
- o Annual earnings
- o Home ownership rates
- o Individual income
- 85% of Veterans who have achieved rehabilitation from an Employment Plan in Cohort I and II are currently still employed.

Figure E-5. Annual Employment Rates for Cohort I and II Participants who were either Achieved Rehabilitation or Discontinued from a VR&E Employment Plan



- Veterans who have achieved rehabilitation reported higher annual income amounts than discontinued participants at least \$15,000 higher for individual income and at least \$20,000 higher for household income.
- For Cohort I, annual individual income of participants who have achieved rehabilitation is 50 percent greater than the median for the entire cohort.
- Of those participants who have achieved rehabilitation in Cohort I, the median annual household income is 40 percent greater than that of the total cohort.
- Cohort II members who have achieved rehabilitation from an employment plan within 3 years of starting services reported slightly higher earnings (\$38,000 in FY 2014) compared to Cohort I within 3 years (\$33,600 in FY 2012). This 13 percent increase in earnings from FY 2012 to FY 2014 outpaces the 3 percent inflation rate between 2012 and 2014.
- For all cohorts, a larger percentage of those who have achieved rehabilitation currently have life insurance and a VA home loan, compared to discontinued and persisting participants.
- A larger percentage of those who have achieved rehabilitation reported owning their principal residence, relative to those who discontinued from the program.

## Observed Characteristics of Participants who Achieved Rehabilitation versus Discontinued Participants

- Participants who have achieved rehabilitation relative to those who discontinued:
  - o Have served more months on active duty
  - o Are older
  - o Have a larger proportion that obtained a degree or certificate in the past year
- Discontinued participants relative to those who have achieved rehabilitation:
  - o Have a higher combined disability rating (70 percent or higher)
  - O Have a higher rate of Veterans with a serious employment handicap
  - O Visited a VA medical facility more frequently in the past year

- The probability of rehabilitation is higher due to these factors:
  - o Having some college education prior to program entry
  - o Higher pre-rehabilitation salaries
  - o Longer lengths of military service

Additional findings of the study are highlighted in Table E-2. These findings are as of the end of FY 2014. Cohort I and Cohort II have had more time to complete training and to enhance their economic opportunities compared to Cohort III.

Table E-2. Summary of Outcomes for VR&E Participants, by Cohort, as of end of FY 2014

Current Observation	Cohort I (FY 2010)	Cohort II (FY 2012)	Cohort III (FY 2014)
Percentage of Veterans achieved rehabilitation from the VR&E program	28%	16%	2%
Percentage of Veterans persisting in the VR&E program	47%	70%	97%
Percentage of Veterans who achieved Rehabilitation who were employed (at the time of the survey)	72%	72%	72%
Percentage of Discontinued Veterans employed (at the time of the survey)	34%	28%	30%
Average post rehabilitation earnings (during past 12 months) <sup>1</sup>	\$37,392	\$38,484	\$33,001
Average post discontinued earnings (during past 12 months) <sup>1</sup>	\$13,849	\$9,792	\$15,681
Percentage of Veterans with moderate or high program satisfaction	89%	89%	88%
Percentage of Veterans who achieved Rehabilitation who own their principal residence	65%	57%	48%

<sup>&</sup>lt;sup>1</sup> Average earnings reported in table are based on unconditional mean earnings which includes those with zero earnings.

The most substantive finding of the study to date is that regardless of the length of time since they began their VR&E program of services, Veterans who have achieved rehabilitation have substantially better employment and standard of living situations than those who discontinued. Rehabilitation remains the most dominant variable driving positive financial outcomes (current employment rate, number of months worked, annual earnings, and annual individual and household income) compared to those Veterans with a participation status of discontinued.

## Section 1:

## Overview of the Vocational Rehabilitation and Employment Program

Section 1A: Services Provided by the VR&E Program

**Section 1B: Evolution of Vocational Rehabilitation for Veterans** 

**Section 1C: The VR&E Process** 

Section 1D: VR&E Program Participants as of FY 2014

Section 1E: VR&E Program Participants with Successful Rehabilitations

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# Overview of the Vocational Rehabilitation and Employment Program

The mission of the Department of Veterans Affairs (VA) Veterans Benefits Administration (VBA), in partnership with the Veterans Health Administration (VHA) and the National Cemetery Administration (NCA), is to provide benefits and services to Veterans and their families in a responsive, timely, and compassionate manner in recognition of their service to the Nation. The VR&E program is one of the benefits VBA provides to those who have served our country in uniform. It is authorized by Congress under Chapter 31 of Title 38, United States Code.

VR&E provides comprehensive services to include vocational assessment, rehabilitation planning and employment services.

Guidance and advocacy are provided while Veterans complete their rehabilitation programs and throughout the job-placement process.

VR&E also provides assistance to eligible Veterans with service-connected disabilities seeking to start their own businesses. For Veterans with service-connected disabilities so severe that they cannot

The VR&E program assists eligible Veterans with service-connected disabilities and an employment barrier to prepare for, obtain, and maintain suitable employment.

immediately consider work, the VR&E program offers services to improve their ability to live as independently as possible in their families and communities.

VR&E continues to develop and expand methods to assist Servicemembers and Veterans in obtaining and maintaining suitable employment, with a focus on outreach and Servicemembers early entry into VR&E services during transition from active duty. Included in these outreach efforts are the VetSuccess on Campus (VSOC) and the Integrated Disability Evaluation System (IDES) programs. In addition, VR&E expanded services to Servicemembers and Veterans through the implementation of the VOW to Hire Heroes Act of 2011, Pub. L. 112-56.

Under Chapter 36 of Title 38, United States Code, VR&E has worked to increase access to program services for Veterans in VA education programs, including those Veterans receiving benefits under the Post-9/11 GI Bill, through the VSOC program, which provides outreach and transition services

to the general Veteran population during their transition from military to college life and ultimately entry into suitable employment.

Through the VSOC initiative, a VR&E counselor is assigned to participating campuses to provide general benefits assistance; career counseling including vocational testing, academic and readjustment counseling services; assistance in overcoming barriers to in colleges' retention of Veterans and Veterans' completion of degree programs; and medical or other referrals. VSOC counselors ensure that Veterans receive the support and assistance needed to achieve educational and employment goals. VSOC currently has a presence at 94 college campuses throughout the United States, which includes public and private institutions and community colleges.

Similarly, the Integrated Disability Evaluation System (IDES) initiative places VR&E counselors at military installations throughout the country to assist select Servicemembers transitioning from active duty. The VR&E IDES initiative is directly authorized by the Wounded Warrior Act, Title XVI of the National Defense Authorization Act (NDAA) for Fiscal Year 2008 (Public Law 110-181), section 1631(b), as extended by Public Law 113-291, which authorizes automatic eligibility and entitlement to the VR&E program to severely ill or injured Servicemembers. Through this initiative, VR&E provides onsite outreach, transition and other services to Servicemembers as they are transitioning from the military.

The range of services VR&E provides under the IDES initiative includes:

- Onsite VR&E counselor referral for Servicemembers referred to the Physical Evaluation Board (PEB);
- Comprehensive evaluations;
- Career counseling to identify career goals; and
- Rehabilitation planning and services.

### **Overview of the Vocational Rehabilitation and Employment Program**

The early intervention provided by VR&E IDES counselors can significantly reduce uncertainty among Servicemembers during their recovery process, and provides for easier transition into civilian careers.

In 2012, VR&E implemented some of the provisions of Title II of Public Law 112-56. Under section 232 of the law, VA may pay an incentive to employers to hire or train Veterans participating in a VR&E program even when the Veteran has not completed a training program under Chapter 31. Under Section 231 of the law, authority to provide severely injured active duty military members automatic eligibility and entitlement to VR&E services was extended until December 31, 2014. This authority was further extended until December 31, 2015, by Public Law 113-291. Section 233 of the law allows unemployed Veterans who previously completed a Chapter 31 program and had exhausted state unemployment benefits to receive an additional 12 months of vocational rehabilitation services. However, this entitlement for additional benefits expired in 2014 and most eligible Veterans have completed the additional 12 months of services.

### Section 1A: Services Provided by the VR&E Program

VR&E administers the following services to eligible participants in accordance with the following chapters of Title 38:

Chapter 31. The Chapter 31 program assists Veterans with service-connected disabilities and an employment barrier to prepare for, obtain, and maintain suitable jobs. For Veterans with severe service-connected disabilities who cannot immediately consider work, the Chapter 31 program offers services to improve their ability to live as independently as possible through the Independent Living track (see Figure 1A-1). The Longitudinal Study cohorts described in this report are comprised of individuals who applied for the Chapter 31 program, were found entitled, and began a plan of services during FY 2010, 2012, or 2014.

Figure 1A-1. List of Services that May be Provided under Chapter 31

Comprehensive rehabilitation evaluation to Supportive rehabilitation services including case determine abilities, skills, and interests for management, counseling, and medical referrals employment Independent living services for Veterans unable Vocational counseling and rehabilitation to work due to the severity of their disabilities planning for employment services Chapter 31 **Services** On the job training (OJT), apprenticeships, Employment services such as job-training, joband non-paid work experiences seeking skills, resume development, and other work readiness assistance Post-secondary training at a college, vocational, technical or business school Assistance finding and keeping a job, including the use of special employer incentives and job Employer hiring incentives for certain accommodations Veterans

**Chapter 36.** VR&E provides a wide range of educational and vocational counseling services to Servicemembers separating from active duty, as well as Veterans and dependents who are eligible for one of VA's educational benefit programs. These services are designed to help an individual choose a vocational direction and determine the course needed to achieve the chosen goal.

Individuals who are eligible for educational and vocational counseling include transitioning Servicemembers who are within six months prior to discharge from active duty, or within one year following discharge from active duty. Individuals eligible for or currently using VA education programs such as the Post-9/11 GI Bill are also eligible for educational and vocational counseling from VR&E.

Assistance may include interest and aptitude testing; vocational exploration; setting goals; locating the right type of training program; VA benefits coaching; adjustment counseling; and exploring educational or training facilities which might be utilized to achieve a vocational goal. Chapter 36 counseling participants are not represented in the longitudinal study.

Chapter 18. VA provides monetary allowances, vocational training and rehabilitation and VA-financed health care benefits to certain Korea and Vietnam Veterans' birth children who have been diagnosed with spina bifida. For the purpose of this program, spina bifida is defined as all forms or manifestations of spina bifida (except spina bifida occulta). Effective October 10, 2008, Public Law 110-387, Section 408, made a change to 38 U.S.C. § 1803(a). As a result of this change, medical services and supplies for spina bifida beneficiaries are no longer limited to care for the spina bifida condition. This program now covers comprehensive health care considered medically necessary and appropriate.

Vocational training and rehabilitation services are available to Chapter 18 participants if it is determined reasonably feasible for the eligible child to achieve a vocational goal. Chapter 18 participants are not represented in the longitudinal study.

**Chapter 35.** Under Chapter 35, VR&E can provide a wide range of educational and vocational counseling services to the spouse, son or daughter of: 1) a Veteran who died or is permanently and totally disabled as a result of a service-connected disability, 2) a Veteran who died from any cause

while rated permanently and totally disabled as a result of a service-connected disability, 3) a Servicemember missing in action or captured in the line of duty by a hostile force, 4) a Servicemember forcibly detained or interned in line of duty by a foreign government or power, or 5) a Servicemember who is hospitalized or receiving outpatient treatment and has a service-connected permanent and total disability and is likely to be discharged for that disability. These services are designed to help an individual choose a vocational direction and determine the course needed to achieve the chosen goal. Assistance may include interest and aptitude testing; occupational exploration; setting occupational goals; locating the right type of training program and exploring educational or training facilities which might be utilized to achieve an occupational goal. Chapter 35 participants are not represented in the longitudinal study.

VR&E administers these four benefits (Chapter 31, 18, 35 and 36) through a decentralized service-delivery network comprised of 57 regional offices, 165 out-based offices, 71 IDES sites, and 94 VSOC locations. This network as of the end of FY 2014 is staffed with a VR&E workforce of 1,346 staff, including Vocational Rehabilitation Counselors, Employment Coordinators, support staff, and managers. VR&E also has national service contracts which supplement the delivery of services provided by VR&E counselors and employment staff. Figure 1A-2 displays the key features that distinguish the VR&E service-delivery strategy from the service-delivery strategy of VBA's other lines of business.

Figure 1A-2. Three Key Features of the VR&E Service-Delivery Strategy

1

•VR&E provides individualized services that require regular face-to-face interactions with Veterans to deliver the benefits and services, in contrast to most of VBA's other lines of business that focus primarily on claims processing.

2

•The cycle of an active VR&E case may extend over five years. A multi-year timeframe is necessary to provide adequate re-training for Veterans so that they can obtain employment that accommodates their disabilities and provides a career foundation that is appropriate as disabilities worsen.

2

•VR&E has the largest out-based network of any VBA business line with 387 locations nationwide.

VR&E's Chapter 31 workload is predominately driven by three factors: (1) the number of Veterans applying for rehabilitation benefits and services (under Chapter 31, Title 38); (2) the number of Veterans who enter into the development and implementation of a rehabilitation plan; and (3) the associated growth of disability claims consistent with the ongoing reduction of the claims backlog. Once a Veteran applies and is determined eligible for services, the Veteran meets with a VR&E counselor to complete a comprehensive vocational assessment. The VR&E counselor will then make an entitlement determination. If the Veteran or Servicemember is not entitled, the counselor will assist with any necessary referrals for other services. Further information on eligibility and entitlement determination is addressed in Section 1C: "The VR&E Process".

After the Veteran or Servicemember is determined entitled for vocational rehabilitation services, the Veteran continues with further assessment and evaluation activities, as necessary. Based upon the results of the comprehensive vocational assessment and any additional evaluations, the Veteran and counselor develop an individualized rehabilitation plan. The plan centers on one or more of the five tracks of services customized to meet the Veterans' rehabilitation needs. The five tracks of services are described in detail in Figure 1A-3.

### Figure 1A-3. Five VR&E Tracks of Services

## Track 1 Re-employment

For those individuals separating from active duty, National Guard or Reserves with service-connected disabilities who wish to return to work with their previous employers upon returning from active duty

- Services may include accommodating and/or modifying the workplace in order to make it more accessible
- VA counselors and medical staff coordinate with the employer to provide any assistance needed to return to work
- VA provides reemployment rights advice, work adjustment services, adaptive equipment, and specialized consultations necessary for successful return to work

## Track 2 Rapid Access to Employment

For Veterans who are ready to seek employment soon after separation and already have the necessary job skills to be competitive in the job market in an appropriate occupation

- Services may include career-readiness preparation, resume development, career-search assistance, development of employment resources, job accommodations, short-term certificate training, and post-employment follow-up
- VA provides expert career-placement assistance, referrals, and other specialized assistance

## Track 3 Self-Employment

For Veterans who have job skills to start their own business, have limited access to more traditional employment, or need flexible work schedules or a more accommodating work environment due to a disability or other life circumstances

- Category I: VA may provide all Category II services listed below, plus more extensive training in the operation of a small business and some business start-up costs such as supplies and essential equipment
- Category II: Services may include training in the occupational field; incidental training in the operation of a small business; license or other fees required for employment; and personal tools and supplies that are required of all individuals to begin employment in the approved occupational field

## Track 4 Employment through Long-Term Services

The Employment through Long-Term Services track helps Veterans get the job skills needed for employment

- Training may include college or certificate programs, non-college vocational training, on-the-job training, apprenticeships, and/or internships
- Services may include long-term case management, support, and advocacy
- VA provides the cost of all tuition, books, fees, and equipment, and provides a monthly subsistence allowance during training

## Track 5 Independent Living Services

For Veterans who may not be able to go to work immediately due to the severity of their disability and who need assistance to be more independently involved in their families and communities

- Services may include help obtaining a volunteer position, connecting with community-based support services, providing assistive devices, increased access within the home or community, and help in becoming more independent in activities of daily living
- VA will provide the services or equipment needed to reach independent living goals

Assessment and evaluation activities help Veterans and their counselors develop a rehabilitation plan. A rehabilitation plan lists the services that will be provided and identifies the objectives Veterans must pursue to achieve their rehabilitation goals. Every rehabilitation plan is different as the identified objectives and services provided are based on each individual Veteran's needs. The rehabilitation plan can be re-developed based on new needs or circumstances identified by the Veteran and counselor. The counselor and Veteran continue to meet for supportive services throughout all steps of the rehabilitation plan. Monitoring and support continue as long as the Veteran is a participant of the VR&E program.

Some individuals in the VR&E program have disabilities or situations so severe that current feasibility to achieve a vocational goal cannot be determined. These individuals may have unstable medical conditions or other barriers which prevent the current achievement of a vocational goal. If the feasibility of the achievement of a vocational goal cannot be determined, the Veteran enters an Extended Evaluation phase. The purpose of Extended Evaluation is to provide evaluative and rehabilitative services designed to determine whether achievement of a vocational goal is currently reasonably feasible. To participate in an Extended Evaluation plan, an individual must have a serious employment handicap. Veterans in Extended Evaluation may exit the VR&E program because a suitable vocation goal is not currently feasible and they do not need independent living services. As their situations change, these individuals may later re-apply to the VR&E program. The Veteran then participates in a new evaluation, as their circumstances may have changed, and may develop a suitable vocational goal with the support of a VR&E Counselor.

As Veterans near the completion of the objectives of their rehabilitation plans, Veterans meet with their counselors to assess their readiness to enter employment, and work with their counselors to develop a job-ready plan of services or to update their combined training and employment plan. VR&E counselors and Employment Coordinators, in collaboration with the Department of Labor's Veterans Employment and Training Service's (VETS) grant-funded Disabled Veterans' Outreach Program (DVOP) and Local Veterans' Employment Representatives (LVER), then assist Veterans with obtaining employment, ensuring that the Veteran has adjusted well and employment is stable. Once stable employment is reached, follow-up services are provided for at least 60 days before their cases can be closed as achieving rehabilitation.

### Section 1B: Evolution of Vocational Rehabilitation for Veterans

Vocational rehabilitation began as a government service to war-injured Veterans and disabled citizens during the World War I era. In 1917, the War Risk Insurance Act of 1914 was amended to provide rehabilitation and vocational training for Veterans with dismemberment injuries, injuries to their sight or hearing, and other injuries resulting in permanent

In response to Veterans' needs, the VR&E program has changed substantively since it was first created.

disability. Although the legislative history of VA's vocational rehabilitation program has not been as dynamic as VBA's other lines of business, the scope of the program has changed substantively since it was first created. At the same time, the organization that administers this program within VBA has evolved.

The legislative history noted in the highlighted facts in Figure 1B-1 provides context for understanding the nature and extent of changes that have been made over the years to the VR&E program. Since the original legislation that established the VR&E program, there have been numerous pieces of legislation that have shaped the eligibility rules and benefits into the modern program.

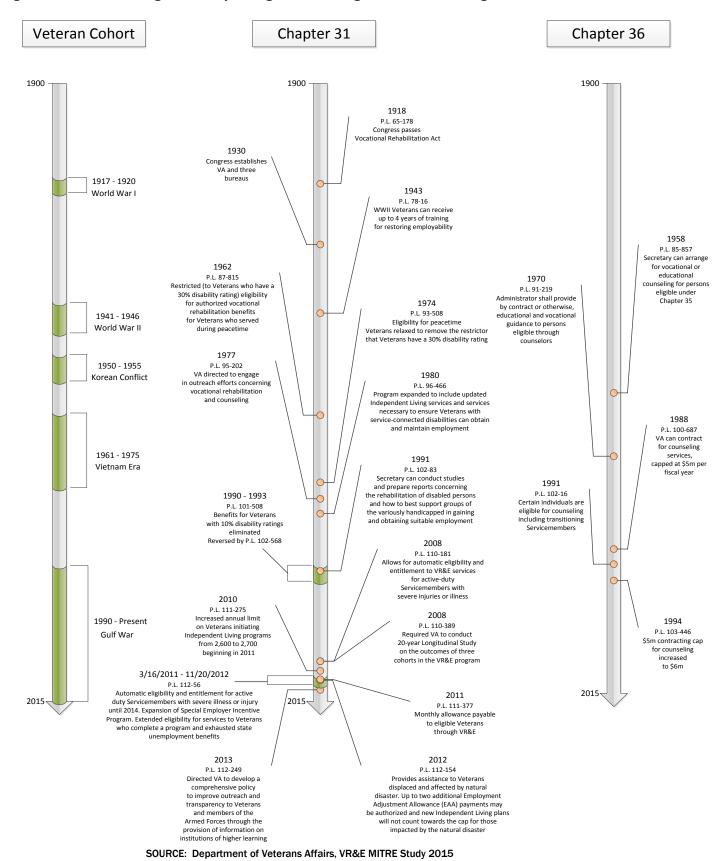
Section 334 of the Veterans' Benefits Improvement Act of 2008 (PL 110-389) requires VA to conduct a longitudinal study of Veterans who apply for VR&E services and begin rehabilitation plans in FY 2010, FY 2012, and FY 2014. Hence, it is important to note legislative changes concerning the VR&E program that have passed into law within the past few years. These recent changes to the VR&E program resulting from new legislation could impact the findings of the Congressionally-mandated longitudinal study. Recent legislative changes to the program include:

- Automatic entitlement of VR&E services for active duty Servicemembers with severe injuries or illnesses (extended through the end of 2015);
- Increasing the annual limit on the number of Veterans initiating plans for Independent Living services from 2,600 to 2,700 (beginning in 2011);

### **Overview of the Vocational Rehabilitation and Employment Program**

- The provision of monthly subsistence allowances similar to those paid under the Post-9/11
   GI Bill for those VR&E program participants who would also qualify for Post-9/11
   educational benefits (beginning in August 2011); and
- An extension of services for Veterans who have completed VR&E programs and exhausted state unemployment benefits. Eligibility for this extension expired in 2014.

Figure 1B-1. Chronological History of Legislative Changes to the VR&E Program



### Section 1C: The VR&E Process

The VR&E process begins when a Veteran completes an application (VA Form 28-1900) for VA Vocational Rehabilitation services. The application can be filled out either electronically or hard copy. Once the application is received by VA and basic eligibility is determined, the counselor meets with the Veteran to complete a vocational, medical, and academic history, including information necessary to determine if the Veteran is entitled to services.

The basic entitlement criteria require that the Veteran has received or will receive an honorable or other than dishonorable discharge, has a service-connected disability, and has a determination that the disability has resulted in an employment handicap. An employment handicap is an impairment associated with the Veteran's ability to prepare for, obtain, or retain suitable employment consistent with his or her abilities, aptitudes, and interests. As shown in Figure 1C-1, Servicemembers and Veterans are determined to be entitled to the program if they have either a

Veterans with a serviceconnected disability or memorandum rating, and a discharge other than dishonorable are eligible to apply for the VR&E program.

In order to be entitled for VR&E services, a Veteran must have an employment handicap.

memorandum rating or a service-connected disability rating of 20 percent or more <u>and</u> an employment handicap. A memorandum rating is provided when a Veteran has not yet completed a disability compensation evaluation, but is admitted to the VR&E program because there is sufficient information to determine that a disability rating of 20 percent or more likely will be granted. In addition, active military personnel referred to a Physical Evaluation Board (PEB) or participating in the Integrated Disability Evaluation System (IDES) are automatically entitled to Chapter 31 services following submission of an application and meeting with a counselor.

Veterans are also entitled to VR&E services if they have a service-connected disability rating of 10 percent and the VR&E counselor determines that they have a serious employment handicap. A serious employment handicap is determined to be present when a significant impairment that results in substantial part from a service-connected disability rated 10 percent or more of a Veteran's ability to prepare for, obtain, or retain employment consistent with his or her abilities, aptitudes, and interests exists.

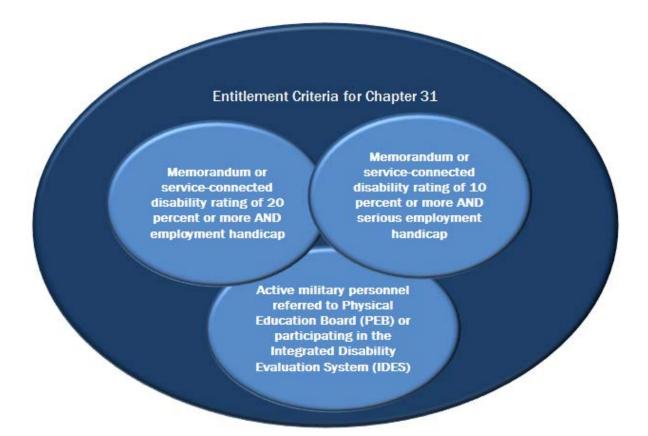


Figure 1C-1. Entitlement Criteria for the VR&E Program

The law generally provides for a 12-year basic period of eligibility in which services may be used. Veterans whose 12-year period of basic eligibility has passed can still be entitled to VR&E services if they are determined to have a serious employment handicap.

Once an entitlement determination is made after a comprehensive vocational assessment, the counselor and Veteran work together to determine if testing or additional assessment is needed. Testing completed during the initial evaluation may include aptitude and interest testing, educational achievement testing, psychological and physical assessments of functioning (through collaboration with VHA), and other assessments, such as a work hardening program, as necessary. The counselor and the Veteran also review labor market information in order to ensure that the Veteran is prepared for, or pursuing training to prepare for, an in-demand occupational field compatible with the Veterans' identified interests, aptitudes, and abilities/disabilities.

When the assessments are completed, the counselor and Veteran develop a rehabilitation plan. Services identified in the rehabilitation plan are designed to meet the unique needs of each Veteran and will vary from Veteran to Veteran. Training services include tuition, fees, books, supplies, and a subsistence allowance. Veterans may also receive tutoring, adaptive equipment, specialized medical referrals, and other services as needed.

The rehabilitation plan is individualized and can be redeveloped as new needs or circumstances are identified by the

as the Veteran is a participant of the VR&E program.

### The individualized Rehabilitation Plan:

- Lists the vocational goal and services that will be provided;
- Identifies the Veteran's objectives; and
- Identifies milestones of progress and estimates timeframes for their completion.

follow up assistance for at least 60 days, to ensure that the employment is stable and the Veteran has adjusted well to his or her employment before closing the case as achieving rehabilitation.

As Veterans near completion of their training requirements and become more competitive and marketable in their career fields, their counselors and employment coordinators work with them to ensure that they are job-ready, including assisting Veterans with developing employment assistance plans. The employment assistance plan includes services tailored to the Veteran's specific needs, and may include such services as job seeking skills training, resume development, intensive interview preparation, job development, job placement, job accommodation assistance, job coaching, or any other services necessary to ensure that the Veteran can obtain and maintain suitable employment. After a Veteran enters suitable employment, the counselor or employment coordinator will provide

Veteran and counselor. The counselor and Veteran continue to meet for case management and

counseling as rehabilitation services are provided. Case management and support continue as long

### Section 1D: VR&E Program Participants as of FY 2014

Before we present the VR&E Longitudinal Study and this year's findings, it is important to consider the description of all the individuals currently in the VR&E population. A review of the entire population of Veterans who participated in some manner in the VR&E program during FY 2014 provides context for the findings of the Longitudinal Study. In FY 2014, VR&E had 123,383 Veterans who participated in a rehabilitation plan, including those who began a plan in that year or previous years. Table 1D-1 shows the number of male and female Veterans who participated in the VR&E program for all or part of FY 2014, as well as the number of participating Veterans who had an employment handicap or a serious employment handicap.

Table 1D-1. Veterans who Received Vocational Rehabilitation and Employment (VR&E) Benefits for all or part of FY 2014

VR&E Program Participants in FY 2014	#	%
Males	98,454	79.8%
Females	24,929	20.2%
Veterans with a serious employment handicap	92,654	75.1%
Veterans with an employment handicap	30,729	24.9%
Total Participants	123,383	100.0%

SOURCE: Department of Veterans Affairs, Veterans Benefits Administration Annual Benefits Report 2014.

Male Veterans comprised almost four-fifths (80 percent) of the VR&E program in FY 2014, and female Veterans one-fifth (20 percent). The percentage of VR&E participants who are female is consistent with the representation of female Servicemembers and Veterans who have served since the Gulf War era. Three-quarters (75 percent) of the Veterans participating in VR&E have a serious employment handicap, which means there is significant impairment associated with their ability to prepare

Seventy-five percent of the Veterans participating in the VR&E program have a serious employment handicap, which means there is significant impairment associated with their ability to prepare for, obtain, or retain employment that is consistent with their abilities, aptitudes, and interests.

for, obtain, or retain employment that is consistent with their abilities, aptitudes, and interests. These Veterans receive additional supportive services, which may include extensions of entitlement, adaptive equipment, job coaching, independent living services, and/or other assistance.

All Veterans who apply for VR&E services first receive an orientation to the program, and are offered an individualized assessment of their interests, skills, and disability needs. Upon completion of the evaluation process and development of a rehabilitation plan of services, Veterans enter their individualized rehabilitation program to become job ready in their selected vocational choice, or to achieve the maximum ability to live independently in their families and community.

The majority of VR&E program participants follow the Employment through the "Long-Term Services" track which typically includes completing additional education or training.

While in Job-Ready Status (JRS), the Veteran works with a counselor to obtain a suitable job, adjust to that new job, and once the job is stable, receive follow-up support for a minimum of 60 days. In certain circumstances, follow-up support will exceed 60 days, in order to meet the needs of a Veteran with a severe disability or to monitor stability of a Veteran. The length of time that Veterans remain in JRS varies according to the Veteran's individual circumstances. During FY 2014, the average number of days that VR&E participants were in JRS was 174.

Of those Veterans participating in a plan of services, most follow the Employment through Long-Term Services track and receive services that include career counseling, case management, employment planning, training or education, VHA-sponsored medical or dental care, job-placement assistance, and other supportive services. Veterans may also receive a subsistence allowance. The traditional subsistence allowance is paid each month during training and is based on the rate of attendance (e.g., full-time or part-time), the number of dependents, and the type of training. In

More than 60 percent of Veterans in the VR&E program received a subsistence allowance for additional education or training in FY 2014.

accordance with Public Law 111-377, a Veteran participating in the VR&E program and entitled to a Chapter 31 subsistence allowance who is also entitled to assistance under the Chapter 33 Post-9/11 GI Bill can elect to receive subsistence allowance at the Basic Allowance for Housing (BAH) rate in lieu of the traditional Chapter 31 monthly subsistence allowance rate. In most instances, the BAH rate may be

### **Overview of the Vocational Rehabilitation and Employment Program**

higher than the traditional Chapter 31 subsistence allowance rate. Table 1D-2 shows the number of Veterans who received subsistence payments as part of a vocational training program in FY 2014. In FY 2014, 73,726 (~60 percent) of the Veterans in VR&E received a subsistence allowance for education or training being pursued while in the Employment through Long-Term Services track.

Table 1D-2. Veterans who Received Subsistence as part of a Training Program during FY 2014

Program	#	%
Subtotal - Educational Program at an Institution of Higher Learning	67,138	91.1%
Undergraduate School	57,640	78.2%
Graduate School	7,640	10.4%
College, Non-Degree	1,858	2.5%
Subtotal – Vocational/Apprenticeship, On-the-Job Training, or Other Training Program	6,588	8.9%
Vocational/Technical	3,791	5.1%
Paid On-Job Training	150	0.2%
Non-Pay Work Experience in Federal, State, or Local Agency	678	0.9%
Non-Pay On-Job Training	267	0.4%
Apprenticeship	120	0.2%
Improvement of Rehab Potential	102	0.1%
Farm Co-op	31	0.0%
High School	9	0.0%
Extended Evaluation/Independent Living Program	1,440	2.0%
Total <sup>1</sup>	73,726	100.0%

SOURCE: Department of Veterans Affairs, Veterans Benefits Administration Annual Benefits Report 2014.

<sup>&</sup>lt;sup>1</sup> This number only represents participants during FY 2014 in receipt of subsistence allowance, a subset of total participants.

About 86 percent (not shown) of Veterans participating in VR&E in FY 2014 had less than a 4-year college degree prior to beginning services. Among those with less than a 4-year degree, about half (~53 percent, not shown) have taken some college courses prior to beginning services. Hence, it is not surprising to find that of those participants who received a subsistence allowance in FY 2014,

almost four-fifths (78 percent) received a subsistence allowance for participating in an educational program at an institution of higher learning to pursue an undergraduate degree (see Table 1D-2). Another 10 percent received a subsistence allowance for pursing a graduate degree, and almost 3 percent are taking college courses as part of a non-degree program. The remaining individuals either

Almost 80 percent of VR&E participants who received a subsistence allowance in FY 2014 are pursuing a 4-year college degree.

participated in technical/apprenticeship, on-the-job training, or other training programs (~9 percent), or a program of solely independent living services (2 percent).

Veterans who did not receive subsistence payments during the fiscal year received other forms of rehabilitation services. Veterans who have appropriate training and skills receive job search assistance and job accommodation services to transition them into the workforce. Other non-subsistence services include independent living services, career counseling, medical referrals and non-training evaluation services such as assistive technology evaluations.

In FY 2014 the VR&E Program used the appropriations listed in Table 1D-3 to support the vocational rehabilitation of Veterans.

Table 1D-3. FY 2014 VR&E Appropriations

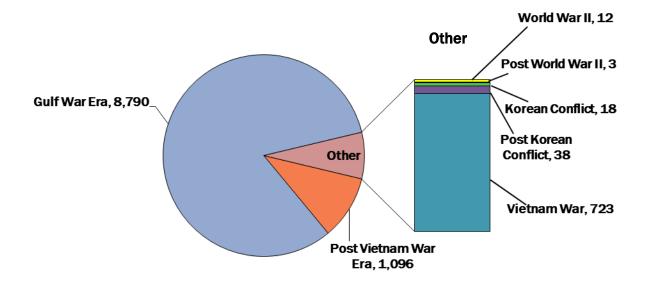
Appropriation	Amount (000's)
General Operating Expenses	
(Salaries, Rent, Other Services, Travel, Etc.)	\$244,877
Readjustment Benefits Subsistence Allowance paid to Veterans	\$447,690
Readjustment Benefits Vocational Training paid on behalf of Veterans (Tuition, Books, Supplies, Fees, Etc.)	\$631,977
Total	\$1,324,544

SOURCE: Department of Veterans Affairs, President's Budget Request Fiscal Year 2016

## Section 1E: VR&E Program Participants with Successful Rehabilitations

Of the Veterans who participated in the VR&E program in FY 2014, there were 10,680 Veterans who successfully completed their rehabilitation plans at some point during the year. As shown in Figure 1E-1, the majority of Veterans who successfully completed their rehabilitation plans served during the Gulf War era. It is important to note that the Veterans who have achieved rehabilitation in FY 2014 entered the program at different points in time as many Veterans require multiple years of training to become qualified for new careers.

Figure 1E-1. VR&E Participants who have Achieved Rehabilitation by Period of Service in FY 2014 (N = 10,680)

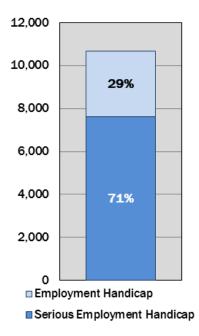


SOURCE: Department of Veterans Affairs, Veterans Benefits Administration Annual Benefits Report 2014.

As shown in Figure 1E-2, Veterans who have a serious employment handicap represent 71 percent of the successfully rehabilitated closures in FY 2014. Eightysix percent (9,132) of the successful rehabilitation closures in FY 2014 included Veterans who obtained and maintained employment (see Figure 1E-3). 511 of these rehabilitations were Veterans who are employable but elected to pursue continuing education instead of immediate suitable employment. The remaining successful closures were Veterans who received Independent Living services. The Independent Living services assist Veterans with disabilities to develop capacity to live as independently as possible in their homes and communities, as well as increase their potential to return to work. Thus, completing a plan of Independent Living services represents a significant step forward for the Veterans with the most serious impairments, the ones who are not currently able to have a feasible vocational goal.

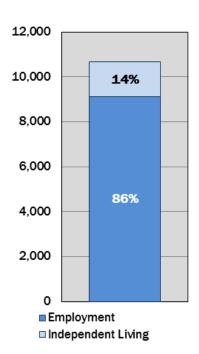
Once these Veterans have achieved the highest level of independence possible in completion of their VR&E program, a subsequent challenge, for select Veterans, is to seek and to find employment. It is expected that some percentage of Veterans will try to accomplish the goal of employment through one of the VR&E Employment tracks. However, for most, the ultimate goal is to live as independently as possible in their families and communities. Because of the design of the program it is expected that a larger proportion of Veterans in the Independent Living

Figure 1E-2. Rehabilitation Outcomes by Employment Handicap in FY 2014 (N = 10,680)



SOURCE: Department of Veterans Affairs, Veterans Benefits Administration Annual Benefits Report 2014.

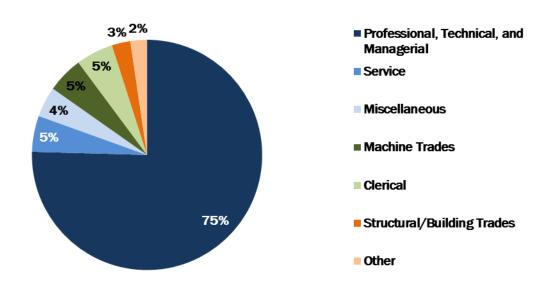
Figure 1E-3. Types of Rehabilitation Outcomes in FY 2014 (N = 10,680)



SOURCE: Department of Veterans Affairs, Veterans Benefits Administration Annual Benefits Report 2014. track will complete their rehabilitation plans within two years, substantially faster than most Veterans in the employment tracks. According to a recent GAO Study, (GAO-14-61) Veterans are in the VR&E program an average of 4.7 years. The Independent Living track is targeted to be 24 months long, although extensions may be provided up to a total of 30 months if needed. For Post-9/11 Veterans, additional extensions may be approved to ensure the most severely injured Veterans are able to achieve successful rehabilitation outcomes.

Of the 9,132 Veterans who successfully completed employment rehabilitation plans, about 88 percent (not shown) began full-time employment. The remaining 12 percent (not shown) pursued part-time employment, volunteer opportunities, or additional education. About three-quarters (75 percent) of the Veterans who have achieved rehabilitation and who began full-time employment, obtained professional, technical, or managerial jobs in FY 2014 (see Figure 1E-4). Another 15 percent began a career in the service (5 percent), machine trades (5 percent), or clerical (5 percent) industries.

Figure 1E-4. Career Categories of Veterans who Achieved Rehabilitation in FY 2014 (N = 8,0121)



SOURCE: Department of Veterans Affairs, Veterans Benefits Administration Annual Benefits Report 2014.

1-22

<sup>&</sup>lt;sup>1</sup> Excludes Veterans who have achieved rehabilitation from the Independent Living track and those Veterans who achieved rehabilitation from an employment plan, but pursued part-time employment, volunteer work, or additional education.

<sup>&</sup>lt;sup>2</sup> Figure may not equal 100% due to rounding.

The average annual starting wage among Veterans who successfully completed their rehabilitation plans and began full-time employment in FY 2014 was \$38,382 (see Table 1E-1). Of the 75 percent taking a professional, technical, and managerial position, the average annual wage was \$41,215, which is above the average for the entire group. The remaining 25 percent of Veterans who completed their employment plans in FY 2014 and began full-time employment entered into service, clerical, machine trades, or other occupations. Within these career categories, the average annual wages ranged from \$29,605 to \$38,180.

Table 1E-1. FY 2014 Career Categories of Veterans who Achieved Rehabilitation

FY 2014 Career Categories of Veterans who Achieve Rehabilitation	Number of Veterans	Average Annual Wages at Rehabilitation
Professional, Technical, and Managerial	6,044	\$41,215
Clerical	420	\$31,818
Machine Trades	406	\$32,967
Service	405	\$29,605
Miscellaneous	342	\$35,061
Structural/Building Trades	208	\$38,180
Other (below 2% each category) <sup>1</sup>	187	\$32,795
National Average	8,0122	\$38,382
Rehabilitations without full-time wages	1,120³	-
Total	9,132	-

SOURCE: Department of Veterans Affairs, Veterans Benefits Administration Annual Benefits Report 2014.

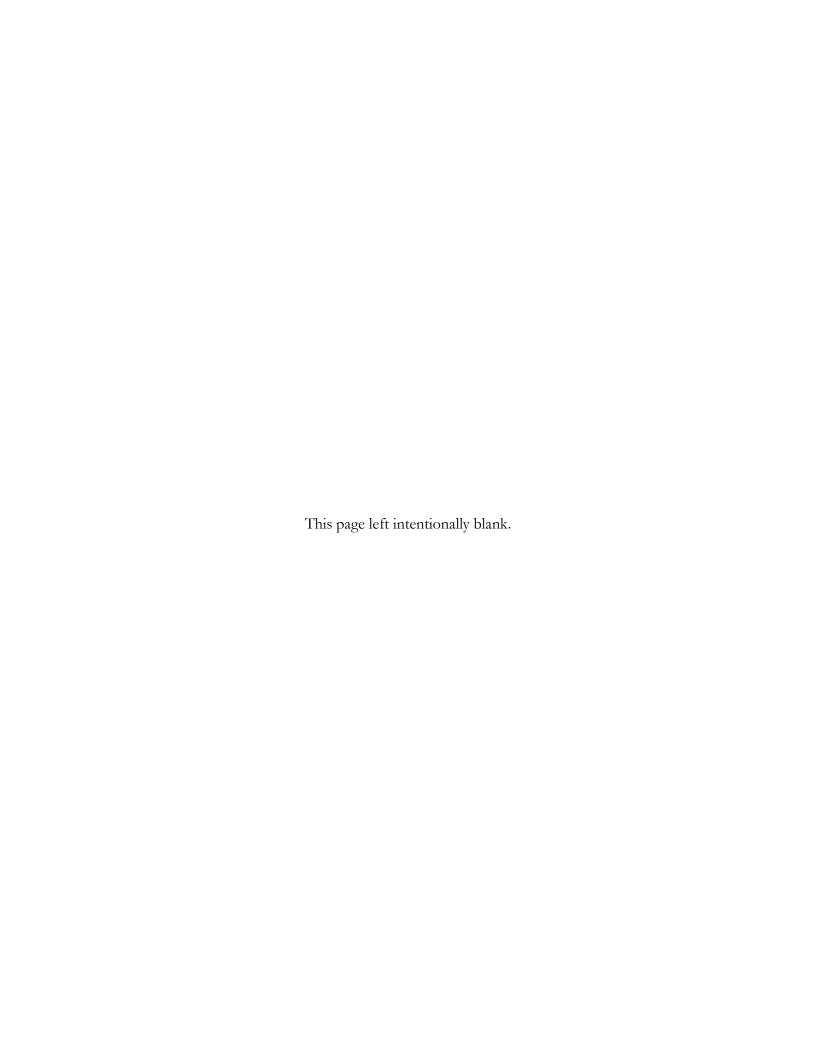
To put these salaries in context we compare the average annual post-rehabilitation employment wages of Veterans who have achieved rehabilitation to the average annual wage for all Americans. In May 2014, the average annual wage of Americans<sup>1</sup> in all occupations was \$47,230. Given that Veterans who have achieved rehabilitation are typically newly trained in their field, it is not unexpected that their average wages immediately following rehabilitation are somewhat lower than the average annual wages of the American working population, which includes individuals who have been working in their occupations for many years.

<sup>1</sup> Includes careers in sales; benchwork; agriculture, fishery and forestry; and processing (butcher, meat processor, etc.).

<sup>&</sup>lt;sup>2</sup> Excludes Veterans in the Independent Living track who have achieved rehabilitation and those Veterans who have achieved rehabilitation from an employment plan but pursued part-time employment, volunteer work, or additional education.

<sup>&</sup>lt;sup>3</sup> Includes continuing education, part-time employment, volunteer, and unknown.

<sup>&</sup>lt;sup>1</sup> http://www.bls.gov/oes/current/oes\_nat.htm



## **Section 2:**

# **VR&E Longitudinal Study**

**Section 2A: Introduction to the Longitudinal Study** 

**Section 2B: Data Sources used for the Longitudinal Study** 

**Section 2C: Policy and Environmental Conditions at Cohort Entry** 

**Section 2D: Interpreting Longitudinal Study Findings** 

In 2008, Congress passed the Veterans' Benefits Improvement Act of 2008, Public Law 110-389, to improve and enhance compensation and pension, housing, labor and education, and insurance benefits for Veterans. Section 334 of this law amended Chapter 31 by adding a 20-year longitudinal study requirement of Veterans who began their vocational rehabilitation program during FY 2010, FY 2012, and FY 2014 (see Figure 2-1). A copy of the law is included in Appendix A.

Figure 2-1. Section 334 of the Veterans' Benefits Improvement Act of 2008 Requiring VA to Conduct a Longitudinal Study of VR&E Program

"Sec. 3122. Longitudinal study of vocational rehabilitation programs

- (a) Study Required.—
  - (1) Subject to the availability of appropriated funds, the Secretary shall conduct a longitudinal study of a statistically valid sample of each of the groups of individuals described in paragraph (2). The Secretary shall study each such group over a period of at least 20 years.
  - (2) The groups of individuals described in this paragraph are the following:
    - (A) Individuals who begin participating in a vocational rehabilitation program under this chapter during FY 2010.
    - (B) Individuals who begin participating in such a program during FY 2012.
    - (C) Individuals who begin participating in such a program during FY 2014."

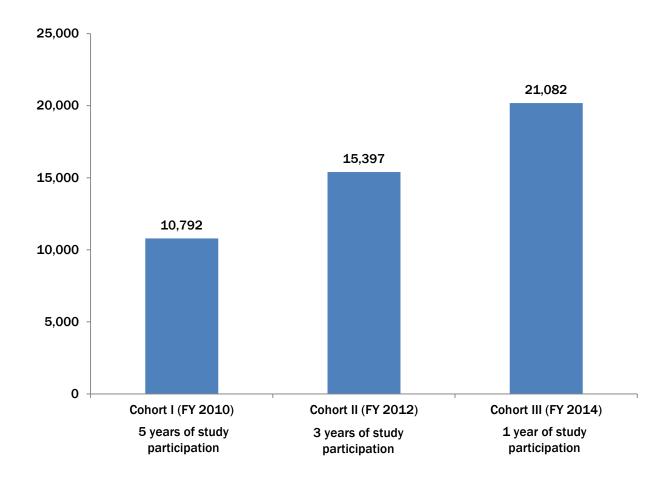
In compliance with the law, VA is conducting the VR&E Longitudinal Study to assess the long-term outcomes of 3 cohorts of participants – those who applied for and began a plan of services during FY 2010, FY 2012, or FY 2014. As shown in Figure 2-2, a total of 10,792 Veterans applied for and began a plan of services during FY 2010 (Cohort I), 15,397 Veterans applied for and began a plan of services during FY 2012 (Cohort II), and 21,087 Veterans applied for and began a plan of services

Per GAO Study 14-61, it often takes Veterans 6 years or more to complete training and obtain suitable employment.

Nearly half of Cohort I and the majority of Cohorts II and III are still preparing for employment.

during FY 2014 (Cohort III). At this time, as of the end of FY 2014, members of Cohort I have been participating in the VR&E Longitudinal Study for almost 5 years and Cohort II members have been in the study for almost 3 years. Cohort III participants have the shortest study tenure as of the end of FY 2014, with a study participation period of up to 1 year.

Figure 2-2. Number of VR&E Participants in Each Cohort of the Longitudinal Study



This current report describes the demographic and program characteristics of each cohort, and also assesses the outcomes-to-date for each cohort, as of FY 2014.

For each cohort, some proportion of members are pursuing the objectives of their rehabilitation plans, while other members have completed their plans (i.e., successfully achieved rehabilitation or achieved their positive outcomes). The remaining cohort members have discontinued their rehabilitation plans. However, over time, a larger cumulative portion of these Veterans will successfully complete the program. It is expected that cohort members who have successfully completed the program will achieve better post-program outcomes than cohort members who are still persisting in their plans. Therefore, findings related to outcomes are presented by program participation status (i.e., persisting, rehabilitated, or discontinued) (see Figure 2-3) as of the end of FY 2014. Before presenting the findings for all 3 cohorts as of the end of FY 2014, we provide more details on the study methodology in the next section.

Figure 2-3. Definition of Cohort Subgroups included in the Analysis

#### Persisting participants

Participants still pursuing the steps in their rehabilitation plan

#### Rehabilitated participants

Participants whose rehabilitation services have been closed after successfully reaching their rehabilitation goals

#### Discontinued participants

Participants whose rehabilitation services have been closed without reaching a rehabilitation goal

## Section 2A: Introduction to the Longitudinal Study

The primary objective of the longitudinal study of the VR&E program is to determine the long-term post-program outcomes associated with Veterans who establish a plan of services. The long-term post-program outcomes of interest include employment, income, home ownership, and use of supplemental programs, such as unemployment, Social Security Disability Insurance (SSDI), or other public assistance. Results of this study are intended to improve the quality of services that the VR&E program provides to Veterans.

#### Long-Term Post-Program Outcomes

- Employment
- Income
- Home ownership
- Use of Supplemental Programs

Section 334 of Public Law 110-389 requires the VA to report to Congress annually on 16 specific data elements. The 16 data elements include specific outcome measures to be assessed, as well as 9 specific measures to be considered as possible covariates to be included in the analyses to explain employment outcomes. Table 2A-1 lists these outcomes and background characteristics along with the data sources that are used to define each measure.

The first step of data analysis includes a descriptive examination of the frequency distributions of various demographic and program characteristics of each cohort, by participation status (i.e., persisting, rehabilitated, or discontinued). Observed differences among subgroups within each cohort are examined further for statistical and programmatic significance, and differences across cohorts are assessed as well. Examination of the cumulative annual rates for Veteran satisfaction, rehabilitation, and discontinuation over time provides insights into program trends. In addition to describing the characteristics of the cohorts and discussing the trends related to exiting the VR&E program, we use regression modeling to identify the individual and program characteristics associated with exiting the program.

Table 2A-1. Data Elements Mandated by Section 334 of Public Law 110-389 to be Collected for the VR&E Longitudinal Study

Domain	Measure		Source of Data
Background	The number of individuals participating in vocational	•	VBA administrative data
characteristics	rehabilitation programs under this chapter who suspended		
	participation in such a program during the year		
	The average number of months such individuals served on	•	VBA administrative data
	active duty		
	The distribution of disability ratings of such individuals	•	VBA administrative data
	<ul> <li>The types of other benefits administered by the Secretary received by such individuals</li> </ul>	•	VBA administrative data
	The number of such individuals enrolled in an institution of higher learning, as that term is defined in section 3452(f) of this title	•	Survey
	<ul> <li>The average number of academic credit hours, degrees, and certificates obtained by such individuals during the year</li> </ul>	•	Survey
	The average number of visits such individuals made to Department medical facilities during the year	•	Survey
	■ The average number of visits such individuals made to non-	•	Survey
	Department medical facilities during the year		-
	The average number of dependents of each such veteran	•	Survey
Employment	The average number of months such individuals were employed during the year	•	Survey
	■ The average annual starting and ending salaries of such	•	Survey, VBA
	individuals who were employed during the year		administrative data
Income	The average annual income of such individuals	•	Survey
	<ul> <li>The average total household income of such individuals for the year</li> </ul>	•	Survey
Home	■ The percentage of such individuals who own their principal		Survey
ownership	residences		•
Use of other	■ The types of Social Security benefits received by such		
public	individuals	•	Survey
program	Any unemployment benefits received by such individuals		-
benefits	tion 224 of Public Low 440 200 is included in Amoundin A		

NOTE: A copy of Section 334 of Public Law 110-389 is included in Appendix A.

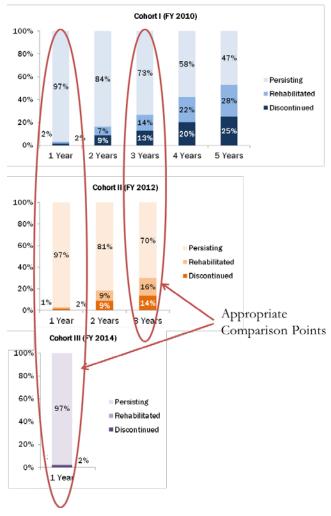
We followed a similar strategy of first conducting descriptive analysis and then using regression analysis to identify key drivers to assess the long-term post-program outcomes of interest. Current differences and trends over time in employment, income, home ownership, and receipt of other program benefits were examined and compared for persisting, rehabilitated, and discontinued cohort members. Differences among subgroups within each cohort were assessed for statistical significance. In addition to describing the outcomes and discussing observed trends, we used

regression modeling to determine the factors that are associated with long-term post-program outcomes.

At the end of FY 2014, Veterans in Cohort I, II, and III have been pursuing the objectives of their individualized rehabilitation plan for up to 5 years, 3 years, and 1 year respectively. Since the 3 cohorts have entered the study at different points in time and are at various stages of pursuing the objectives of their rehabilitation plan, end of the year outcomes should not be directly compared across cohorts.

Instead, comparisons across cohorts are made where cohorts have reached the same point in the program since entering the study. Because Cohort II (FY 2012) members have been in the program for up to 3 years, we can compare the 3-year outcomes for Cohort II members with the 3-year outcomes for Cohort I (FY 2010) members. Similarly, first-year outcomes can be compared across all 3 cohorts.

Figure 2A-1. Cohort Appropriate Comparison Points



However, because such a small proportion of the cohorts exit the program after 1 year of services, the sample size for those who exit VR&E within 1 year of services may be too small to make reliable comparisons across cohorts for specific subgroups of interest (e.g., participants who have achieved rehabilitation).

## Section 2B: Data Sources used for the Longitudinal Study

The VR&E Longitudinal Study data sources used for analysis include (1) self-reported survey data collected from a sample of cohort members, and (2) VBA administrative data. Details about the survey methodology are included in Appendix B.

Two Data Sources for the VR&E Longitudinal Study:

- Survey data
- VA administrative data

VBA administrative data focuses on information about the participant while they are in the program and their immediate post-program circumstances. Therefore, as Veterans complete their rehabilitation programs, there is limited VBA administrative data available regarding the long-term outcomes of interest. After participants end their programs, VBA administrative data only provide information on changes in disability status, use of health care assistance, death status, and re-entry into VR&E service tracks. Information about employment outcomes, such as changes in employment status, annual wages from employment, income, and home ownership, come from survey data. A copy of the survey instrument for the VR&E Longitudinal Study is included in Appendix C, and Appendix D includes a list of the relevant administrative variables used for analysis.

Findings reported in the first 2 years of the VR&E Longitudinal Study were based solely on VBA administrative data. The initial survey for the study was administered to Cohort I and Cohort II in the fall of 2012, and the first annual follow-up survey was fielded in the fall of 2013. For this current report, data collection for the second annual follow-up survey began in the winter of 2014 for Cohorts I and II. All Veterans and Servicemembers in Cohorts I and II who completed the initial survey in 2012 were encouraged to participate this year for the second annual follow-up.<sup>2</sup> The initial survey for Cohort III was administered early in 2015.

<sup>&</sup>lt;sup>2</sup> During the first year of survey data collection, a \$20 incentive was offered to Veterans who completed the initial survey. The incentive was not offered for the first annual follow-up. For this current survey year, the \$20 incentive was offered again to Cohort I and II members who completed the second annual follow-up and to Cohort III members who completed the initial survey.

The sampling plan for the survey was designed to yield 3,500 completed surveys from each cohort during the initial year of administration. This was achieved with 3,710 responding from Cohort I and 3,636 responding from Cohort II in the initial survey that was administered in 2012. These same respondents were the starting sample for the 2014 survey administration, which yielded 2,342 responding from Cohort I and 2,248 responding from Cohort II (see Table 2B-1).<sup>3</sup>

Given our experience with fielding the initial survey for Cohorts I and II in the fall of 2012, about two-thirds (66 percent) of the entire population for Cohort III (N = 14,000) was invited to complete the initial survey, with 29.3 percent of the cohort responding (see Table 2B-1), resulting in 4,102 completed surveys for Cohort III. The comparable response rates for the initial survey for Cohorts I and II were 34.3 percent (3,710 out of 10,792) and 26.2 percent (3,636 out of 13,895), respectively.

Table 2B-1. VR&E Longitudinal Survey Completions during 2014 Administration

	Second Annual	Initial Survey	
Respondent Type	FY 2010 Cohort	FY 2012 Cohort	FY 2014 Cohort
Cohort Population	10,792	15,397	21,082
Total in FY14 Survey Sample	3,710	3,636	14,000
Deceased Cohort Members	34	29	3
Eligible Potential Respondents	3,676 <sup>1</sup>	3,607 <sup>1</sup>	13,997 <sup>2</sup>
Final Refusals <sup>3</sup>	86	43	6
Survey Non-respondents	1,248	1,316	9,889
FY 2014 Survey Respondents (Completed Surveys)	2,342	2,248	4,102
Web Survey	1,576	1,609	3,653
Mail Survey	539	449	449
Telephone Survey	227	190	_
Response Rate	63.7%	62.3%	29.3%
95% Confidence Interval Response Rate	62.2% - 65.3%	60.7%- 63.9%	28.6% - 30.1%
Total in FY15 Survey Sample	3,590	3,564	4,102

<sup>&</sup>lt;sup>1</sup> Eligible potential respondents include cohort members who completed the initial survey and were still alive at the start of the field period for the second annual follow-up.

<sup>&</sup>lt;sup>2</sup> Eligible potential respondents include cohort members who were still alive during the field period for the initial survey.

<sup>&</sup>lt;sup>3</sup> Final refusals include those respondents who indicate that they want do not want to participate, and want no further contact about the study in future years.

<sup>&</sup>lt;sup>3</sup> Appendix E includes details on the procedures used for survey non-response weighting.

Because the initial survey for Cohorts I and II were administered in FY 2012 and the initial survey for Cohort III was administered just after the end of FY 2014 a comparison of initial administrations is included below.

Table 2B-2. VR&E Longitudinal Survey Initial Cohort Administrations Comparison

	Initial Su	Initial Survey 2014	
Respondent Type	FY 2010 Cohort	FY 2012 Cohort	FY 2014 Cohort
Baseline Cohort	10,792	15,397	21,082
Initial Survey Distribution	10,792	13,895	14,000
Initial Survey Non-respondents	7,081	10,257	9,889
Initial Survey Respondents	3,710	3,636	4,102
Web Survey	2,639	2,832	3,653
Mail Survey	1,071	804	449
Initial Survey Response Rate	34.3%	26.2%	29.3%

## Section 2C: Policy and Environmental Conditions at Cohort Entry

There are many factors that influence a Veteran's decision to seek assistance from VR&E. Many of these are personal factors, such as the nature and severity of a disability, level of education, professional skills, length of time employed, and family finances. Additional personal factors, such as a Veteran's ability, aptitude, and interest, may also impact the type of track selection pursued while in the VR&E program, as well as the length of time it takes to complete the program. Some of these external factors are discussed below in more detail to illustrate the conditions that were present at the time of cohort entry.

Changes in number of eligible Veterans. The overall number of Veterans who seek to receive VR&E services is a function of the number of Veterans who are eligible for the program. Both the number of Veterans separating from the military and the share of Veterans determined to have a service-connected disability affect the number of Veterans eligible for VR&E services. Military personnel levels are typically expressed in terms of end strength, which is the maximum number of personnel each of the military services is authorized to have on the last day of the fiscal year (September 30). The number of military separations is related to the end strength cap and is dictated by Congress each fiscal year. Table 2C-1 shows the end strength levels authorized in FY 2007 through FY 2014 by the NDAA for each fiscal year. In general, between FY 2007 and FY 2011, end strength levels grew, peaking at just over 1.43 million Servicemembers. Since then, end strength levels have been declining, which is likely to continue based on recent Congressional discussions regarding the Federal budget and requisite personnel levels for the military services.

Table 2C-1. End Strength Levels Authorized in the National Defense Authorization Act FY 2007 through FY 2015

Fiscal Year	Army	Navy	Marine Corps	Air Force	Total
2007	512,400	340,700	180,000	334,200	1,367,300
2008	525,400	329,098	189,000	329,563	1,373,061
2009	532,400	326,323	194,000	317,050	1,369,773
2010	562,400	328,800	202,100	331,700	1,425,000
2011	569,400	328,700	202,100	332,200	1,432,400
2012	562,000	325,700	202,100	332,800	1,422,600
2013	552,100	322,700	197,300	329,460	1,401,560
2014	520,000	323,600	190,200	327,600	1,361,400
2015	490,000	323,600	184,100	311,220	1,308,920

SOURCE: NDAA for FY 2007 through FY 2015.

The declining active duty end strength numbers stem from military policy and budgetary decisions. The military completed the withdrawal of troops from Iraq in 2011, and began the drawdown of U.S. forces in Afghanistan in 2012. In January 2012, Secretary of Defense Leon Panetta announced that Pentagon spending would be decreased over the next decade by \$487 billion. As end strength declines, the number of military separations increases. Table 2C-2 shows the number of military separations from FY 2007 through FY 2013 for the four branches of service combined. The table

shows an increase in separations starting in FY 2011. Decreasing end strengths and increasing separations are indicative that over the time period of this study's cohort entry dates (FY 2010 through FY 2014), more Servicemembers have transitioned into Veteran status.

In parallel to the increases in the number of individuals becoming Veterans, a greater share of military personnel are separating with a disability rating. Due to the improvements and technological advances in military medicine and

Table 2C-2. Number of Military Separations from FY 2007 through FY 2013

Fiscal Year	Total
2007	210,226
2008	185,101
2009	179,273
2010	176,248
2011	184,484
2012	201,958
2013	206,218

SOURCE: Department of Defense, Office of the Deputy Assistant Secretary of Defense for Military Community and Family Policy, Annual Demographic Profile of the Military Community Reports 2007-2013. Accessed from

http://www.militaryonesource.mil/search?content\_id=268828

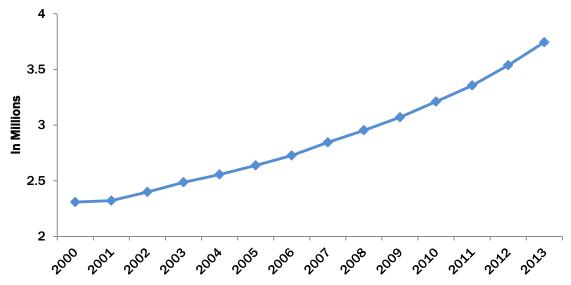
equipment, more Servicemembers are surviving injuries, compared with previous wars. One research study<sup>4</sup> that examined injuries related to involvement in the Iraq and Afghanistan campaigns reported that unlike previous wars such as World War II and the Vietnam conflict where only 70 to 75 percent of soldiers survived their injuries, more than 90 percent of Operation Enduring Freedom/Operation Iraqi Freedom soldiers survived their injuries. However, as a consequence, some soldiers separate from active duty with multiple injuries, many with "invisible wounds" such as hearing impairments, degenerative vision, or post-traumatic stress disorder. These injuries can have a significant impact on a Veteran's ability to obtain and maintain employment.

As Figure 2C-1 shows, the number of Veterans with a service-connected disability has risen substantially since 2000. Further examination of this same data indicates that the growth in the number of Veterans with a service-connected disability is concentrated among those rated 50 percent or higher (see Figure 2C-2). In particular, there has been a marked increase in the number of individuals with disability ratings of 70 percent or higher

The number of Veterans with a disability rating of 70 percent or higher has increased from about 352,000 in 2001 to almost 1,140,000 in 2013.

Figure 2C-1. Number of Veterans with a Service-Connected Disability (from 2000 to 2013)

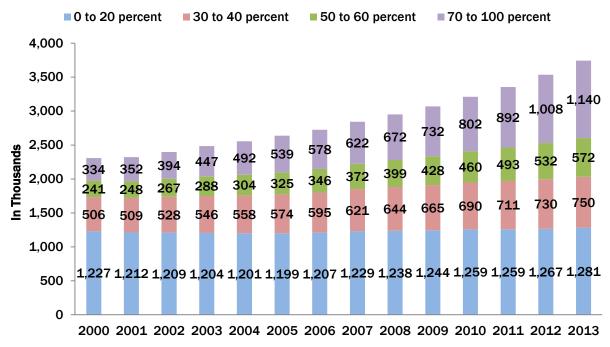
starting in 2001, coinciding with the beginning of combat operations in Afghanistan.



SOURCE: Department of Veteran Affairs, Veterans Benefits Administration Annual Benefits Reports 2000-2013.

<sup>&</sup>lt;sup>4</sup> Gawande, Atul, "Casualties of War – Military Care for the Wounded from Iraq and Afghanistan," New England Journal of Medicine, Vol. 351, No. 24, December 2004, pp. 2471-2475.

Figure 2C-2. Number of Veterans with a Service-Connected Disability (from 2000 to 2013), by Severity



SOURCE: Department of Veterans Affairs, Veterans Benefits Administration Annual Benefits Reports, 2000-2013.

The number of Veterans receiving disability compensation has also steadily grown in recent years, increasing by more than 790,000 individuals (~27 percent) between FY 2008 and FY 2013 (see Table 2C-3). In fact, as shown in Table 2C-4, the number of Veterans who began receiving disability compensation increased by more than 50 percent between FY 2007 and FY 2013. This trend is due to increased efforts by VA to reduce the disability claims backlog and the substantial growth in the number of Veterans with an initial

Table 2C-3. Number of Veterans with Service-Connected Disabilities Receiving Compensation from FY 2008 through FY 2013

Fiscal Year	Total
2008	2,952,282
2009	3,069,652
2010	3,210,261
2011	3,354,741
2012	3,536,802
2013	3,743,259

SOURCE: Department of Veteran Affairs, Veterans Benefits Administration Annual Benefits Reports 2008-2013.

disability rating of 50 percent or higher in this time period, indicating more complex or severe disabilities.

Table 2C-4. Number of Veterans with Service-Connected Disabilities Who Began Receiving Compensation by Disability Rating by Fiscal Year (FY 2007 through FY 2013)

Disability Rating	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY2012	FY2013	Percent Change FY 2007 – FY 2013
0%	521	551	624	635	522	710	781	49.9%
10%	52,949	53,374	58,949	70,872	68,834	67,541	72,608	37.1%
20%	33,702	33,024	34,069	36,763	28,980	31,163	32,248	-4.3%
30%	25,851	26,368	27,495	29,078	32,089	30,602	31,549	22.0%
40%	20,748	20,539	21,311	21,145	18,576	24,051	23,554	13.5%
< 50%	133,771	133,856	142,448	158,493	149,001	154,067	160,740	20.2%
50%	14,004	14,513	15,239	16,217	15,989	20,979	23,083	64.8%
60%	13,009	13,849	14,873	14,903	18,314	24,477	26,880	106.6
70%	9,316	10,031	10,729	11,457	12,297	21,280	25,410	172.8%
80%	5,580	6,233	7,199	7,648	7,808	15,054	19,664	252.4%
90%	2,384	2,927	3,475	4,010	4,131	9,070	13,611	470.9%
100%	9,653	9,909	11,103	12,175	15,467	16,912	20,287	110.2%
50% - 100%	53,946	57,462	62,618	66,410	74,006	107,772	128,935	139.0%
Total	187,717	191,318	205,066	224,903	223,007	261,839	289,675	54.3%

SOURCE: Department of Veteran Affairs, Veterans Benefits Administration Annual Benefits Report 2007 - 2013.

Trends in U.S. economic and employment context. It is likely that the U.S. economic and employment climate has a potential impact on the number of Veterans seeking assistance from VR&E. Figure 2C-3 shows that from 2006 through 2014 Veteran unemployment mirrored overall unemployment, with Veterans consistently having roughly 1 percentage point lower unemployment rates than the overall population. According to the Bureau of Labor Statistics, in August 2014, the unemployment rate for Veterans mirrored that of Veterans with no disability.<sup>5</sup>

<sup>&</sup>lt;sup>5</sup> U.S. Department of Labor, Bureau of Labor Statistics, "Employment Situation of Veterans Summary," Washington, D.C., March 18, 2015.

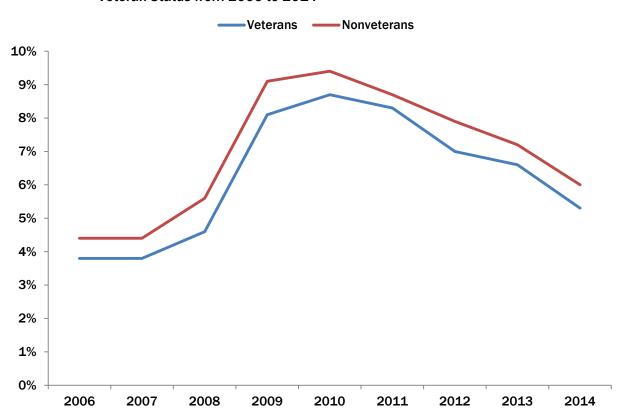


Figure 2C-3. Annual Unemployment Rates for the Total Population 18 Years and Older by Veteran Status from 2006 to 2014

SOURCE: Bureau of Labor Statistics, Labor Force Statistics from the Current Population Survey extracted on March 18, 2015. Accessed from <a href="http://www.bls.gov/webapps/legacy/cpsatab5.htm">http://www.bls.gov/webapps/legacy/cpsatab5.htm</a>.

Although unemployment rates have declined starting from 2010 to 2014, the job market remains relatively competitive. In fact, White House Council of Economic Advisers statistics show that post-September 2001 Veterans have a higher unemployment rate than both non-Veterans and Veterans from all other service periods combined (Figure 2C-4). These unemployment statistics indicate that Veterans with service-connected disabilities are experiencing significant employment barriers similar to, and sometimes greater than, those of the general population.

Percent 13 12 Post September 11 Non-Veterans Adjusted for 2001 Veterans Comparable Demographics to Post September 2001 10 Non-Veterans Veterans 9 All Other Service Periods 8 6 Jul-09 Jan-10 Jul-10 Jan-11 Jul-11 Jan-12 Jul-12 Jan-13 Jul-13

Figure 2C-4. Unemployment Rates for Veterans Compared to Non-Veterans from July 2009 through July 2013 (in percent)

NOTE: Unemployment rate is a 12-month moving average based on not seasonally adjusted data. SOURCE: Furman, Jason. "The Employment Situation in October." November 8, 2013. Accessed from <a href="http://www.whitehouse.gov/blog/2013/11/08/employment-situation-october">http://www.whitehouse.gov/blog/2013/11/08/employment-situation-october</a>

Legislative changes concerning Veterans returning to work. In recent years, several pieces of legislation have expanded and enhanced VR&E services for Veterans and Servicemembers. VA conducted extensive outreach to inform Veterans and Servicemembers of recent provisions and the availability of these expanded benefits. As we continue to assess the long-term post-program outcomes of the study cohorts over time, it will be important to understand the nature and extent of these recent legislative changes to the VR&E program, as they could affect both program participation and long-term outcomes. In fact, the VR&E program has already experienced an increase in program participation from FY 2010 to FY 2014.

**Recent increases in VR&E program participation.** From FY 2010 to FY 2014, there has been a marked increase in the number of Veterans and Servicemembers who began a VR&E rehabilitation plan of services. There are 43 percent (4,605) more members in the FY 2012 cohort than in the FY 2010 cohort, and 37 percent (5,692) more members in the FY 2014 cohort than in the FY 2012

cohort. While the exact reason for this increase is difficult to discern, there are several factors that may contribute to this increase over time in the number of Veterans and Servicemembers who apply for and begin a plan of VR&E services.

First, as discussed previously, increases in the number of Veterans eligible for VR&E services are driven, in part, by the increases in military separations and the number of Veterans with a service-connected disability.

Second, there has been a marked increase in the number of Veterans with a combined disability rating of 50 percent or more since 2007, which may contribute to the demand for VR&E services.

Consistent with these trends, Figure 2C-5 reveals that the increase in the size of the cohorts from FY 2010 to FY 2014 is largely due to higher numbers of recently separated Veterans seeking VR&E services.

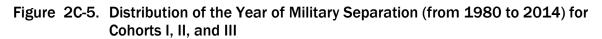
Furthermore, in addition to the growth of disability claims in recent years, in the past 2 years VBA has increased efforts to reduce the claims backlog. The claims backlog totaling

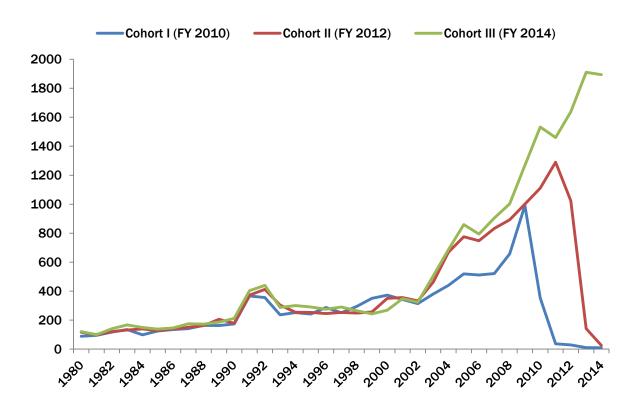
The number of Veterans and Servicemembers who began a VR&E rehabilitation plan has substantially increased.

The FY 2014 Cohort is 95 percent larger than the FY 2010 Cohort.

611,703 on March 25, 2013 is substantially reduced to 140,703 as of May 30, 2015.<sup>6</sup> The decreased backlog means an increased number of Veterans who are eligible to apply for VR&E services.

<sup>6</sup> http://benefits.va.gov/reports/mmwr\_va\_claims\_backlog.asp





Fourth, although the U.S. economic and employment climate is improving, the job market remains competitive, which may be encouraging more individuals to seek VR&E services. Finally, recent changes in program eligibility and provisions may have attracted more Veterans with service-connected disabilities to the program. For example, Public Law 111-377, signed on January 4, 2011, modified the program so that Veterans eligible for both VR&E training and the Post-9/11 GI Bill could utilize VR&E training benefits while collecting a larger housing allowance comparable to that associated with Chapter 33. In addition, recent agency-level initiatives resulting from legislative changes have focused on increased outreach to Veterans and Servicemembers and may have had an impact on the number of Veterans entering into a plan of services with VR&E. No doubt the cumulative effect of all of these related factors has contributed to the increase in the number of Veterans and Servicemembers who begin a plan of VR&E services.

## Section 2D: Interpreting Longitudinal Study Findings

This current report presents findings for the VR&E Longitudinal Study as of FY 2014, the fifth year of the 20-year study period. Summary findings for all 3 cohorts are presented in Section 3 of the report. Information on how to interpret the information presented in summary tables and figures is provided in Appendix F. Detailed findings for each cohort are provided separately in Appendices G, H, and I. As of the end of FY 2014, Cohort I members who began their plan of services very early in FY 2010 have been in the VR&E program for at most 5 years, and Cohort II members who began services very early in FY 2012 have been in the program for at most 3 years. Similarly, Cohort III members who began services very early in FY 2014 have been in the program for at most 1 year. At this early point in the study period, we can describe emerging trends related to outcomes.

Because the majority of cohort members are still pursuing the objectives outlined in their rehabilitation plans, any conclusions drawn at this point in the 20-year study period are preliminary. However, emerging trends for those cohort members who have exited the VR&E program thus far, especially so for those who successfully completed their rehabilitation plans, appear to be consistent over time and across cohorts.

Because the majority of cohort members are still persisting in the program, post-program findings are still preliminary at this point in the study.

**Program outcomes.** The basic period of eligibility in which Veterans can utilize VR&E services is 12 years. As Veterans work to complete the objectives of their rehabilitation plans, the proportion of cohort members who exit the program increase over time. Because most VR&E participants pursue the Employment through Long-Term Services track, which usually takes multiple years to complete, the majority of cohort members are still persisting in their programs as of FY 2014. However, some cohort members have successfully achieved rehabilitation or discontinued their plan of services at this point in the study. Hence, this current report describes the characteristics of those cohort members who are still persisting and have successfully achieved rehabilitation, as well as those who have discontinued, by the end of FY 2014.

Long-term employment and standard of living outcomes. Although the majority of cohort members are still persisting in the program, a sufficient proportion have achieved rehabilitation or

discontinued as of FY 2014 to analyze outcome data and describe early trends related to employment and income, particularly for Cohort I. Because those cohort members have been in the study for up to 5 years, a larger proportion of Cohort I members have achieved rehabilitation (or discontinued) and more positive outcomes. However, these post-program findings are still preliminary at this point in the study.

**Future reports.** As we continue to follow these 3 cohorts over time and as more VR&E participants exit the program, there will be more information on the long-term post-program outcomes and the key programmatic and demographic factors influencing these outcomes. As

multiple years of data are collected, it will be possible to examine more salient trends in outcomes. Furthermore, it is reasonable to expect that trends in outcomes across all 3 cohorts will become increasingly similar as the majority of Veterans will have exited their program of service.

It will become important to track changes such as returns after discontinuation or re-entering the program after having successfully completed the program to examine how entering the program more than once may influence outcomes.

As the cohorts mature, it will become increasingly important to track status changes such as returns after discontinuation or re-entering the program after having achieved rehabilitation to examine how entering the program more than once may influence outcomes. Future reports will also include an analysis of administrative data provided to VA by the Social Security Administration, through the use of a data sharing agreement, which will provide more accurate estimates on the number and percentage of cohort members who receive income from various Social Security programs, such as the Disability Insurance program.

The Education Business Line of the Veterans Benefits Administration, which administers the education benefits available through the Chapter 33 Post-9/11 GI Bill program, has plans to implement a longitudinal study similar to the VR&E Longitudinal Study. The Chapter 33 Graduation and Employment Longitudinal Study will follow 3 cohorts of participants of the Chapter 33 program, and will use a survey similar to the VR&E Longitudinal Survey, to collect self-report data on long-term employment and standard of living outcomes. Because the survey instruments for the 2 studies are similar, we should be able to compare findings from the VR&E Longitudinal Study to those of the Chapter 33 Longitudinal Study.

## **Section 3:**

# **Current Findings as of FY 2014**

**Section 3A: Veteran Satisfaction** 

**Section 3B: Select Characteristics of VR&E Participants** 

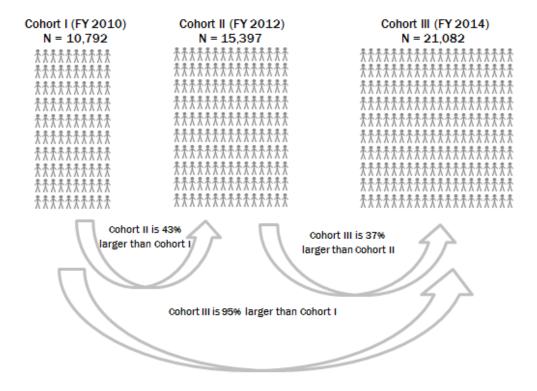
**Section 3C: Program Outcomes (Rehabilitation and Discontinuation)** 

**Section 3D: Employment and Standard of Living Outcomes** 

**Section 3E: Cohort Comparisons** 

Cohort I (FY 2010) includes 10,792 Veterans who began a plan of services within the VR&E program at some point during FY 2010. As shown in Figure 3-1, Cohort II (FY 2012) is nearly double the size of Cohort I and includes 15,397 participants who began their rehabilitation plans during FY 2012. Cohort III (FY 2014) is the largest cohort, with 21,082 VR&E participants who began a plan of services during FY 2014. While the exact reason for this observed increase in VR&E program participation cannot be determined, there are several likely contributing factors, such as in the number of recently separated Veterans, increases in the number of Veterans with a service-connected disability, and VA's efforts to reduce the disability claims backlog, therefore increasing the number of potential eligible Veterans entering the program. Recent changes in program eligibility and provisions such as providing monthly subsistence allowances similar to those paid under the Post-9/11 GI Bill for VR&E program participants who also qualify for Chapter 33 benefits may have attracted more Veterans with service-connected disabilities to the program.

Figure 3-1. Comparison of Cohort Size



As of FY 2014, Cohort I members have been tracked in the VR&E Longitudinal Study for up to 5 years, and Cohort II members have been in the study for up to 3 years. VR&E participants in Cohort III have the shortest tenure being in the study for up to 1 year. This section of the report presents a summary of findings for all 3 cohorts as of FY 2014. Appendix F provides summary information on how to understand and interpret the data presented in the tables and figures. Appendices G, H, and I present more detailed findings for each of the 3 cohorts as of FY 2014.

#### **Section 3A: Veteran Satisfaction**

Through the survey, cohort members were asked to rate their overall experience with the VR&E

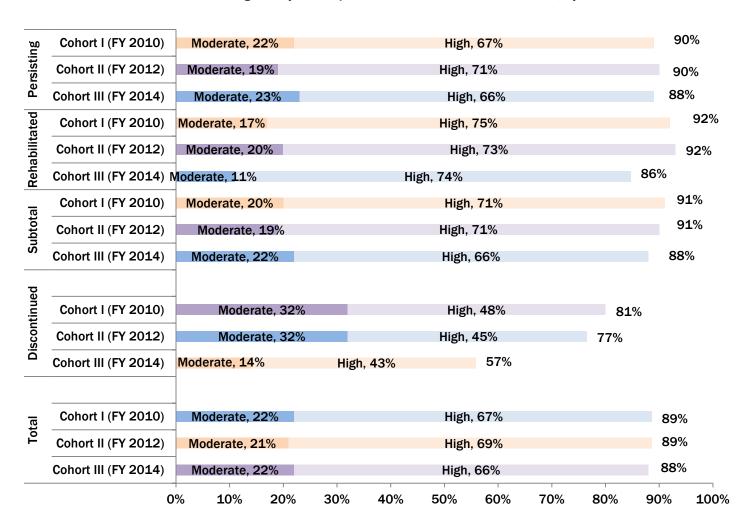
program, using a 1 to 9 scale, where 1 is unacceptable, 5 is average, and 9 is outstanding. Scale scores between 1 and 3 indicate low satisfaction, whereas scale scores between 7 and 9 indicate high satisfaction. Scale scores near the midpoint of the scale (4 to 6) indicate moderate satisfaction. Figure 3A-1 compares the proportion of VR&E participants, across the 3 cohorts, who reported moderate or

For all 3 cohorts, almost 90 percent of Veterans report moderate to high satisfaction with the VR&E program.

high satisfaction with the program as of FY 2014, separately for persisting, rehabilitated, and discontinued cohort members. The survey data is weighted and summed to the cohort population. As shown in the figure, for all 3 cohorts, the vast majority of VR&E participants are satisfied with the program.

For all cohorts, about 90 percent of cohort members who achieved rehabilitation and who are persisting reported moderate or high satisfaction with the program. A substantial proportion of discontinued cohort members also report being satisfied with the program, especially for Cohorts I and II. Furthermore, more detailed findings for Cohorts I and II discussed in Appendices G and H indicate that the percentage of discontinued participants in these two cohorts reporting higher levels of satisfaction have increased over time. A little more than half (57 percent) of discontinued participants in Cohort III reported moderate to high satisfaction.

Figure 3A-1. Percentage of VR&E Participants Reporting Moderate or High Overall Satisfaction with the Program by Participation Status as of end of FY 2014, by Cohort



NOTE: Percentages (%) reported in the figure are based on survey data that has been weighted up to reflect the cohort population. Individual percentages may not sum to total percentages due to rounding.

### Section 3B: Select Characteristics of VR&E Participants

In this section, we assess participant characteristics that Congress mandated to be examined for all 3 cohorts as of FY 2014 and explore how these characteristics as well as other select characteristics relate to cohort member's current participation status. The participant characteristics discussed include:

Table 3B- 1. Select Characteristics of VR&E Participants

	Serious employment handicap
	Gender
<u>8</u>	Age at program entry
Demographics	Level of education at program entry
nog	Era of service
Der	Length of active duty military service
	Combined disability rating
	Number of dependents
Training Selection	Program Track
g of	Visits to a VA medical facility during the past 12 months
Receipt of Other Benefits	Visits to a non-VA medical facility during the past 12 months
Rec O Be	Receipt of other VA benefits (i.e., VA-insured life insurance and mortgage loans)
of	Enrollment in an institution of higher learning during the past 12 months
Receipt of Education or Training	Number of credits completed during the past 12 months
Re Edu	Attainment of a degree or certificate during the past 12 months

Descriptive examination of demographic and other background characteristics of participants can provide insight as to if and how these characteristics influence long-term post program outcomes over time.

While VBA administrative data allows us to examine certain background characteristics for the entire cohort population, survey data provides additional information for a sample of the cohort. The survey data have been weighted to reflect the entire cohort population.

#### **Demographics**

Table 3B-2 provides a snapshot of select demographic characteristics of the cohorts, as of the end of FY 2014. About three-quarters of cohort members have a serious employment handicap. Determination of a serious employment handicap indicates significant impairment in a Veteran's ability to prepare

Approximately threequarters of cohort members have a serious employment handicap.

for, obtain, or retain employment consistent with his or her abilities, aptitudes, and interests.

About one-fifth of cohort members are women, with more women being represented in the cohorts over time. The percentage of women in the VR&E cohorts ranges from 17 to 20 percent and is greater than their percentage of Veterans overall (9 percent<sup>7</sup>). This finding reflects the fact that more younger Veterans are women. As of 2014, women represented about 20 percent of the Gulf War II era Veterans<sup>8</sup>.

National Center for Veterans Analysis and Statistics. Department of Veterans Affairs Statistics at a Glance. National Center for Veterans Analysis and Statistics, Department of Veterans Affairs, Washington, DC. December 2014. Available at: <a href="http://www.va.gov/vetdata/docs/Quickfacts/Homepage\_slideshow\_09\_30\_14.pdf">http://www.va.gov/vetdata/docs/Quickfacts/Homepage\_slideshow\_09\_30\_14.pdf</a>.

<sup>&</sup>lt;sup>8</sup> Based on 2014 Bureau of Labor Statistics data available at <a href="http://www.bls.gov/news.release/pdf/vet.pdf">http://www.bls.gov/news.release/pdf/vet.pdf</a>.

Table 3B-2. Demographic Characteristics of VR&E Participants by Cohort

Demographic Characteristic	Coh (FY 2		Coho (FY 2		Cohort III (FY 2014)						
ondidotoristio	#	%	#	%	#	%					
Total	10,792	100%	15,397	100%	21,082	100%					
	Serious Employment Handicap										
Yes	8,064	75%	11,729	76%	15,186	72%					
No	2,728	25%	3,668	24%	5,896	28%					
		Ge	ender								
Male	9,005	83%	12,575	82%	16,852	80%					
Female	1,787	17%	2,822	18%	4,230	20%					
		Age at Pr	ogram Entry								
Less than 30	1,595	15%	2,679	17%	3,875	18%					
30 - 44	4,505	42%	6,723	43%	9,847	47%					
45 - 54	2,910	27%	3,769	24%	4,844	23%					
55 and above	1,783	17%	2,226	15%	2,516	12%					

NOTE: Frequencies (#) and percentages (%) reported in table are based on VBA administrative data available for the cohort population.

Overall, cohort members tend to be younger, with the majority being less than 45 years old. When

comparing age at program entry across cohorts, Table 3B-2 indicates that, over time, the average age of VR&E participants have decreased, from 57 percent of Cohort I members being less than 45 years old to 65 percent in Cohort III. In addition, all 3 cohorts are also relatively younger than the overall VR&E population with 56 percent being less than 45 years old in FY 2014.9

The average age of VR&E participants has decreased over time and more participants are reporting higher levels of prior education at program entry. They also have a larger proportion of female Veterans and Veterans who served during the Gulf War era II.

In addition to comparing age and gender across cohorts, Figure 3B-

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<sup>&</sup>lt;sup>9</sup> SOURCE: Department of Veterans Affairs, Veterans Benefits Administration Annual Benefits Report 2014.

1 presents trends for two other select demographic characteristics at program entry – level of education and era of service. As the figure indicates, Veterans are reporting higher levels of prior education at program entry and the percentage of female VR&E participants is increasing. Similarly, the percentage of participants who have served in the Gulf War era II is also increasing. In fact, we find that the majority of cohort members are from the Gulf War era, and of those who served in the Gulf War, the majority are from the Gulf War era II. In addition, as shown in Figure 3B-1, Cohort II (FY 2012) and Cohort III (FY 2014) have a higher percentage of Veterans with a primary rating of post-traumatic stress disorder, compared to Cohort I (FY 2010).

Cohort I (FY 2010) Cohort II (FY 2012) **■ Cohort III (FY 2014)** 100% 80% 72% 68% 65% 57% 60% 62% 61% 60% 54% 45% 40% 17% 18% <sup>20%</sup> 20% 0% Less than 45 years old **Females** At least some college Served in Gulf War Era II at program entry at program entry (post-Sept 2001)

Figure 3B-1. Key Demographic Trends of VR&E Participants at Program Entry

NOTE: Percentages (%) reported in the figure are based on VBA administrative data available for the cohort population.

As shown in Figure 3B-2, about one quarter or more of VR&E participants has a primary rating of post-traumatic stress disorder, which is higher than the percentage for overall Gulf War era Veterans.<sup>10</sup> In addition, Cohort II (FY 2012) and Cohort III (FY 2014) have a higher percentage of Veterans with a primary rating of PTSD, compared to Cohort I (FY 2010).

Figure 3B-2. Percentage of VR&E Participants with a Primary Rating of Post-Traumatic Stress Disorder <sup>10</sup>

#### Percent of Veterans with PTSD

Cohort I (FY 2010)	24%
Cohort II (FY2012)	29%
Cohort III (FY 2014)	28%

Among all war Veterans of Iraq and Afghanistan 11-20%

The legislation requiring this study seeks information on specific background characteristics of VR&E participants. Summary statistics on these mandated variables are provided in Table 3B-3 for

each cohort, by participation status. Examination of the table reveals that more recent VR&E participants have served on active duty longer. Additionally, participants who have achieved rehabilitation have served more months on active duty, relative to persisting and discontinued participants. The table also reveals that, on average, discontinued participants have a higher combined disability rating than persisting or participants who achieved rehabilitation. The table

Relative to persisting and discontinued participants, participants who achieved Rehabilitation have served more months on active duty.

also reports the average combined disability rating for each cohort. The findings indicate that, on average, cohort members have a combined disability rating of 60 percent.

NIH Medline Plus. (2009.) PTSD: A Growing Epidemic. Volume 4 (1): 10-14. Available at: <a href="http://www.nlm.nih.gov/medlineplus/magazine/issues/winter09/articles/winter09pg10-14.html">http://www.nlm.nih.gov/medlineplus/magazine/issues/winter09/articles/winter09pg10-14.html</a>

Table 3B-3. Mandated Characteristics of VR&E Participants by Participation Status as of end of FY 2014, by Cohort

Cohort I (FY 2010)					Cohort II (FY 2012)				Cohort III (FY 2014)						
Characteristic	Persisting	Reha- bilitated	Subtotal	Discon- tinued	Total	Persisting	Reha- bilitated	Subtotal	Discon- tinued	Total	Persisting	Reha- bilitated	Subtotal	Discon- tinued	Total
						Demograp	ohic Chara	cteristics							
Average Number of Months Served on Active Duty <sup>1</sup>	71.6	85.0	76.6	69.5	74.8	76.9	85.8	78.6	67.0	77.0	78.9	85.0	79.0	60.6	78.7
Average Combined Disability Rating <sup>1</sup>	55%	60%	57%	62%	58%	58%	60%	59%	63%	59%	56%	57%	56%	63%	56%
Average Number of Dependents <sup>2</sup>	1.9	1.8	1.8	1.7	1.8	2.0	1.6	1.9	1.7	1.9	1.8	2.2	1.8	1.6	1.8

<sup>&</sup>lt;sup>1</sup> Averages and percentages (%) are based on VBA administrative data available for the cohort population.

<sup>&</sup>lt;sup>2</sup> Averages and percentages (%) are based on survey data that has been weighted up to reflect the cohort population.

Comparison of the cohort distributions for combined disability rating with that of overall Veterans with a service-connected disability reveals that VR&E participants have a higher combined disability rating than the average Veteran with a service-connected disability. On average, more than half of cohort members (55 percent for Cohort II, 57 percent for Cohort II, and 54 percent for Cohort III, not shown) have a combined disability rating of 60 percent or more. Among overall Veterans with a service-connected disability, one-third reported a disability rating of 60 percent or higher in the

On average, cohort members have a combined disability rating of nearly 60 percent.

Comparing combined disability ratings for cohort members with that of overall Veterans with a service-connected disability reveal that VR&E participants have a higher combined disability rating than the average Veteran with a service-connected disability.

August 2014 Current Population Survey. <sup>11</sup> The legislation also requires the study to report the average number of dependents for VR&E participants. Cohort members report an average of 2 dependents.

#### **Training Selection**

Table 3B-4 provides a snapshot of each cohort by their program track selection as of the end of FY 2014. The table shows that the vast majority of participants – 84 percent for Cohort I, 88 percent for Cohort II, and 93 percent for Cohort III – are in the Employment through Long-Term Services

track (Track 4). Keeping in mind the length of time that has passed since each cohort began the VR&E program, it is important to note that track selection is one of a few characteristics that can change over time. Not surprisingly, we find a small proportion of Cohort I and Cohort II have changed tracks since entering the VR&E program.

For all 3 cohorts, the majority of participants pursue the Employment through Long-Term Services track.

The Employment through Long-Term Services track provides services that include career counseling, case management, employment planning, training or education, VHA-sponsored medical or dental care, job-placement assistance, and other supportive services. Given that most Veterans in the VR&E program require significant support and re-training to obtain a suitable job, it is not surprising that the Employment through Long-Term Services track is the largest.

 $<sup>^{11} \, \</sup>underline{http://www.bls.gov/news.release/pdf/vet.pdf}$ 

Table 3B-4. Track Selection of VR&E Participants by Cohort as of end of FY 2014

Track Selection	Cohort I Selection (FY 2010)		Coho (FY 2		Cohort III (FY 2014)		
	#	%	#	%	#	%	
Track 1 Re-Employment	60	1%	91	1%	72	0%	
Track 2 Rapid Access to Employment	798	8%	921	6%	745	4%	
Track 3 Self-Employment	34	0%	34	0%	36	0%	
Track 4 Employment through Long-Term Services	8,455	84%	12,739	88%	17,120	93%	
Track 5 Independent Living	777	8%	662	5%	358	2%	
Subtotal	10,124	100%	14,447	100%	18,331	100%	
Extended Evaluation <sup>1</sup>	666	-	946	-	2,751	-	
Data Unavailable	2		4		0		
Total	10,792	-	15,397	-	21,082	-	

NOTE: Frequencies (#) and percentages (%) reported in table are based on VBA administrative data available for the cohort population. 

For FY 2014, a different method was used to identify participants in an Extended Evaluation. Hence, data from previous years for participants in an Extended Evaluation should not be compared to FY 2014 data.

The second most common track is Track 2 – Rapid Access to Employment. The Rapid Access to Employment track assists Veterans with disabilities that already have the skills to be competitive in the job market and desire immediate employment. Given the nature of this track and the fact that many Veterans seeking services from VR&E require significant support, including additional training

and education, it is not surprising that a small proportion – less than 10 percent – of cohort members pursue this track. However, for those that do pursue this track, it is expected that the majority achieve rehabilitation much earlier than Veterans in the Employment through Long-Term Services group.

A larger percentage of cohort members are women, compared to the overall Veteran population.

A small proportion of cohort members are in an Independent Living program (Track 5). The goal of the Independent Living program is to assist Veterans with disabilities to develop capacity to live

as independently as possible in their families and communities, as well as increase their potential to return to work. For some Veterans pursuing an Independent Living program, a subsequent goal may be to find employment through one of the 4 VR&E employment tracks, once they have successfully completed their IL program. However, for most participants in Track 5, especially so for those with the most serious impairments, the ultimate goal is to live as independently as possible.

#### **Receipt of Other Benefits**

Two additional background characteristics the Congressional legislation requires to be measured are the number of medical visits VR&E participants make on average during the year – the average number of visits made to VA medical facilities during the year and the average number of visits made to non-VA medical facilities during the year. Many Veterans utilize the health care benefits offered by the Veterans Health Administration (VHA), which manages the largest health care system in the country. On average, cohort members visited a VA medical facility twice as often as they

Cohort members use VA-provided health care services on average more frequently than the overall Veteran population.

visited a non-VA medical facility, averaging 13 visits to a VA medical facility during the past 12 months versus only 6 visits to a non-VA medical facility during the same time frame. Relative to the first 2 cohorts, Cohort III (FY 2014) reported a higher number of average visits to both VA and non-VA medical facilities in the past 12 months. Examination of these data by participation status also reveals that

discontinued participants report a higher number of average visits to a VA medical facility than persisting participants or participants who have achieved rehabilitation across all 3 cohorts.

With an average of 13 visits a year, cohort members appear to use VA-provided health care services more frequently than the overall Veteran population, which is not surprising given they have a service-connected disability. For the Veteran population overall, a total of 8.9 million enrollees made a total of 86.4 million outpatient visits to VHA-managed facilities in FY 2013, yielding an average of about 9.8 visits for the year.<sup>13</sup>

 $<sup>^{12}~\</sup>underline{http://www1.va.gov/health/aboutVHA.asp}$ 

<sup>&</sup>lt;sup>15</sup> Based on data prepared by the National Center for Veterans Analysis and Statistics available at <a href="http://www.va.gov/vetdata/docs/Utilization/VHAStats.xls">http://www.va.gov/vetdata/docs/Utilization/VHAStats.xls</a>.

Table 3B-5. Receipt of Other Benefits by Participation Status as of end of FY 2014, by Cohort

Cohort I (FY 2010)						Cohort II (FY 2012)				Cohort III (FY 2014)					
Characteristic	Persisting	Reha- bilitated	Subtotal	Discon- tinued	Total	Persisting	Reha- bilitated	Subtotal	Discon- tinued	Total	Persisting	Reha- bilitated	Subtotal	Discon- tinued	Total
						Receipt	of Other E	Benefits							
Average Visits to VA Medical Facility <sup>2</sup>	13.8	10.8	12.5	14.0	12.8	12.2	12.0	12.2	16.0	12.5	13.2	13.1	13.2	19.5	13.3
Average Visits to non-VA Medical Facility <sup>2</sup>	6.1	5.8	6.0	6.0	6.0	5.7	4.4	5.4	6.8	5.6	6.5	5.3	6.5	5.8	6.5
Have VA Life Insurance <sup>1</sup>	13%	17%	14%	14%	14%	12%	15%	13%	12%	13%	9%	11%	9%	11%	9%
Have VA Home Loan <sup>1</sup>	4%	7%	5%	4%	5%	4%	8%	5%	4%	5%	4%	7%	4%	4%	4%

#### **Receipt of Education and Training**

The Congressional legislation asks for information on the types of other VA benefits received by cohort members. Using administrative data collected by VA, Table 3B-5 reports the number and percentage of cohort members who have life insurance through VA and have VA-insured mortgage loans. The table reveals that, for all 3 cohorts, a higher proportion of participants that have achieved rehabilitation have life insurance policies, as well as VA-insured mortgage loans, relative to

A higher proportion of cohort members who have achieved rehabilitation have life insurance policies and mortgage loans that are insured by VA, relative to persisting and discontinued cohort members.

persisting and discontinued participants. The table also indicates that Cohort III has a smaller percentage of members with life insurance through VA, relative to the other 2 cohorts, which may be explained in part by the fact that Cohort III is younger and has a higher percentage of recently separated Veterans (relative to Cohorts I and II).

A higher proportion of persisting Veterans were enrolled in an institution of higher learning in the past 12 months, relative to participants who have achieved rehabilitation and have discontinued.

Table 3B-6 provides information on the educational pursuits and achievements of cohort members since beginning their rehabilitation plans. For all 3 cohorts, a larger percentage of persisting participants are enrolled in an institution of higher learning (IHL) at some point during the past 12 months, relative to participants who have achieved rehabilitation or discontinued from the program. This finding is not surprising given the fact that the majority of VR&E participants are in the Employment through Long-Term Services

track, which is the track pursued when additional training or education is needed. A subsistence allowance is paid each month when pursuing a training or education program and is based in part by the rate of attendance (e.g., full-time or part-time). In 2011, based on Public Law 111-377, VR&E increased the amount of the subsistence allowance to be similar to the monthly allowance paid under the Post-9/11 GI Bill only for Veterans eligible for Chapter 33 benefits. Table 3B-4 indicates that, in general, about half of those cohort members who are enrolled in an IHL, reported completing more than 20 academic credits in the past year, which likely means these cohort members were in school for at least 2 semesters during the year and attending on a full-time basis.

Table 3B-6 also reports the proportion of cohort members who obtained a degree or certificate during the past 12 months. For Cohorts I and II, a larger percentage of cohort members who are still persisting in their plans reported that they obtained a degree over the past 12 months, compared to the overall cohort. This finding is not unexpected given that these participants have been in the program for 3 to 5 years, and the majority of persisting participants entered the Employment through Long-Term Services track, which is the track pursued when additional training or education is needed. A smaller percentage of Cohort III members who are still persisting, relative to Cohorts I and II, report obtaining a degree in the past 12 months, which is expected given that they have only been in the program for up to 1 year and have not yet had enough time to complete a degree program.

Table 3B-6. Education or Training Characteristics of VR&E Participants by Participation Status as of end of FY 2014, by Cohort

	Cohort I (FY 2010)				Cohort II (FY 2012)				Cohort III (FY 2014)						
Characteristic <sup>5</sup>	Persisting	Reha- bilitated	Subtotal	Discon- tinued	Total	Persisting	Reha- bilitated	Subtotal	Discon- tinued	Total	Persisting	Reha- bilitated	Subtotal	Discon- tinued	Total
				R	eceipt of I	Education	or Training	g (in past 1	L2 months	5)					
Enrolled in Institution of Higher Learning <sup>2,3</sup>	61%	15%	42%	10%	37%	78%	17%	65%	21%	61%	84%	30%	84%	48%	83%
Completed More than 20 Credit Hours <sup>2,4</sup>	49%	42%	48%	34%	48%	61%	41%	59%	28%	59%	48%	28%	48%	25%	48%
Obtained Degree <sup>2</sup>	26%	6%	17%	2%	15%	27%	11%	24%	5%	22%	16%	15%	15%	5%	15%
Obtained Certification <sup>2</sup>	12%	11%	12%	6%	11%	11%	18%	12%	8%	12%	10%	31%	10%	5%	10%

<sup>&</sup>lt;sup>1</sup> Averages and percentages (%) are based on VBA administrative data available for the cohort population.

<sup>&</sup>lt;sup>2</sup> Averages and percentages (%) are based on survey data that has been weighted up to reflect the cohort population.

<sup>&</sup>lt;sup>3</sup> Enrollment is defined as being enrolled within the last 12 months.

<sup>&</sup>lt;sup>4</sup> The reported percentage is out of those enrolled in an institution of higher learning.

<sup>5</sup> Veterans in each category (Persisting, Rehabilitated or Discontinued) may appear in multiple characteristics. (e.g., a Veteran could have obtained a degree and a certification in the past 12 months,).

# Section 3C: Program Outcomes (Rehabilitation and Discontinuation)

For each cohort, some cohort members are continuing to pursue the objectives outlined in their rehabilitation plans. Some members have successfully achieved rehabilitation, while other members have discontinued their rehabilitation plans. The overall basic period of eligibility in which Veterans can utilize VR&E services is 12 years from their initial rating decision. As Veterans work to complete the objectives of their rehabilitation plans, it is expected that a larger share of cohort members will successfully achieve rehabilitation over time. Similarly, one would expect that the number (and thereby the percentage) of continuing participants will decrease over time as well. For each cohort, Figure 3C-1 presents by year the percentage of cohort members who are persisting in their plans, have successfully achieved rehabilitation, or discontinued services. Because cohort members can re-enter VR&E services after exiting the program throughout their period of eligibility, the annual percentages displayed in the figure were calculated using the program participation status (i.e., rehabilitated, discontinued, and persisting) as of the end of each fiscal year.

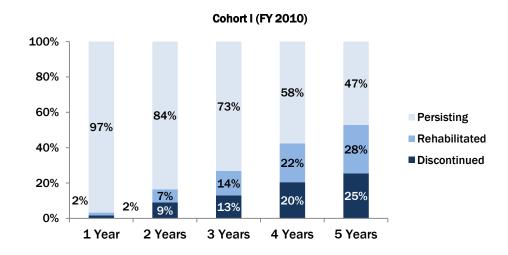
As Figure 3C-1 reveals, the number of rehabilitations and discontinuations have increased over time. Only 2 percent of Cohort I (FY 2010) achieved rehabilitation within 1 year, however that percentage steadily increased to 28 percent within 5 years. The proportion of Cohort I members still persisting in their plans has declined over time, from 97 percent during the first year of participation to less than half (47 percent) of the cohort within 5 years of beginning their plans. This steady decrease in the number of persisting participants is due to increases over time in not only rehabilitations, but discontinuations as well. Discontinuations increased from 2 percent to 25 percent over the same

time period.

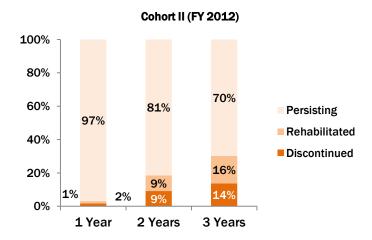
A similar trend of increasing rehabilitations and discontinuations over time is observed for Cohort II (FY 2012). The proportion of Cohort II members pursuing the objectives of their rehabilitation plans has decreased from 97 percent during year 1 to 70 percent by the end of year 3, while the

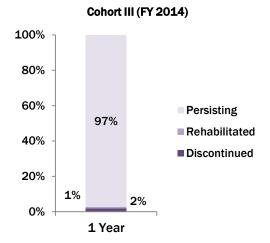
About 15 percent of VR&E participants successfully rehabilitate within 3 years of beginning the program, and more than one-quarter (28 percent) successfully rehabilitate within 5 years of beginning the program.

Figure 3C-1. Cumulative Percentage of VR&E Participants who have Rehabilitated, Discontinued, or are Still Persisting by Cohort as of each Study Year



75 percent of Cohort I continue to persist in meeting their objectives to rehabilitation or have successfully completed the program.





NOTE: Percentages (%) reported in the figure are based on VBA administrative data available for the cohort population.

percentage of Cohort II members who have successfully achieved rehabilitation increased from 1 percent to 16 percent over the same three year period. Similar to the increase observed among those who have achieved rehabilitation, the proportion of Cohort II members who discontinued also increased from 2 percent in year 1 to 14 percent in year 3.

Further examination of Figure 3C-1 reveals similar rates of change over time across the cohort groups. For all 3 cohorts, with 97 percent of cohort members still persisting in their plans within the first year of receiving services, only a very small percentage exited the program within

Veterans in all 3 cohorts exit the VR&E program at similar rates over time.

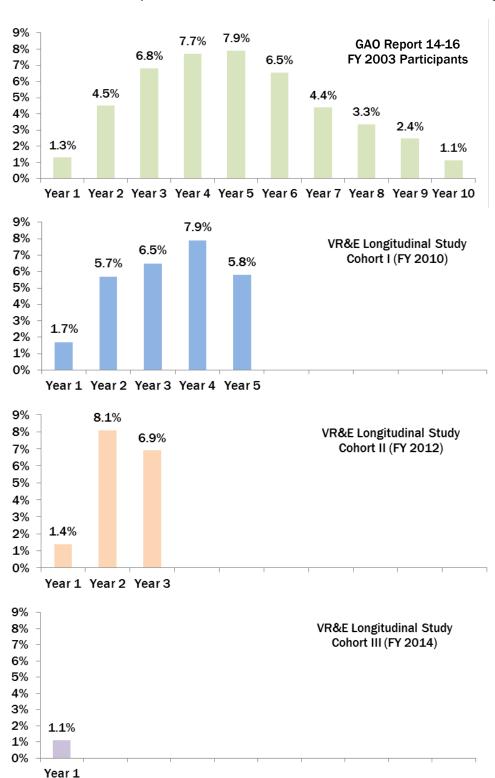
the first year. The rehabilitation and discontinuation outcomes experienced by Cohort I and Cohort II members in years 2 and 3 indicates that the majority of cohort members are still pursuing their rehabilitation plans within the first 3 years since beginning the VR&E program. By year 3, about 30 percent of participants have exited the VR&E program, with half of the exits being due to successful rehabilitations and the other half due to a discontinuation of services.

The experience of Cohort I, as illustrated in Figure 3C-1, indicates that it takes between 4 and 5 years for half of the cohort to exit the VR&E program. A recent study conducted by the U.S. Government Accountability Office (GAO) of the VR&E program revealed that, on average, it took Veterans who began an employment plan of services in 2003 4 years 7 months to successfully rehabilitate. The GAO study further reported that while almost half of those who have successfully achieved rehabilitation did so within 3 to 5 years of applying for services, about one-third (37 percent) of those who achieve rehabilitation took 6 to 10 years. Current findings from the 3 cohorts closely parallel the GAO findings. Figure 3C-2 compares the proportion of VR&E Longitudinal Study cohort members who have successfully achieved rehabilitation each year to the percentage who have achieved rehabilitation from the GAO study.

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<sup>14</sup> http://www.gao.gov/assets/670/660160.pdf

Figure 3C-2. Annual Percentage of VR&E Longitudinal Study Participants and GAO 14-61 Study Participants who Achieved Rehabilitation within 5 Years of Program Start



SOURCE: http://www.gao.gov/assets/670/660160.pdf

# Section 3D: Employment and Standard of Living Outcomes

In this section we present descriptive information about the employment and standard of living outcomes experienced by cohort members. Because only a limited amount of information on post-program outcomes is available through VBA administrative files, the main source of data used to measure outcomes is the survey.

The primary objective of the longitudinal study of the VR&E program is to determine the long-term post-program outcomes associated with Veterans who establish a plan of services. Because the main focus of the longitudinal study is on long-term outcomes experienced by VR&E participants after exiting the program, the discussion primarily concentrates on the outcomes experienced thus far by cohort members who have achieved rehabilitation and who have discontinued.

Table 3D-1 presents summary statistics for employment and standard of living outcomes of interest for all 3 cohorts. When interpreting the findings presented in the table, it is important to note that data across cohorts are not comparable given the 3 cohorts began a rehabilitation plan at different

points in time. Hence, a larger proportion of cohort members have exited the program for the earlier cohorts. As such, one would expect employment and standard of living outcomes to be better for earlier cohorts versus newer cohorts. The data presented in table 3D-1 does in fact confirm that cohort outcomes improve over time. Cohort I has had more time to

Employment and standard of living outcomes among cohorts improve over time as VR&E participants have more time to complete training and enhance their economic opportunities.

complete training and enhance their economic opportunities, relative to Cohorts II and III, and similarly Cohort II has had more time than Cohort III. Hence, it is not surprising that Cohort I reports higher employment rates, annual earnings, annual income amounts, and home ownership rates than Cohorts II and III, and that Cohort II has better outcomes than Cohort III.

Table 3D-1. Outcome Measures by Participation Status as of end of FY 2014, by Cohort

		Coh	ort I (FY 20	010)			Coh	ort II (FY 20	012)			Cohe	ort III (FY 2	014)	
Outcome Measure	Persisting	Reha- bilitated	Subtotal	Discon- tinued	Total	Persisting	Reha- bilitated	Subtotal	Discon- tinued	Total	Persisting	Reha- bilitated	Subtotal	Discon- tinued	Total
	Employment-Related														
Currently Employed (as of survey date)	44%	72%	55%	34%	52%	45%	72%	50%	28%	48%	36%	72%	36%	30%	36%
Employment Within the Past 12 Months <sup>1</sup>	53%	76%	63%	42%	60%	54%	79%	60%	46%	58%	54%	82%	55%	45%	54%
					Anı	nual Earnin	gs (in past	12 month	s) <sup>2</sup>	•					
Unconditional (with zeroes) Median Annual Earnings	\$0K	\$36K	\$10K	\$0K	\$7K	\$0K	\$36K	\$4K	\$0K	\$4K	\$1K	\$27K	\$1K	\$0K	\$1K
Conditional (without zeroes) Median Annual Earnings	\$22K	\$39K	\$32K	\$29K	\$32K	\$20K	\$38K	\$25K	\$19K	\$25K	\$15K	\$30K	\$15K	\$25K	\$15K
					An	nual Incom	ne (in past	12 months	s) <sup>3</sup>						
Unconditional (with zeroes) Median Annual <u>Individual</u> Income	\$20K	\$45K	\$30K	\$24K	\$30K	\$22K	\$41K	\$26K	\$24K	\$25K	\$18K	\$38K	\$19K	\$7K	\$18K
Unconditional (with zeroes) Median Annual <u>Household</u> Income	\$31K	\$56K	\$42K	\$30K	\$40K	\$32K	\$53K	\$36K	\$27K	\$36K	\$25K	\$44K	\$26K	\$13K	\$25K
						Other Publ	ic Progran	n Benefits							
Unemployment Compensation Rate	3%	3%	3%	2%	3%	3%	3%	3%	4%	3%	11%	11%	11%	16%	11%
Home Ownership															
Home Ownership Rate	47%	65%	54%	49%	54%	45%	57%	47%	47%	47%	37%	48%	37%	27%	37%

NOTE: Averages and percentages are based on survey data that has been weighted up to reflect the cohort population.

<sup>&</sup>lt;sup>1</sup> Past employment rate is defined as the percentage of cohort members who reported working at any point in the past 12 months (including working currently as of the survey date).

<sup>&</sup>lt;sup>2</sup> Annual earnings is defined as the amount earned, before taxes and other deductions, in the past 12 months from all jobs or businesses. Hence, median annual earnings are reported only for Veterans in an employment plan. Veterans in an Independent Living plan or an Extended Evaluation are not included in the average earnings calculations given that employment is not a goal of those programs.

<sup>&</sup>lt;sup>3</sup> Annual income is defined as income received from all sources, before taxes, in the past 12 months, including earnings from a job, benefits received from government programs, and any retirement, pension, investing, or savings income from which regular payments are received.

Examination of the findings in Table 3D-1 reveals participants who have achieved rehabilitation have substantially better employment and standard of living outcomes than those who discontinued and those who are still persisting in their plans. For all 3 cohorts, Veterans who have achieved rehabilitation are significantly more likely to be employed than discontinued Veterans. Seventy-two

72 percent of Veterans who achieved rehabilitation in all cohorts reported currently being employed.

percent of participants who have achieved rehabilitation in all 3 cohorts reported being currently employed at the time of the survey, and more than three-quarters reported being employed during the past 12 months. Participants who have achieved rehabilitation also earn substantially higher earnings over the past 12 months, relative to discontinued participants, which is largely due to more participants that have completed the program working and, when working, having higher salaries. Participants that successfully complete the program include Veterans who have achieved rehabilitation from the IL track and employable Veterans electing to pursue further education instead of immediate employment.

Participants who have achieved rehabilitation reported higher annual income amounts than discontinued participants – at least \$15,000 higher for individual income and at least \$20,000 higher for household income.

Given that participants who have achieved rehabilitation have substantially higher earnings than discontinued participants, it is not surprising to find that those participants also report higher individual and household annual incomes for the past 12 months, for all 3 cohorts. On average, the median individual income for Veterans who have achieved rehabilitation is at least \$15,000 higher than that of discontinued Veterans. The median

household income for participants who have achieved rehabilitation is at least \$20,000 higher than that of discontinued participants. Additionally, the median annual earnings of Veterans who have achieved rehabilitation in all 3 cohorts are higher than that of Veterans overall and the average American, based on data from the 2010 U.S. Census data.<sup>15</sup>

For all cohorts, a larger percentage of those who have successfully completed the program reported owning their principal residence, relative to those who discontinued. Table 3D-1 also indicates that

A larger percentage of those who have achieved rehabilitation own their principal residence, relative to those who discontinued.

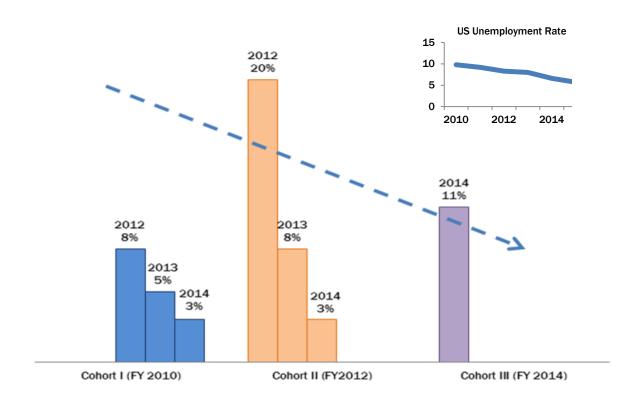
<sup>15</sup> https://www.census.gov/how/pdf/census\_veterans.pdf

cohort members report less dependence on unemployment benefits over time, as they have more time to complete the VR&E program and improve their employment opportunities. As shown in Figure 3D-2, examination of the unemployment benefits usage rate over time for Cohorts I and II

The number of
Veterans reported
receiving
unemployment
benefits has
declined over time
for cohort members.

further supports this point. The decline in this rate over time may also be affected by the fact that the overall U.S. economy has improved in recent years, as evidenced by the decline in the overall U.S. unemployment rate since 2010.

Figure 3D-1. Unemployment Benefits Usage Rate of VR&E Participants Over Time, by Cohort



## Section 3E: Cohort Comparisons

The previous sections of the report present cohort findings as of FY 2014. However, these findings are affected by the differing lengths of time that each cohort has been in the study. As such, this section compares findings for the cohorts using a common elapsed time, specifically within 3 years of beginning a rehabilitation plan. Within this section, we first present comparisons of program-related outcomes that are based on administrative data, such as the proportion of cohort members who have exited the program within the first 3 years of program entry.

As of the end of FY 2014, 2 to 3 years had passed since Cohort II (FY 2012) members first began a VR&E plan of services, while Cohort I (FY 2010) members reached this time benchmark in FY 2012. Using data as of FY 2012 for Cohort I and data from FY 2014 for Cohort II, we can compare outcomes within 3 years of beginning a VR&E program for Cohorts I and II. Specifically, we compare the employment rate, annual earnings, and annual income for Cohorts I and II. However, when comparing these data, it is important to recognize that the 3-year outcomes reported for Cohort I are for outcomes achieved as of FY 2012 and the 3-year outcomes reported for Cohort II are for outcomes achieved 2 years later, as of FY 2014.

Although we do not have survey data for Cohort I (FY 2010) at the 1-year mark <sup>16</sup>, we do have it for the other 2 cohorts. As of the end of FY 2014, up to 1 year had passed since Cohort III (FY 2014) members began the VR&E program, and the survey data collected for FY 2014 provides estimates of 1-year outcomes for this cohort. For Cohort II, 1-year outcome data were collected with the FY 2012 survey. However, we do not any comparisons of these 1-year outcome measures because the number of survey respondents who exited the program from an employment plan within 1 year is too small to provide statistically reliable estimates (2.7 percent for Cohort II and 1.6 percent for Cohort III).

<sup>16</sup> The survey was not fielded until 2012; hence we do not have survey data from 2010, which is the actual 1-year mark for Cohort I.

## **Comparison of Program Outcomes**

Rehabilitation and discontinuation outcomes. Comparisons of the cumulative proportion of cohort members who have achieved rehabilitation or discontinued services each year, within 3 years of beginning services, reveal that VR&E participants are exiting the program at similar rates over time. Figure 3E-1 shows that within 1 year of beginning services only about 1 or 2 percent of VR&E

Observing the same length of time, both cohorts are similar in terms of the percentage of Veterans who exited the program by successfully rehabilitating.

Within 3 years of beginning an employment plan, only 10 percent of Cohort I members and 15 percent of Cohort II members achieved rehabilitation. However, this finding is expected given that the majority of VR&E participants are in the Employment through Long-Term services track, and many individuals in this track are pursuing additional training or education that may take several years to complete.

expected given the fact that the vast majority of participants pursue the Employment through Long-Term services track. The figure also reveals that while the number of participants that achieve rehabilitation from an employment plan increases over time, the proportion who have achieved rehabilitation within 3 years of beginning services is still relatively small (10 percent for Cohort I and 15 percent for Cohort II).

Figure 3E-1 indicates that for those pursuing an

Independent Living plan, the proportion that successfully completes the program within 3 years of beginning services is much larger, relative to those pursuing an employment plan. About 70 percent of Cohort I and Cohort II members in the Independent Living program have achieved rehabilitation

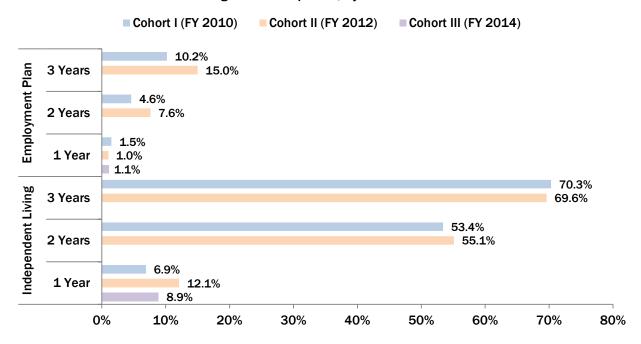
participants successfully achieve rehabilitation from an employment plan. However, this finding is

by year 3. The majority of Veterans in an Independent Living program have achieved rehabilitation within 2 and 3 years of beginning the program given that the program generally lasts 24 months (with an additional 6 month extension if needed).

More than two-thirds (70 percent) of cohort members pursuing an Independent Living program rehabilitate within 3 years of beginning the program.

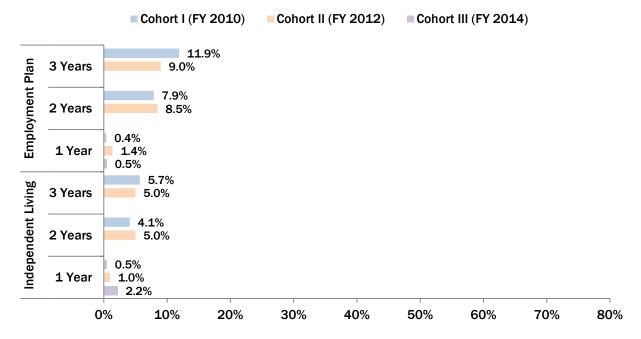
Figure 3E-2 provides comparisons of the cumulative proportion of cohort members who discontinued services each year, within 3 years of beginning services. The figure indicates that the proportion who discontinue services is similar across cohorts over time.

Figure 3E-1. Cumulative Percentage of VR&E Participants who Achieved Rehabilitation, Within First 3 Years of Program Participation, by Cohort



NOTE: Percentages (%) reported in the figure are based on VBA administrative data available for the cohort population.

Figure 3E-2. Cumulative Percentage of VR&E Participants that Discontinued, Within First 3 Years of Program Participation, by Cohort



 $\textbf{NOTE:} \ \ \textbf{Percentages (\%) reported in the figure are based on VBA administrative data available for the cohort population.}$ 

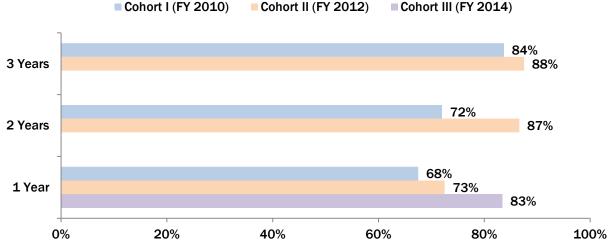
#### Receiving subsistence allowance for a training program.

One significant difference between the 3 cohorts is that a greater percentage of the more recent cohorts received a subsistence allowance for training each year. As depicted in Figure 3E-3, 83 percent of Cohort III received a subsistence allowance for an education or training program within the first

A significant difference between the 3 cohorts is that, in more recent cohorts, a greater percentage is receiving a subsistence allowance for training.

year of beginning services, compared with 73 percent of Cohort II and 68 percent of Cohort I. Similarly, a higher percentage of Cohort II members received a subsistence allowance for training within 2 and 3 years of beginning services, relative to Cohort I. One possible explanation for this difference is the signing of Public Law 111-337 on January 4, 2011. Under this legislation, VR&E participants who are also eligible for Chapter 33 benefits can elect to receive a subsistence allowance at the Basic Allowance for Housing (BAH) rate instead of the traditional subsistence allowance rate. In some circumstances, the BAH rate may be higher than the traditional subsistence allowance rate. Prior to this change, there was concern that disabled Veterans were foregoing the more comprehensive VR&E services to obtain the higher immediate cash allowance that accompanied Chapter 33 benefits. As the VA expanded their outreach efforts to inform Veterans and Servicemembers of the benefits of the VR&E program, knowledge of the enhanced housing allowance may have attracted more recent cohort members to use the subsistence allowance benefit under the VR&E program.

Figure 3E-3. Percentage of VR&E Participants Receiving Subsistence Allowance, Within First 3 Years of Program Participation, by Cohort



NOTE: Percentages (%) reported in the figure are based on VBA administrative data available for the cohort population.

## **Comparison of Employment and Standard of Living Outcomes**

When comparing employment outcomes for participants who exit the program, it is important to examine these measures separately for those who exit from an employment plan versus an Independent Living program, given that the primary goal of the Independent Living program is restoring autonomy of daily living versus employment. Additionally, Veterans who discontinue from an Extended Evaluation are not included in these findings, given that employment is not the primary goal of that program. Conversely, individuals pursuing an employment plan obtain the skills and training necessary to be competitively employed in their field. VR&E evaluates each participant as they near the completion of their rehabilitation goals and determines that their new training and skill development has made them competitive in their chosen field. VR&E also assesses and assists with their job seeking skills such as resume development and interview skills. Once a Veteran has all the necessary training and skills, they are declared job ready.

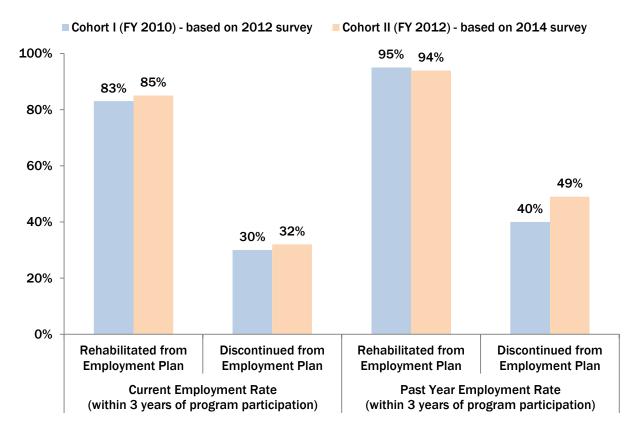
The final set of findings in this section compares the employment rate, annual earnings, and annual income for Cohorts I and II within 3 years of beginning a plan of services. However, when comparing these data, it is important to recognize that the 3-year outcomes reported for Cohort I are for outcomes achieved as of FY 2012 and the 3-year outcomes reported for Cohort II are for outcomes achieved 2 years later, as of FY 2014. Given that the U.S. economy has improved in recent years, one would expect the economic outcomes for cohort members to improve over time as well.

Figure 3E-4 indicates that both Cohorts I and II experienced similar rates of employment for those who exited the VR&E program from an employment plan within 3 years of beginning services. However, as expected, Veterans who have achieved rehabilitation from an employment plan experience much higher rates of employment – about 50 percentage points – relative to Veterans who discontinue from an employment plan.

VR&E participants report similar employment rates within 3 years of beginning services.

The employment rates of those who rehabilitate from an employment plan are more than double the rates of Veterans who discontinue from an employment plan.

Figure 3E-4. Employment Rates Within 3 Years of Program Participation for VR&E Participants who Achieved Rehabilitation or Discontinued from an Employment Plan, by Cohort



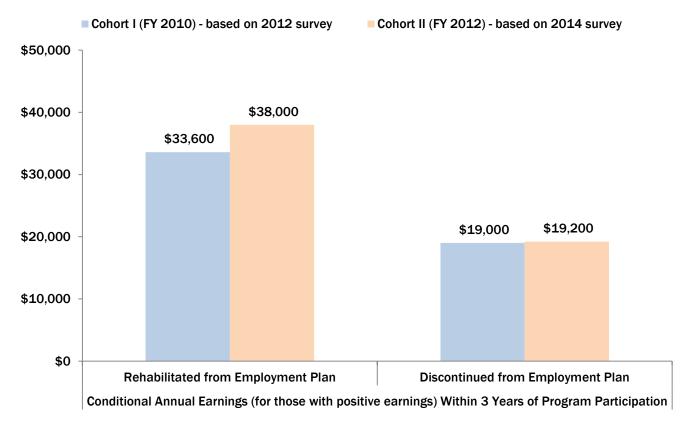
NOTE: Percentages (%) reported in the figure are based on survey data that has been weighted up to reflect the cohort population.

<u>Current employment rate</u> is defined as the percentage of cohort members who reported being employed as of the survey date. <u>Past year employment rate</u> is defined as the percentage of cohort members who reported working at any point in the past 12 months (including working currently as of the survey date).

When comparing the annual earnings amounts for participants who are employed within 3 years of beginning services, the earnings of those who have achieved rehabilitation from an employment plan are substantially higher than those who discontinued, as shown in Figure 3E-5. While participants who discontinued from an employment plan reported very similar earnings amounts across the 2 cohorts, there are earnings differences between the cohorts for those who have achieved rehabilitation from an employment plan. Cohort II members who have achieved rehabilitation from an employment plan within 3 years of starting services reported slightly higher earnings (\$38,000 in

FY 2014) compared to Cohort I within 3 years (\$33,600 in FY 2012). This 13 percent increase in earnings from FY 2012 to FY 2014 outpaces the 3 percent<sup>17</sup> inflation rate between 2012 and 2014.

Figure 3E-5. Conditional Median Earnings from Employment (for those with positive earnings)
Within 3 Years of Program Participation for VR&E Participants who Achieved
Rehabilitation or Discontinued from an Employment Plan, by Cohort



NOTE: Amounts reported in the figure are based on survey data that has been weighted up to reflect the cohort population. Earnings are defined as the amount earned, before taxes and other deductions, in the past 12 months from all jobs or businesses.

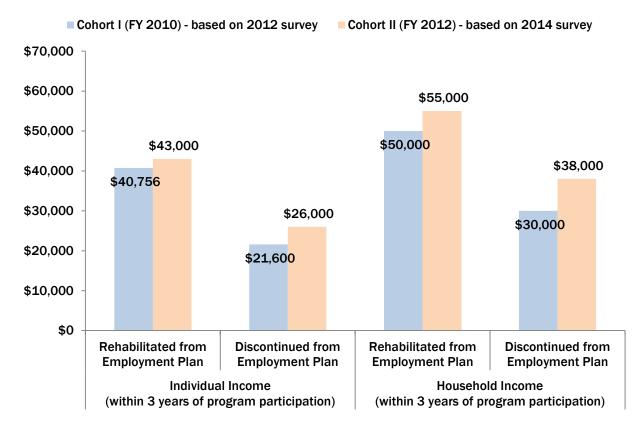
Figure 3E-6 presents the annual income amounts reported by those who exited from an employment plan within 3 years of beginning services. As expected, participants who have achieved rehabilitation from an employment plan report annual individual and household income amounts that are substantially higher than those of participants

13 percent increase in earnings from FY 2012 to FY 2014 outpaces the 3 percent inflation rate between 2012 and 2014.

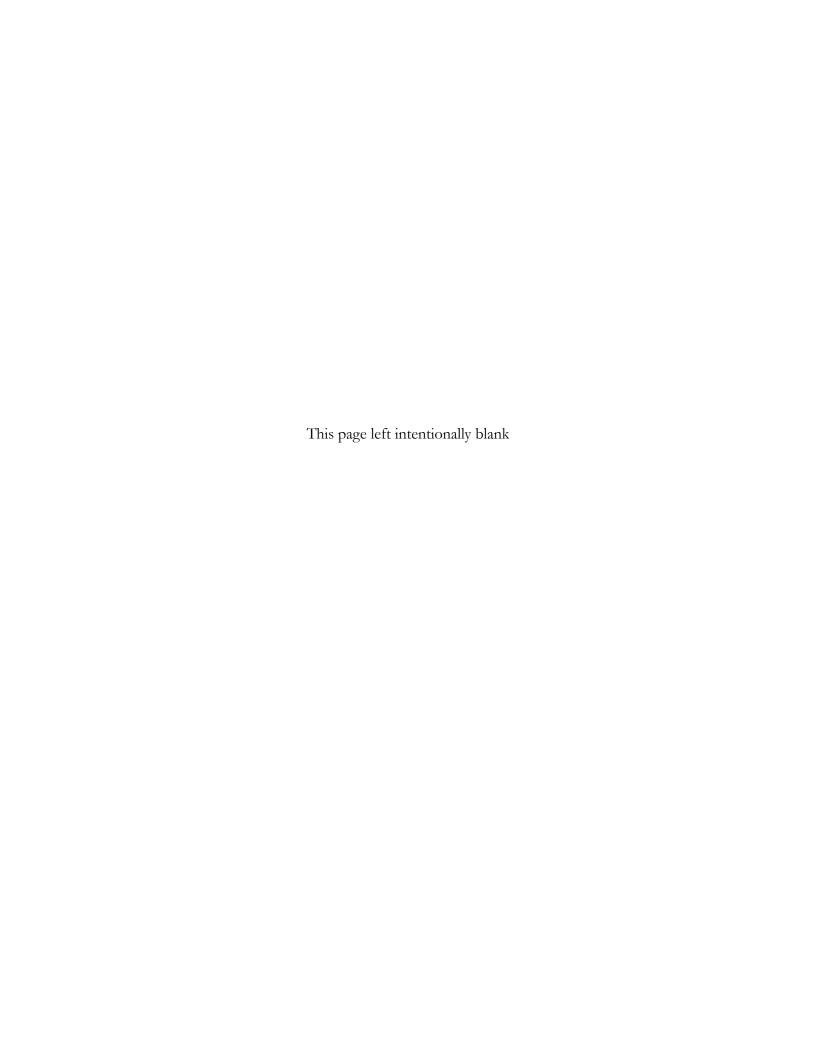
<sup>17</sup> http://www.bls.gov/data/inflation\_calculator.htm

who discontinue from an employment plan. Given that Veterans who have achieved rehabilitation from an employment plan report higher annual earnings from employment, it is not surprising that reported income amounts (which include earnings from employment) are also higher. Figure 3E-6 also reveals that the income of VR&E participants has increased over time. Cohort II members reported higher income amounts in the 2014 survey compared to the income amounts reported by Cohort I members in the 2012 survey. Again, these changes outpaced the inflation rate between 2012 and 2014.

Figure 3E-6. Unconditional Median Annual Income Within 3 Years of Program Participation for VR&E Participants who Achieved Rehabilitation or Discontinued from an Employment Plan, by Cohort



NOTE: Amounts reported in the figure are based on survey data that has been weighted up to reflect the cohort population. Income is defined as income received from all sources, before taxes, in the past 12 months, including earnings from a job, benefits received from government programs, and any retirement, pension, investing, or savings income from which regular payments are received.



Section 4:								
Summary of Findings and Early Conclusions								

# Summary of Findings and Early Conclusions

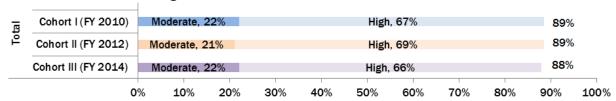
The data analyzed for Cohorts I, II, and III during these early years of the VR&E Longitudinal Study reveal some common patterns across the three cohorts as well as a few differences. The main findings are summarized below.

#### **Veteran Satisfaction**

For all cohorts, a majority of Veterans reported being satisfied with the VR&E program. In comparison, active and participants who have achieved rehabilitation reported higher program satisfaction relative to those who discontinued for all cohorts.

The majority of all participants for all cohorts reported moderate to high program satisfaction (~90 percent).

Figure 4-1. Percentage of VR&E Participants Reporting Moderate or High Overall Satisfaction with the Program as of end of FY 2014



#### **Demographic Changes at Program Entry**

The two more recent cohorts of VR&E participants are younger, have a slightly larger proportion of female Veterans, are more educated prior to program entry, have served in active duty longer, and have a higher proportion of Veterans that served in the Gulf War era II. Women make up a larger percentage of the program participants (17% - 20%) than the overall Veteran population (9%). In addition, the substantial growth in the size of the cohorts over time

# The two more recent cohorts of Veteran participants:

- are younger
- have a slightly larger proportion of female Veterans
- are more educated prior to program entry
- have served longer on active duty,
- have a higher proportion of Veterans that served in the Gulf War era II.

suggests that more Veterans are eligible for and seeking VR&E services.

There are several likely contributing factors to this increase in participation such as increases in the number of recently separated Veterans, increases in the number of Veterans with a service-

Women make up a larger percentage of the program participants (17% - 20%) than the overall Veteran population (9%).

connected disability, and recent changes in program eligibility and provisions which may have attracted more Veterans rated with service-connected disabilities to the program. When comparing all three cohorts within the first 3 years of receiving VR&E services, a larger proportion of the more recent cohorts as compared to older cohorts received a subsistence allowance while pursuing further education or training under VR&E which likely stems from the 2011 change in legislation that allowed VR&E to pay similar monthly allowances as those paid under the Post-9/11 GI Bill.

#### **Program Outcomes (Rehabilitation and Discontinuation)**

Comparisons of cohorts for the same period of program tenure reveal that participants exit the program at similar rates.

Cohort I has had more time to complete their rehabilitation plans, they have experienced larger increases in the number and proportion of Veterans who have successfully completed their program or who have discontinued program services. Comparisons of cohorts for the same period of program tenure reveal that participants exit the program at similar rates. Only about 3 percent of cohort members

exit the program within the first year of receiving services. By year 3, the percentage of participants who have achieved rehabilitation and discontinued services increases to about 30 percent of the cohort, with slightly more achieving rehabilitation (14 percent for Cohort I and 16 percent for Cohort II) versus discontinuing services (13 percent for Cohort I and 14 percent for Cohort II).

Five year rehabilitation and discontinuation outcomes for Cohort I suggest that a little more than half of cohort members exit the program within 5 years of beginning services.

Cohort members pursuing an Independent Living plan achieve rehabilitation within 3 years of entering the program. Among cohort

The majority of Cohort members pursuing an Independent Living plan achieve rehabilitation within 3 years of entering the program. members pursuing an Independent Living plan, about half achieve rehabilitation within 2 years of beginning their program and about 70 percent achieve rehabilitation within 3 years. However, this is expected, given that the program is targeted to be completed within 2 years, with extensions provided up to 30 months if needed.

Fifteen percent or less of participants pursuing an employment plan achieve rehabilitation within 3 years of program start. Nevertheless, this finding is not surprising, as the majority of cohort members are in the Employment through Long-Term Services track pursing additional training or education which may take years to complete. In fact, a recent study conducted by GAO reveals it often takes Veterans 6 years or more to successfully achieve rehabilitation.<sup>18</sup>

Successful completion of the program takes time. 15% of Veterans pursuing employment goals rehabilitate in the first three years. This grows to 28% by the fifth year.

Having some college education, higher pre-rehabilitation salaries, and longer lengths of military service increases the probability of rehabilitation.

Similarly, for all cohorts, multivariate regression analyses reveal that the most dominant variable driving rehabilitation to date is the individual's program track. Having some college education, higher pre-rehabilitation salaries, and longer lengths of military service increases the probability of rehabilitation. These characteristics are also related to achieving rehabilitation within five years of program entry.

Compared to Veterans in the Independent Living track, Veterans in the Employment through Long-Term Services track are less likely to successfully achieve rehabilitation by the end of FY 2014. For all three cohorts, discontinuation is driven by the reasons that necessitate a Veteran being placed in an Extended Evaluation. Individuals are placed in an Extended Evaluation plan in order for the counselor to make a final decision regarding if the achievement of a vocational goal is currently feasible, if it is not the Veteran's Extended Evaluation plan is discontinued. Additionally, those who selected an employment track are more likely to discontinue their plans than those in the Independent Living track. Veterans with more severe service-connected disabilities are more likely to discontinue within the first five years. 79% of discontinued Veterans have a serious employment handicap. More than 51% have a combined service-connected disability rating of 70% or more.

<sup>18</sup> http://www.gao.gov/assets/670/660160.pdf

Table 4-1. Factors that Contribute to Achieving Rehabilitation as of end of FY 2014

Explanatory Variable for Probability of Rehabilitation <sup>1</sup>	Cohort I (FY 2010)	Cohort II (FY 2012)	Cohort III (FY 2014)
Employment through Long-Term Services track (compared to Independent Living)	-	-	-
Other employment tracks (compared to Independent Living)	-	-	
Serious employment handicap (SEH)	-	-	
Male		+	
Age			
Disability rating	-	-	
Receiving subsistence allowance for a degree program	-	-	-
Some college or higher	+	+	
Pre-rehabilitation salary	+		
Primary mental health diagnosis		+	
Length of military service	+	+	
Served in Gulf War era I	+		
Served in Gulf War era II	+	+	
Officer status	+	+	

 $<sup>^{1}</sup>$  The effects are based on a logistic regression estimation for cohort members who have *not* discontinued, where the dependent variable is a dichotomous variable where  $\mathbf{1}$  indicates rehabilitation and 0 indicates persisting program participation.

Veterans are more likely to achieve rehabilitation if they are in an Independent Living plan (compared to an employment plan). This result is consistent with expectations as most Veterans pursing an employment plan are completing education and training that take multiple years. Also, the target timeframe for the Independent Living track is generally 2 years.

In addition, Veterans are more likely to achieve rehabilitation if they have an employment handicap (versus a serious employment handicap), have a lower disability rating, are not receiving a subsistence allowance for a degree program, are more educated prior to beginning services, have longer lengths of active duty military service, have served in the military more recently, and served as an officer (rather than being enlisted).

Table 4-2. Factors that Contribute to Time to Achieve Rehabilitation as of end of FY 2014

Explanatory Variable for Time to Rehabilitation <sup>1</sup>	Cohort I (FY 2010)	Cohort II (FY 2012)	Cohort III (FY 2014)
Employment through Long-Term Services track (compared to Independent Living)	+	+	+
Other employment tracks (compared to Independent Living)	+	+	
Serious employment handicap (SEH)			
Male		-	
Age			
Disability rating	+	+	+
Receiving subsistence allowance for a degree program	+	+	+
Some college or higher	-	-	
Pre-rehabilitation salary	-		
Length of military service	-	-	
Served in Gulf War era I	-		
Served in Gulf War era II	-	-	
Officer status	-	-	

 $<sup>^{1}</sup>$  The effects are based on a survival regression estimation where the dependent variable is number of days between the date of cohort entry and the date of rehabilitation (cohort members are removed from the risk set once they discontinue).

As expected, Veterans take longer to achieve rehabilitation if they are in an employment plan (compared to an Independent Living plan). Most Veterans pursing an employment plan are completing education and training that take multiple years. Also, the target timeframe for the Independent Living track is generally 2 years.

In addition, Veterans take longer to achieve rehabilitation if they have a higher combined disability rating and are receiving a subsistence allowance for a degree program.

Factors associated with faster rehabilitation include having more education prior to beginning services, having longer lengths of active duty military service, serving in more recent military periods, and serving as an officer (versus being enlisted).

Table 4-3. Factors that Contribute to Discontinuation as of end of FY 2014

Explanatory Variable for Probability of Discontinuation <sup>1</sup>	Cohort I (FY 2010)	Cohort II (FY 2012)	Cohort III (FY 2014)
Factors that contribute to being in an Extended Evaluation (compared to being in a program track)	+	+	+
Employment through Long-Term Services track (compared to Independent Living)	+	+	
Other employment tracks (compared to Independent Living)	+	+	
Serious employment handicap (SEH)		+	
Male	+		
Age	+	+	-
Disability rating	+	+	+
Receiving subsistence allowance for a degree program	-	-	-
Some college or higher	-	-	
Pre-rehabilitation salary	-	-	
Length of military service	-	-	
Served in Gulf War era I		-	
Served in Gulf War era II			
Officer status			

Veterans who are in an Extended Evaluation are more likely to discontinue than those pursuing a plan of service. The factors that place Veterans in an Extended Evaluation (e.g. TBI, severe PTSD, long history of inability to retain and maintain employment, chronic pain, and other conditions) seem to be highly correlated with their discontinuation from the program.

In addition, discontinued participants tend to pursue employment (compared to receiving Independent Living services), be older, have a higher combined disability rating, not be receiving a subsistence allowance for a degree program, have earned less formal education, have lower pre-rehabilitation salaries, and have shorter lengths of active duty military service.

<sup>&</sup>lt;sup>1</sup> The effects are based on a logistic regression estimation where the dependent variable is a dichotomous variable where 1 indicates discontinuation and 0 indicates persisting program participation.

#### **Employment and Standard of Living Outcomes**

To understand what post-program long-term outcomes Veterans experience we examine the following elements of only Veterans who have exited the program.

Table 4-4. Employment and Standard of Living Outcome Measures

Employment Outcomes		
Current Employment Status	Survey report if currently employed at time of survey	
Extent Current Job Matches	Survey report on how closely current job matches	
Training	their training	
Number of Months Employed	Survey report on how many months worked in the 12	
During Past Year	months prior to the survey	
Earnings		
Annual Earnings	Survey report on how much earned in the previous year. Heavily influenced by how many months worked in that year.	
Pre-Rehabilitation and Post-	VA administrative data collected at the beginning of	
Rehabilitation Salaries	the program and at the point of rehabilitation	
Income		
Individual Income	Survey report of individual annual salary/wage income and other sources of income including VA disability benefits	
Household Income	Survey report of household annual salary/wage income and other sources of income including VA disability benefits	
Unemployment Benefits	Survey report of receipt of unemployment benefits	
Home Ownership		
Home Ownership	Survey report of home ownership	

At the end of Year 1 of Cohort III the number of surveyed Veterans who had exited the program was too small to produce statistically reliable estimates. Over time more Veterans will exit the program and allow for reliable estimates. All of the results and trending analysis are based on the information from Cohorts I and II.

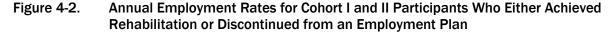
The FY 2014 VR&E Longitudinal Study findings reveal that regardless of program tenure, Veterans who have achieved rehabilitation have substantially better employment and standard of living circumstances than those who discontinued. Participants who have achieved rehabilitation experience higher rates of employment, and consequently higher earnings from employment. However, when comparing earnings for only

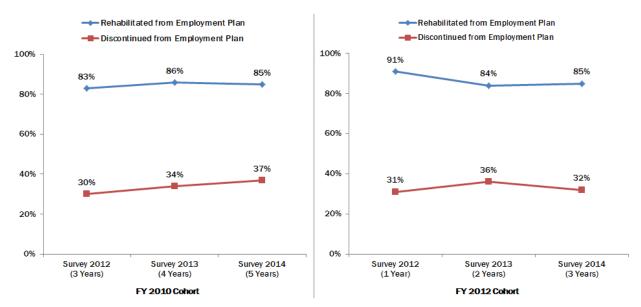
Compared to those who have discontinued, participants who achieved rehabilitation report more positive economic outcomes, including higher:

- Employment rates
- Annual earnings
- Individual income
- Household income
- Home ownership rates

those cohort members who report working, those who have achieved rehabilitation report higher earnings amounts than those who discontinued, suggesting that Veterans who achiever rehabilitations both work more, and earn more, than Veterans who have discontinued from the program.

**Employment Outcomes**. 85% of Veterans who have achieved rehabilitation in an employment plan are employed, 50% higher than Discontinued Veterans in an employment plan.





Approximately 75% of Veterans who achieved rehabilitation are employed in a job that matches or nearly matches their training provided by VR&E. Less than 40% of Veterans who did not complete the program are employed in a job that matches or nearly matches their training provided by VR&E.

**Earnings**. The annual income<sup>19</sup> for Cohort I has increased by more than 17% over the past two years. Cohort II has increased by more than 18% over the past two years. These increases are

<sup>&</sup>lt;sup>19</sup> The annual income reported is the conditional median annual income. Definition can be found in Appendix G-31.

heavily influenced by Veterans having completed the program, being employed longer, and earning promotions and raises. Veterans who did not reach their rehabilitation goals are seeing increases in incomes over the past two years, but still make between 36% and 98% less than those who successfully completed the program.

For Veterans who have achieved rehabilitation and worked before entering the VR&E program, the average post-Rehabilitation salary is 38% greater for Cohort I and 46% greater for Cohort II. The post-Rehabilitation Salary is comparable to entering salaries into most career fields. Over time the annual income will show how Veterans progress financially in their employment.

**Income**. In addition to higher earnings levels, participants who have achieved rehabilitation reported substantially higher individual and household income levels relative to discontinued

For Cohort I, annual individual income of participants who achieved rehabilitation is 50 percent greater than the median for the entire cohort.

The median annual household income of participants who achieved rehabilitation is 40 percent greater than that of the total cohort.

participants. Veterans who have achieved rehabilitation in Cohort I saw an 18% increase in annual individual income<sup>20</sup> over the past two years and over 20% increase in household individual income<sup>21</sup>. In the past 2 years, Veterans in Cohort II saw a 7.5% increase in annual individual<sup>20</sup> and over 21% increase household individual income<sup>21</sup>.

Over time, fewer Veterans reported receiving unemployment benefits. Specific conclusions as to cause of this trend are difficult to make. Participants may not need unemployment benefits or may have exhausted unemployment benefits at the time of the survey.

The most dominant variable driving positive financial outcomes is successful completion of the program compared to discontinuing services.

who discontinued.

Successful completion of the program (i.e., rehabilitation) was the most dominant factor driving positive financial outcomes compared to those who discontinued program services. Lastly, a larger percentage of those who have achieved rehabilitation reported owning their principal residence, relative to that of those

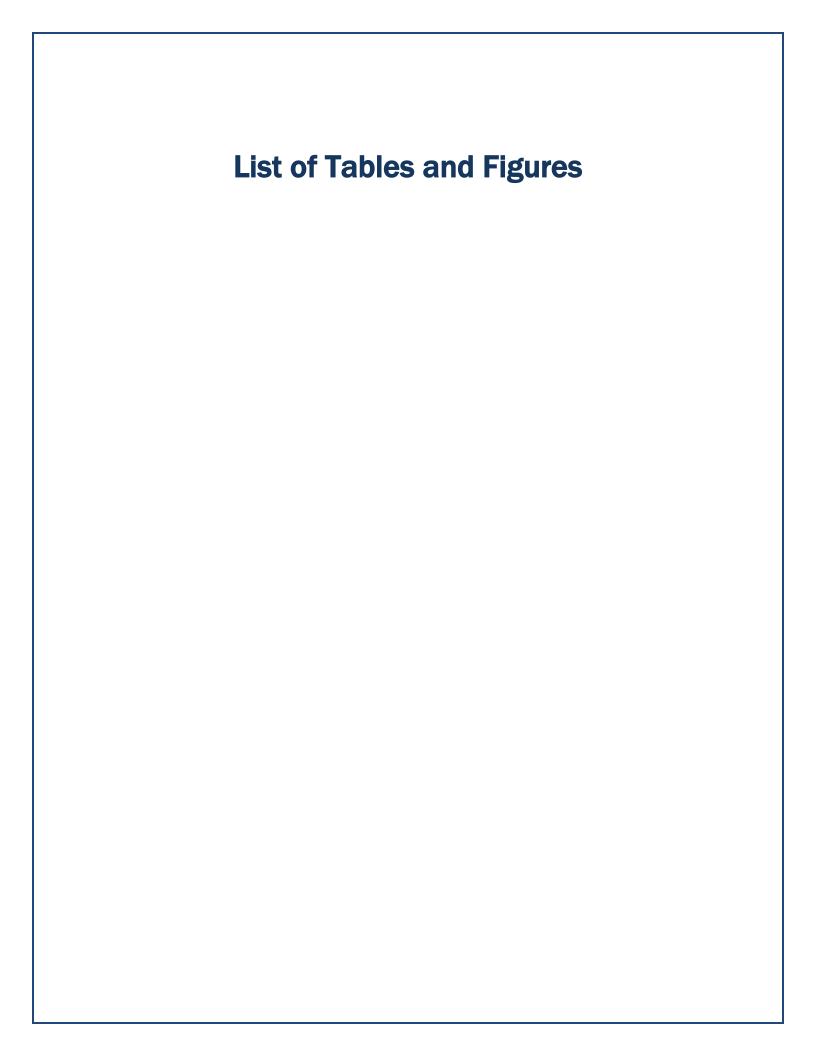
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<sup>&</sup>lt;sup>20</sup> Annual individual reported is the unconditional median annual income. Definition can be found in Appendix G-38.

<sup>&</sup>lt;sup>21</sup> Household Income reported is the unconditional median household income. Definition can be found in Appendix G-38

#### **Future reports**

In addition to presenting findings for Cohorts I and II, similar to previous reports, this current report introduced first year findings for Cohort III. As we continue to follow these three cohorts over time and as more VR&E participants exit the program, there will be more information on the long-term outcomes and the key programmatic and demographic factors influencing these outcomes. Moreover, as multiple years of data are collected, it will be possible to examine more salient trends in outcomes.



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