Economic Impact on Caregivers of the Seriously Wounded, Ill, and Injured

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14. ABSTRACT

This study estimates the economic burdens borne by the family and friends who provide non-medical care, support, and assistance to seriously wounded, ill, and injured (WII) service members. Caregivers of the WII face many economic challenges as a result of being a caregiver. These include making housing/location changes, inability to meet existing financial obligations, additional/new financial obligations, and additional childcare arrangements. Many of these challenges are a result of caregivers having to permanently or temporarily forgo earnings and benefits to be a caregiver. We estimate that about three out of every four caregivers had to quit or taken time off from either work or school. For those working or in school prior to caregiving, this figure is 85 percent. We estimate that (1) the average earnings and benefits of caregivers is $3,200 per month, (2) about 720 new WII service members need a caregiver each year, and (3) service members need a caregiver an average of 19 months. Given these figures, the average earnings and benefits losses for a caregiver are $60,300. Across all 720 caregivers, annual economic losses are $43.4 million.

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Executive Summary

As a nation, the United States is grappling with the challenge of the care and treatment of its wounded, ill, and injured warriors and veterans, many of whom would not have survived in previous wars. In addition to the burdens borne by wounded warriors, their families often carry great burdens. The purpose of this study is to estimate the economic burdens borne by the family and friends who provide non-medical care, support, and assistance for wounded warriors. What are these burdens? The Dole-Shalala Commission described them as follows:

> "Family support is critical to patients' successful rehabilitation. Especially in a prolonged recovery, it is family members who make therapy appointments and ensure they are kept, drive the service member to these appointments, pick up medications and make sure they are taken, provide a wide range of personal care, become the impassioned advocates, take care of the kids, pay the bills and negotiate with the benefits offices, find suitable housing for a family that includes a person with a disability, provide emotional support, and, in short, find they have a full-time job—or more—for which they never prepared. When family members give up jobs to become caregivers, income can drop precipitously" [1].

Given these challenges that families face, the Principal Deputy Assistant Secretary of the Air Force for Manpower and Reserve Affairs (SAF/MR) asked CNA to estimate the economic impact on caregivers of the seriously wounded, ill, and injured (WII). Note that the SAF/MR was tasked by the Joint Department of Defense (DoD) and Department of Veterans Affairs (VA) Wounded, Ill, and Injured Senior Oversight Committee (SOC) regarding issues of personnel, pay, and financial support (Line of Action #8). The economic impact borne by family and friends (caregivers) of the seriously WII is one of these issues.

Approach

To estimate these economic impacts that caregivers bear, we need to know three things: (1) how many service members need caregivers (non-medical attendants or NMAs), (2) how long they need caregivers, and (3) caregivers' average economic losses per time period. We provided our *preliminary* findings for this study in our report, *Economic Impact on Caregivers of the Seriously Wounded, Ill, and Injured: Preliminary Results*, dated September 2008 [2] based on the information available at that time. Since then (November 2008) we completed a survey of seriously WII service members regarding the economic impact on their caregivers as well as a data call to case managers regarding service members' caregiving needs. This report presents our final results.

Findings

For those individuals serving as caregivers, the results of this study show that there is a significant time commitment on the part of caregivers to provide assistance, with 57 percent providing care at least 10 hours per week (for male service members). The impact on caregivers was also evident in the percentage of caregivers with employment, schooling, housing, and child care impacts. About three out of every four caregivers had quit or taken time off from either work or school. For those working or in school prior to caregiving, this figure is 85 percent. Eleven percent of caregivers dealt with housing/location changes. And new child care arrangements affected a third of caregivers.

Similarly, financial obligations affect many caregivers. Thirty-seven percent of caregivers had unmet financial obligations, and 41 percent of caregivers had new financial obligations. The percentage of caregivers with unmet or additional financial obligations is positively correlated with the number of hours of assistance the caregiver provides each week. The presumption is that more hours of caregiving are associated with more severely wounded, ill, or injured service members.

How many service members need a caregiver?

We estimate that the average annual incidence of seriously WII service members needing a caregiver is about 720. This estimate is based on the number of "very seriously ill or injured" or "seriously ill or injured" (VSI/SI) service members. If we restrict this to just VSI cases, the average annual number is 170. We used VSI/SI as a proxy for the seriously WII population because VSI/SI categorization starts the process for family travel to the service member's bedside. Note that this estimate is based on the VSI/SI experience from 2003 through 2008. The implicit assumption is that the number of seriously WII going forward will reflect past experience.

How long do service members need a caregiver?

How long the seriously WII need caregivers or NMAs is highly variable by case and condition. According to the results of our survey, seriously WII service members need a caregiver for an average of 19 months. This figure is an average. The distribution is highly variable with some service members not needing caregivers at all while others need caregivers for the rest of their lives. For example, 43 percent of survey respondents indicated that they expect to need a caregiver for the long-term.

What are caregivers' average economic losses?

The potential economic consequences of caregivers include out-of-pocket expenses (such as travel costs) and lost earnings and benefits (from having to quit or take time off from work). In the course of conducting the study, we found that out-of-pocket costs are generally covered by DoD programs and/or non-governmental organizations (NGOs) and charities.

DoD financial assistance is principally through Invitational Travel Authorization (ITA) Orders that cover some travel costs. NGOs and charities provide assistance to service members and their families on a case-by-case basis for other financial needs such as helping pay expenses such as utilities, car payments, and mortgages. During our interviews with MTF-associated personnel, they indicated that they can almost always find an organization to help with "reasonable" expenses where reasonable was in the opinion of those we interviewed.[1] The one major exception is lost earnings and benefits. This is not something that these groups typically replace although they indirectly provide some replacement by helping with expenses. Given this, we focused our estimate of the economic impact on caregivers as the amount of caregivers' lost earnings and benefits.

We estimate average earnings and benefits losses of caregivers based on earnings data from the Bureau of Labor Statistics' (BLS) Current Population Survey (CPS) and with imputed benefits based on survey data. Applying average earnings and benefits from the general population to the age-gender-education distribution of caregivers, we estimate that the average earnings and benefits of caregivers is $38,100 annually or approximately $3,200 per month.

Bringing together all of the information, we estimate that if a caregiver is needed for 19 months, the earnings and benefits losses for a caregiver are $60,300. Across the estimated 720 new caregivers annually, annual earnings losses are $43.4 million. If DoD wanted to target just the most seriously injured such as just VSI rather than VSI and SI, this would be approximately 170 cases annually for annual losses of $10.2 million.

Other findings

While our focus was on economic losses and earnings losses specifically, there are other findings that are worth noting. First, access to resources and information is highly variable. Better resource information and access can ease the burden on service members and their caregivers. Often that access is location and/or service specific, and information about resources is spread by word of mouth. Second, benefits eligibility (both DoD and charities) is a concern for some service members. Resources are generally more available for Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) veterans than for others. Additionally, there is little financial

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[1] We note, however, that this was prior to the financial downturn in the fall of 2008. Now some are concerned that NGOs and charities might not have the resources to do what they have in the past.

support for those suffering solely with post-traumatic stress disorder (PTSD) or mild to moderate traumatic brain injury (TBI) because they often do not qualify for Traumatic Servicemembers' Group Life Insurance (TSGLI) or for an NMA. Third, there remain issues of transition to VA such as lapse of pay during the transition period. Finally, there was a consensus from those we interviewed that families need more education on medical conditions such as TBI and on financial matters as they prepare for the road ahead of them

Introduction

As a nation, the United States is grappling with the challenge of the care and treatment of its wounded, ill, and injured warriors and veterans, many of whom would not have survived in previous wars. Unlike any other war of its duration, the Global War on Terrorism (GWOT) has experienced comparatively low mortality rates [2].[2] During the two World Wars, the ratio of wounded to killed averaged about 1.7 wounded for every fatality [3]. Air medical evacuation improved the injury survival rate during subsequent wars, Korea and Viet Nam, to about 3 per fatality [4], and current operations, OEF/OIF, have further increased the survival rate largely due to improved body armor and superior battlefield medicine techniques. The result is a ratio of injured to killed in OEF/OIF that is about 7 to 1.

With so many surviving what were previously fatal injuries, there is concern and ongoing dialog as to the long-term financial and emotional effects these injuries will have on service members, their families, and their communities [5]. Various commissions and committees have been established in recent years to deal with the issues faced by seriously WII service members and veterans. These include the following:

- The President's Commission on the Care for America's Returning Wounded Warriors (Dole-Shalala Commission)
- The Veterans' Disability Benefits Commission (Scott Commission)
- The DoD and VA Wounded, Ill, and Injured Senior Oversight Committee (SOC).

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[2] The Obama administration uses "overseas contingency operations" rather than GWOT.

In addition to the burdens borne by wounded warriors, their families often carry great burdens as well. As the Dole-Shalala Commission said:

> "The most seriously injured service members and their families are embarking on a long journey together, one that may require family to temporarily relocate to a different part of the country to be near the facility where their loved one is being treated. Relocation may require them to give up the lives they know—jobs, school, homes—and live for an uncertain period far from their existing network of friends and family. Family support is critical to patients' successful rehabilitation. Especially in a prolonged recovery, it is family members who make therapy appointments and ensure they are kept, drive the service member to these appointments, pick up medications and make sure they are taken, provide a wide range of personal care, become the impassioned advocates, take care of the kids, pay the bills and negotiate with the benefits offices, find suitable housing for a family that includes a person with a disability, provide emotional support, and, in short, find they have a full-time job—or more—for which they never prepared. When family members give up jobs to become caregivers, income can drop precipitously" [1].

Given these challenges that families face, the purpose of this study is to estimate the economic burdens borne by the family and friends who provide non-medical care, support, and assistance for wounded warriors. Specifically, CNA was asked by the Principal Deputy Assistant Secretary of the Air Force for Manpower and Reserve Affairs (SAF/MR) to estimate the economic impact on caregivers of the seriously wounded, ill, and injured (WII). Note that the SAF/MR was tasked by the Joint DoD and VA Wounded, Ill, and Injured Senior Oversight Committee (SOC) regarding issues of personnel, pay, and financial support (Line of Action #8). The economic impact borne by family and friends is one of these issues.

Although we were tasked with estimating the economic impact on caregivers, we note that there are many non-economic impacts that caregivers face.[3] These include high levels of emotional distress and family dysfunction [6-7] as well as anxiety and clinical depression [8]. Research also shows that wives of veterans suffering from post traumatic stress disorder (PTSD) and traumatic brain injury (TBI) can experience a "greater overall severity of psychiatric symptoms, more symptoms of somatization, obsessive-compulsive problems, depression, anxiety, paranoid ideation, and psychoticism" than the wives of veterans without PTSD and TBI [9].[4] This study suggests that these findings support the concept of "secondary traumatization," meaning that individuals who come in contact with a person suffering from a traumatic experience may experience similar emotions and may become victims themselves of the traumatic event.

In looking at caregivers, researchers found that social support from family was the strongest factor in helping caregivers avoid feelings of "anxiety and various stress-related behavioral outcomes such as disturbances in sleep and appetite" [10]. Further, this research found that self-reliance was the strongest factor in helping caregivers avoid or limit feelings of anger and irritability. Hence, to the degree that being a caregiver results in loss of self-reliance due to loss of employment and economic stability, the economic impacts on caregivers play into non-economic impacts as well.

Importance of caregivers

Families naturally want to be at the bedside of their wounded service member. There is the belief that caregivers speed the recovery process of service members. While the literature is thin on this issue, some evidence exists concerning the benefits caregivers provide to overall patient recovery. For instance, a study of patients

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[3] Note that our use of the term *caregiver* is not to imply that those individuals provide medical care. We use the term *caregiver* to describe the family and friends who act as non-medical attendants (NMA) who help the service member with activities of daily living, provide transportation, and help the service member navigate through the process of recovery.

[4] What we label as TBI, this study calls post-concussion syndrome.

seeking treatment for mental illness within the VA system found that family education and involvement in treatment were associated with beneficial outcomes. These include increased treatment participation, greater satisfaction with care, and improved hope, knowledge, and empowerment among patients [11].

Another study [12] found a significant relationship between family and progress in a post-acute rehabilitation program following TBI. The study found that patients who have supportive families have better and more successful experiences in rehabilitation than patients who do not. The authors noted that because individuals with TBI are "frequently dependent upon family members for finances, transportation, leisure, and emotional support, a healthy family environment would seem important for a good outcome."

Approach to evaluating economic impact on caregivers

To estimate the economic impact on the caregivers of the seriously WII, we need to know three things: (1) how many service members need caregivers, (2) how long they need caregivers, and (3) caregivers' average economic losses per time period.

To answer the question of how many service members need caregivers, we relied on administrative data from DoD and VA. Administrative data do not have indicators that explicitly identify specific service members as seriously WII, but these are data items that we can uses as proxies.

Determining how many months the seriously WII need caregivers or determining caregivers' average economic losses is more challenging as administrative databases do not exist with this information. To estimate how long service members need caregivers, we relied on data we collected through a survey of WII service members regarding the economic impact on their caregivers. Additionally, we collected data from case managers on a sample of seriously WII service members regarding caregiving needs. These data were not available for our preliminary report due to the time associated with getting Institutional Review Board (IRB) approval.

For the types of economic losses that caregivers incur, we relied on interviews with case managers, social workers, and other personnel who work with the seriously WII and their caregivers. The consensus was that caregivers' economic losses (not covered by service organizations, NGOs, or charities) centered on lost earnings. Given earnings as the principal area of loss, we used data from the Bureau of Labor Statistics' (BLS) Current Population Survey (CPS) to estimate average earnings losses. We applied these earnings data (along with imputed benefits from survey data) to estimate the average earnings and benefits losses of caregivers.

Using the data on the number of seriously WII needing caregivers, the average number of months they need caregivers, and caregivers' average economic losses per month, we estimated average losses per caregiver and annual losses across all caregivers.

Structure of this report

We provided our *preliminary* findings for this study in our report, *Economic Impact on Caregivers of the Seriously Wounded, Ill, and Injured: Preliminary Results,* dated September 2008 [2] based on the information available at that time. This report updates and finalizes our analysis using updated data on the VSI/SI population as well as the results of our survey of seriously WII service members regarding their caregivers. Hence, much of what was included in our preliminary report is included here.[5]

The next two chapters of this report discuss the immediate financial impacts of injury and the challenges that caregivers face. These are intended as background information on the circumstances that some service members and families call the "whole new normal."

With that background, the next chapter presents the results from the survey of WII service members regarding the impact on their caregivers. The following chapter answers the questions (1) how

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[5] Our intension is to summarize the key findings of the preliminary report in this report so that all of the results are contained in a single document. For compactness, however, some of the details are not brought forward to this report. See [2] for the complete detail.

many service members need caregivers? (2) How long do they need caregivers? and (3) What are caregivers average economic losses per time period?

Immediate financial impacts of injury

Before we detail our estimates of economic losses for caregivers, it is important to understand the financial impacts for service members and families immediately following an injury and the process the injury sets in motion. The suddenness of the life changes that a serious injury sets in motion were aptly described by an Army spouse as "In one second my whole life changed" [13]. This sudden, inextricable change has emotional and financial ramifications for months, years, or even a lifetime for service members and families affected by combat injuries. This section discusses the process service members and families go through and the immediate impact on pay and entitlements.

Process

When a service member is injured, military medicine categorizes the patient's condition as one of the following:

- Very seriously ill or injured (VSI)
- Seriously ill or injured (SI)
- Incapacitating illness or injury (III)
- Not seriously injured (NSI)
- Duty status-whereabouts unknown (DUSTWUN).

Patients categorized as VSI are in danger of imminent death. The SI classification denotes a level of severity that is cause for immediate concern but with no danger of imminent death. Being categorized as VSI or SI starts the process for family travel to the service member's bedside. The service member's condition category is important since it drives where the family can travel to (OCONUS or CONUS) [14].

The military provides financial assistance in the form of "Invitational Travel Authorization" (ITA) orders to eligible immediate family members. The provision of these travel orders is the duty of the service member's attending physician and is based on objective medical criteria. If the service member is not seriously ill or injured but is expected to remain hospitalized for 3 months or more as a result of injuries sustained in combat, up to three immediate family members can be issued ITA orders. These orders provide for round-trip transportation to a CONUS MTF, lodging, and 30 days per diem for meals and living expenses. If the service member is categorized as VSI/SI as a result of combat-related injuries, the orders issued will allow round-trip transportation to a medical facility anywhere in the world where the service member is hospitalized [15]. The military coordinates and makes the necessary travel and lodging reservations based on the family's wishes. Extensions of additional 30-day increments are available [16].

While family members are on ITA orders, travel to and from the hospital, lodging, meals, and incidental expenses are paid for by the government. Lodging is usually provided at the base Guest House, one of 38 Fisher Houses located at major military and VA hospitals, the Navy Lodge, or through the USO-Metro Emergency Housing Program.[6] For situations where all on-base lodging is full, MTFs have contracted with a number of nearby hotels. Per diem is meant to cover the cost of meals and incidental expenses. It is not meant to be an income replacement program.

Medical evacuation to Landstuhl Army Medical Center or to a CONUS MTF can occur within hours following injury depending on the type and severity of the wound. Most service members with serious combat-related injuries or illnesses are eventually admitted to one of four military medical centers: Walter Reed Army Medical Center (WRAMC); National Naval Medical Center (NNMC); San Antonio Military Medical Center (SAMMC) formerly Brooke Army Medical Center (BAMC); or Naval Medical Center San Diego

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6. USO-Metro Emergency Housing Program is available to families of critically or terminally ill service members receiving care at Walter Reed or National Naval Medical Center, Bethesda. The program provides free furnished apartments for up to 60 days.

(NMCSD). The average length of stay as an inpatient as reported by the services is 30 to 45 days and is dependent on the wound sustained, the need for further surgeries, and necessary rehabilitative services between surgeries.[7] Following hospitalization, there is often an extended period of treatment and rehabilitation that can continue at an MTF, VA polytrauma hospital, or civilian hospital. In this period, the service member remains at or near the facility in an outpatient status.

The recovery and rehabilitation phase is also a time when the need for an NMA is discussed. A medical provider is responsible for authorizing the use of an NMA. Based on medical criteria, the injuries must be of such a nature that performing activities of daily living independently may be difficult to impossible. The NMA helps with these activities and makes sure that the service member attends all medical and rehabilitative appointments. The service member is the one who decides who the NMA is, but in most cases it is either their spouse or parent [16].

Regardless of whether the injury is combat related or not, the ultimate goal of any medical care received is to get the service member fit for full duty as soon as possible. To determine the latter, DoD established the Disability Evaluation System (DES) is a complex process governed by United States Code, Title 10, Chapter 61 (Retirement or Separation For Physical Disability), and numerous other regulations and policies [17]. Its twofold mission is (1) to determine fitness for duty and (2) to determine benefits and compensation for those individuals who are medically separated from the service [18]. Under the DES, each service member who has been designated unfit for further service is afforded the right to a full and fair personal appearance and hearing, counseling, and final disposition [17].

If the evaluation process determines that the service member is medically unfit for further active duty, the service member is transitioned from DoD to begin receiving his or her medical care and benefits primarily through the VA. The NMA or caregiver is

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7. WRAMC indicated that the average length of stay was 36.4 days in FY05, 33.2 days in FY06, and 21.1 days in FY07.

often not involved in the evaluation process making it difficult for some service members to navigate the transition. To address the needs of these veterans, the VA recently placed Federal Recovery Coordinators (FRCs) at WRAMC, NNMC, SAMMC, and SDNMC. FRCs are nurse case managers who coordinate services among VA, DoD, and civilian facilities, as well as serve as a critical resource for the families concerning health care and any other federal benefits [19]. Note that the Services have similar coordinators. With this process as a background, now consider pay impacts for the service member.

Pay and entitlements

Service members receive various types of pays and living allowances depending on where they are stationed, whether they are located within a combat zone, or whether they are hospitalized. Once a service member is deployed to a combat zone, other pays and entitlements figure into his or her income in addition to pays received while in garrison. Some of these pays include Hardship Duty Pay Location (HDP-L), HF/IDP, also known as Combat Pay, and Family Separation Allowance (FSA). Certain programs such as the Savings Deposit Program (SDP) sponsored by DFAS, which guarantees 10 percent return on savings for up to $10,000 while the service member is in the combat zone, are also made available. Each of these entitlements has a start and end date, is non-taxable, and "may" be available during hospitalization [20-21].

Loss of these entitlements when the service member is seriously WII can cause financial problems for those families relying on the associated combat pays to meet certain financial obligations. However, legislation in the National Defense Authorization Act of FY 2008 authorized the continuation of certain special pays and allowance. As the patient moves through the Medevac system, DoD and DFAS work together to ensure that appropriate pay and entitlements are received by the service member with an overall objective of making this process as seamless as possible for the wounded warrior and the family.

Once the service member arrives at Landstuhl or a CONUS facility for treatment, he/she may not have a way to withdraw funds from his or her accounts since wallets and personal items may or may not arrive with the service member at the final destination. In that case, Casual Pay (CP) is available and is to be considered a cash advance. The amount of the advance is subtracted from the patient's next paycheck [21], and the Pay and Allowance Continuation Program (PAC), formerly known as Combat-Related Injury and Rehabilitation Pay or CIP, can offset the impact to caregivers having to support the service member's financial needs.

Traumatic Servicemember's Group Life Insurance, implemented in December 2005 as a "traumatic injury protection rider under the Servicemember's Group Life Insurance (SGLI)" [22], also provides a financial benefit to those that qualify. Depending on the severity of the injury, there may be a one-time payment of up to $100,000. Note that this is not an income replacement program, but a rider to SGLI. Although recently expanded in November 2008, TSGLI is based on physical injuries and does not cover all individuals who may require assistance with daily living, including those with a diagnosis of stress, PTSD, or mental illness [22].[8] Tables available in our preliminary report provide more details on the pay and benefits available [2].

Other financial considerations

If the family is in financial difficulty prior to deployment, the service member's return following injury will not improve his or her financial situation. Traveling mostly to the Washington, DC, area, family members leave homes, employment, educations, the care of younger children or grandchildren, other social and family commitments, and community support systems. Even though transportation to the bedside, lodging, and per diem are provided to families on ITA or NMA orders while the service member remains at a DoD MTF, bills back home continue while new bills are acquired as a result of the relocation. Parents of single service members are in their prime work years, and many have to decide

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[8] Information on expanded TSGLI benefit extracted from: http://www.insurance.va.gov/sgliSite/TSGLI/ExpandedBenefits.htm.

who will stay at the bedside and who will return home to their jobs so that benefits and health insurance will not be terminated [21].

Taking time off from work can be an extreme hardship, especially when one considers that inpatient and outpatient stays for the severely wounded average 333 days and can be as long as 2 to 4 years depending on the severity of the injury.[9] The Family Medical Leave Act (FMLA) of 1993 was intended to help "eligible" workers of covered employers to take up to 12 workweeks of unpaid FMLA leave for certain qualifying family and medical reasons without fear of being terminated from their jobs by their employers or being forced into a lower job upon their return.[10]

This act was amended by the National Defense Authorization Act (NDAA) in January 2008 to provide two important new military family leave entitlements for eligible specified family members. Under one of these new provisions, an eligible employee who is the spouse, son, daughter, parent, or next of kin of a covered service member with a serious injury or illness incurred in the line of duty on active duty may take up to a total of 26 workweeks of leave during a single 12-month period to care for the service member [23]. Eligible employees are limited to a combined total of up to 26 weeks of leave for all FMLA-qualifying reasons during the single 12-month period. Even with the 26 weeks offered by this legislation, the long lengths of stay for inpatient hospitalization and

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[9] These figures were reported to us during our site visits. Similiarly, a white paper for the "Troops and Family Care Fund Feasibility Study" reported that the average length of stay (covering the inpatient and outpatient periods) at NNMC and WRAMC is more than 380 days.

[10] The protections provided by this act include restoration to the same or an equivalent position with equivalent pay, benefits, and other terms and conditions of employment upon return from FMLA leave and the continuation of the employee's group health benefits while on leave on the same terms and conditions as if the employee had not taken leave. The employer is prohibited from interfering with, restraining, or denying the exercise of rights under the FMLA and from discriminating or retaliating against an employee or prospective employee for exercising or attempting to exercise FMLA rights.

rehabilitative service necessitate that many caregivers, especially parents, leave work in order to be continuously at the bedside.[11]

Summary

In summary, injury has an immediate impact on service members and families. Categorization of medical conditions as VSI/SI sets in motion ITA orders for family members to travel to the beside. If the medical condition so requires, a medical provider can authorize an NMA at the appropriate time. Service members' pays and tax status change as they move from deployment to hospitalization to outpatient status to eventual return to duty or transition to VA. At the same time, the financial challenges on caregivers begin to mount as they leave work and educational pursuits to be a caregiver. FMLA provides some job protection, but the time away from work under FMLA is unpaid and not all employers are subject to FMLA.

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11. Further, employees are only eligible for FMLA leave if they work for a covered employer, have worked for their employer at least 12 months, have worked at least 1,250 hours in the 12 months prior to the start of the leave, and work at a location where the employer employs at least 50 workers at the site or within 75 miles of the site.

Caregiver challenges

As a first step to understand the economic impact on caregivers, we conducted site visits to six different MTFs:

- Walter Reed Army Medical Center (WRAMC)
- National Naval Medical Center (NNMC)
- Naval Medical Center San Diego (NMCSD)
- Naval Hospital Camp Pendleton (NHCP)
- San Antonio Military Medical Center (SAMMC)
- Carl R. Darnall Army Medical Center.

During these visits, we met with hospital staff and active and reserve component military personnel and civilians, including administrators, nurse case managers, and social workers; service liaisons and squad/unit leaders; transition and VA liaisons. These key personnel were individuals who extensively interface with the seriously WII.[12] Through our informal meetings, these key staff were able to offer information on who the seriously WII caregivers are in terms of their relationship to them, the impact on these caregivers in providing care to them, and the challenges they face and subsequent life adjustments that are needed.

These discussions offered various vantage points to the experiences of caregivers throughout the seriously WII's continuum of care. Minutes were taken during each of the meetings and analyzed to draw out common themes. The results highlighted three problematic areas for seriously WII and their NMAs: access to resources, eligibility for government benefits, and provisions for long-term caregiving. We also provide information on other challenges that caregivers face that do not fit neatly into these general themes. We begin with access to resource information.

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[12] In addition, we spoke with a few wounded warriors and one NMA.

Access to resource information

Not everyone involved in the care of a seriously WII has equal access to information on the resources available to them. Two main factors affect their access, including the seriously WII's service affiliation and the location of the seriously WII during recovery (home vs. MTF). At the time we conducted our visits (March and May 2008), and despite the formal layers of care in place, e.g., the Wounded Warrior Programs and the Federal Recovery Coordinator Program, there was no DoD-wide standardized system for disseminating resource information. Often the systems that were in place were not delivering information to the seriously WII caregivers in a manner easily digested by NMAs while they are dealing with the care of a service member.

Similarly, focus groups conducted for the Defense Department Advisory Committee on Women in the Services (DACOWITS) found that those in the "focus groups expressed concern with communication by the military to families" on a range of topics. These include "administrative matters and processes, information related to the Service member's ongoing medical care and treatment..., specific roles that could be expected from various providers and staff, [and] support resources" [24].

Since the completion of the preliminary report, progress has been made toward developing more comprehensive Web-based resource directories such as the National Resource Directory (NRD).[13] Additionally, in October 2008, DoD released the *Compensation and Benefits Handbook for Seriously Ill and Injured Members of the Armed Forces* [25]. This resource provides seriously WII service members and their families information on benefits and resources available to them during the recovery, rehabilitation, and reintegration phases.

Line of Action #3 developed the Web-based NRD for seriously WII service members, veterans, and their families as well as for care

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[13] The NRD Web site can be found at: https://www.nationalresourcedirectory.org/nrd/public/DisplayPage.do?parentFolderId=6006

providers and the general public.[14] The NRD is fully operational as of November 2008 and is reported to be able to identify the full range of medical and non-medical services.[15] It was difficult for caregivers, inundated with new responsibilities and moving through the shock of having their loved one become seriously WII, to seek out information on where to go for help. Note that the NRD and *Compensation and Benefits Handbook* were not available when we conducted our site visits; hence, some of the problems we observed may be lessened by these new resources.

Our visits revealed that one reason for the lack of standardization across sites is that many of the resources for NMAs are coming from independent, and often local, organizations external to DoD. As a result, each service, and subsequently each MTF, has developed its own approach to presenting families with the benefits to which they're entitled. The methods for coordination and dissemination of incoming resources from NGOs often vary.

For example, dissemination of information typically occurs through case managers and social workers, who over time develop their own catalogues or spreadsheets on "where to go for what." There is a sense of redundancy in efforts at assembling resource information and a lack of communication among the various arms participating. Contributing to this issue may also be the turnover in the caseworker and squad or unit leader positions that is inherent to staffing the billets that are often 1 to 2 years in length. Here again, the recently developed *Compensation and Benefits Handbook*, NRD, and more widely publicized wounded warrior resource center may help those individuals working with service members and families to get them the best information on resources available.

A great deal of information on resources is also provided via word-of-mouth among the families themselves that have received aid.

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[14] U.S. Senate Committee on Veterans Affairs: Committee Hearing 3/10/2008; pulled from http://veterans.senate.gov/public/index.cfm?pageid=16&release_id=11536&sub_release_id=11593&view=all.

[15] Information provided by a member of the Senior Oversight Committee of the Office of the Deputy Assistant Secretary of the Air Force for Force Management Integration (SAF/MRM) on July 31, 2008.

Similarly, [24] found that "families often learn about available resources and administrative matters from their counterparts at the lodging facilities or while waiting at treatment facilities." Those service members who are home on convalescent leave can miss much of this informal sharing of information.

Established and newly formed groups at the MTFs have developed or improved upon existing systems to make more resources accessible to families. Some of these are DoD organizations, such as the Army's Soldier and Family Assistance Centers (SFACs) and the respective service wounded warrior programs. Others are outside DoD yet closely connected such as the Injured Marine Semper Fi Fund and the Armed Forces YMCA. With the help of these groups, most facilities have implemented protocols for greeting all incoming warriors and their families upon their arrival and are often able to conduct needs assessments within a day or two to identify any immediate areas of concern.

Orientations are conducted at some facilities to provide an overview of the services available to families, including details on how to navigate military systems. Understanding the language and culture of the military in particular was reported in our discussions as challenging for parents of wounded warriors who are not familiar with military acronyms and operations. The utilization of these groups and seminars vary by facility. There impact is a function of how they are structured and integrated into the processing and care of the seriously WII and the methods implemented for reaching out to the seriously WII and their caregivers. Similarly, [24] found that "Many focus group participants were not aware that there was an FRG (Family Readiness Group) or similar support group for their Service member's WTU, and were first learning about it in the focus group."

The timing of when information is presented to families can determine its usefulness. Many service members and their caregivers are inundated with information upon arriving at a facility. The caseworkers report that this is overwhelming. The families are seeing their service members for the first time since they've been injured. Most often the focus is solely on the well-being of the wounded warrior and not on the potential problems that are going to result from having to provide long-term care during recovery.

Social workers, case managers, and others leave contact information such that at the end of the day a caregiver or service member has a stack of business cards and no idea what they are for or what to do with them. In many cases, the families best suited to utilize the resources offered so early in recovery are those who have pre-existing needs or financial problems now exacerbated by the warrior's injury or illness.

Benefit eligibility

Another theme arising from the discussions is the inequity in who is eligible to receive certain benefits. During site visits, we were frequently told that it is unjust to offer so many resources to only those combat-injured during OIF/OEF and not to other seriously WII who have been serving in support of the war, but outside Theater or in CONUS.

Similarly, the need for respite for caregivers can be as great as that required by service members. Many groups donate or provide recreation opportunities to the seriously WII but not to NMAs. Although eligibility criteria are enforced in many ways, some commented during the meetings that organizations are loosening these strict criteria, allowing for a wider dispersion of resources. Often NMAs live in a small hotel room for months, some with small children, assuming unaccustomed medical duties while taking care of someone who is very dependent. This experience is emotionally and physically exhausting. The MTFs we visited recognized the drain on caregivers and were developing respite programs to help with their stress.

As a caveat, we note that since the completion of our preliminary report, there is now a Respite Care benefit for caregivers offered by TRICARE and provided by the NDAA 2008. This benefit covers the expenses of having a home health representative from a TRICARE-authorized home health agency (HHA) come to the home of a homebound seriously WII for up to 8 hours/day for a maximum of 5 days per calendar week. What's unique about the caregiver respite benefit is that although there are restrictions on the use, the seriously WII do not have to be combat-injured and caregivers do not have to be a blood relation.[16]

We also found that the type of injury sustained can impact the benefits available. Those physically wounded in war, amputees in particular, tend to be targeted for resources by both the government and NGOs. This advantage is evident in the determination of who receives the TSGLI benefit. The criteria for TSGLI eligibility are based on the physical abilities/limitations of the seriously WII or their inability to independently complete basic activities of daily living (ADL). Those interviewed commented that many of the severe TBI and PTSD patients are not eligible for this benefit despite the long-term effect their condition may have on their ability to sustain employment or even live independently (that is, without a caregiver's assistance).

TSGLI has recently been expanded with a revised benefit put out in November 26, 2008. The benefit now addresses some of these concerns and includes hospitalization as a proxy for ADL loss. Continuous 15-day inpatient hospital care is deemed a proxy for the first ADL eligibility period for Other Traumatic Injury and TBI claims. Because this change occurred after our site visits, we do not have information on how the expanded benefit has affected those with less visible wounds from the war.

Some donor organizations also target their resources to those service members visibly injured. Advocates for wounded warriors are trying to educate non-profits to help them understand that non-visible injuries can have considerable impact on the lives of service members and their caregivers, often resulting in a longer period of recovery than some visible injuries.

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16. The TRICARE web site indicates that "Respite care is short-term care for a patient to provide rest and change for the primary caregivers who have been caring for the patient at home and assisting with activities of daily living. Although this is usually the patient's family, it may be a relative or friend who assists the member with his or her activities of daily living. The active duty service member respite benefit is intended to mirror the benefits provided under the TRICARE Extended Care Health Option (ECHO) Home Health Care benefit."

There can also be disparity in the benefits available to the active and the reserve components. Service members in the active component are eligible for PCS (move) to the MTF where they are receiving care. Generally, this is not done for the reserve component. Changing the service member's primary duty location can put an end to the NMA benefit (if the NMA is an immediate family member living in the seriously WII's home), but it can still be advantageous for family members to move close to their loved one to alleviate some of the NMA's stress by making it easier for the NMA to balance home life with providing support and care to the seriously WII.

As mentioned earlier, service members in the reserve component typically cannot PCS (move) to the MTF where they are receiving treatment, and transferring the reserve service member closer to his or her home has its challenges. The Army has implemented the Community Based Health Care Organization (CBHCO) program to help reserve component service members return to their homes while recovering. However, there is often no facility near the service member's home that is able to accommodate the wounded warrior's medical needs. Placement into the program is through CBHCO units that do not cover every state, making entry to the program subject to availability. Utilizing this program can also result in a lengthy process and can involve the VA health care facilities when needed for the service member's care, requiring considerable coordination between hospitals and staff.

Maintaining a support system for a recovering reserve component service member is further compounded by the demographics of reserve component personnel. They tend to be older with families, making it more difficult for spouses and children to temporarily uproot their lives to be at the bedside during recovery. Those who do relocate often experience a loss in income.

Long-term provisions for care

As improvements in the care of seriously WII on active duty continue, problems remain in the transition of service members to the VA. Some of the problems identified during our interviews include (1) lapse in pay during the transition stage, i.e., a need for a stronger bridge to civilian employment and/or education opportunities, which if improved, could lessen the amount of time a seriously WII is financially dependent on others, particularly their caregivers, and (2) the difference in quality of rehabilitation treatment facilities between DoD and the VA. Many staff report that amputees are returning to MTFs once medically separated because the prosthetics are better quality and more types of prosthetics are available for conducting various activities such as swimming and running. The DoD and VA benefits have not been standardized in regard to the rehabilitative services offered. In terms of the impact this has on those caring for seriously WII, it could mean increased travel time in order to get to specific MTFs to receive the best services and/or equipment necessary for service members to maintain the highest quality of life.

Another concern is related to the GI Bill. Many felt that education and employment benefits offered to seriously WII should be extended to family members. Because of the service member's disability, the spouse often has to become the primary breadwinner, and is therefore the one who can benefit most from furthering his or her education or being given priority in obtaining certain types of employment. There are programs that exist to provide spouses and other dependents with education benefits, including the DoD's Military Spouse Career Advancement Accounts, and the VA's Dependents' Educational Assistance (DEA) program. Various state-funded programs may also be available, but none seem to be as comprehensive as the New GI Bill (Chapter 33) or so-called "Post-9/11 GI Bill."

President George W. Bush signed into law the Post-9/11 Veterans Education Assistance Act of 2008 also known as the New GI Bill. Like its predecessor, the Servicemen's Readjustment Act, this bill provides up to 36 months of educational assistance to individuals who served on active duty after 9/11. These educational benefits may be transferrable to a spouse or to children if the service member is on active duty in the Armed Forces on August 1, 2009. DoD is to issue further guidance on the transferability of these benefits in the near future.

Similarly, the Department of Labor (DOL) announced in August 2008 a new education and employment initiative targeted to employers and workforce development professionals that addresses employment issues for veterans who are living with TBI and/or PTSD. This resource known as America's Heroes at Work (AHaW) can be helpful to the caregiver looking for employment support information.[17] Additionally, in October 2004 DOL initiated its REALifelines (RLL) program. RLL is designed to provide seriously WII one-on-one employment assistance when they are ready to reenter the work force. This service is also available to spouses of seriously WIIs who may need to return to work upon recovery or to part time employment to assist with expenses while the service member is recovering.[18]

Other challenges

When interviewees were asked what they would communicate to the military's leaders regarding gaps between what's needed by the caregivers of seriously WII and what's provided, they agreed unanimously that lost income resulting from being at the bedside is the biggest hardship. Replacement of caregivers' lost earnings is not something that charities generally provide. Regardless of who functions as the NMA, financial ramifications and lost wages and benefits are usually involved. For example, [24] found that "family members, typically caring for the severely injured, were facing very serious financial difficulties. Their challenges were the result of having to leave a job and relocate to the MTF locale to provide full-time care. Some were in the process of losing their homes and/or jobs, and suggested they would be unable to recover financially, despite support from the military and private groups."

Being a caregiver also puts benefits at risk. For example, many parents are not military beneficiaries, so their health benefits may be at risk as a result of leaving their jobs. If they use Medicaid for their health care, their coverage is non-transferable outside the state they live in.

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[17] See www.americasheroesatwork.gov for additional information.

[18] See http://www.hirevetsfirst.gov/realifelines/index.asp for additional information.

There was also a general consensus that families need more education on medical conditions such as TBI and PTSD, financial matters, and life skills in general to prepare them for the road ahead.

Overall, the site visits indicate that the needs of seriously WII and their caregivers can be extensive. Given the number of organizations involved in fulfilling these needs, it's difficult to account for all the resulting transactions and support with a dollar amount. Many efforts are in place to start documenting what's requested by the families and tracking the organizations responding to those requests. Successful integration of NGOs into the care model for wounded warriors can be helpful as can be seen from the unique public-private and military-civilian partnerships being formed at the various MTFs. The DoD and VA partnership of recent years, formed to provide better services to seriously WII service members and their families, has also been a much-appreciated improvement.

As a result of the war, the number of charities with a mission specific to the issues facing the seriously WII and their families has grown rapidly. These NGOs have donea great deal to assist service members and their families. When asked whether the country's current financial situation had contributed to "donor fatigue," many charities we talked to said Americans continue to generously donate, but the amount donated may be less. With the changing state of the American economy it would be interesting to know how the charities we interviewed would respond to this question of "donor fatigue" now versus when we initially asked the question in May 2008. Regardless of the American people's generosity, there is a limit to the resources available.[19]

Issues complicating the financial status of service members and their families can be affected by how they've budgeted their money during deployment. Many plan on the extra money connected with service in-theater and add it into their monthly budget. However, if the deployment is delayed or canceled or if the service member

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[19] See [2] for more information on NGOs and charitiable organizations and the assistance they provide to service members and families.

returns early, it can have a negative impact on the family budget when the money is already committed.

Some military families are facing foreclosure prior to deployment. This situation can be exacerbated by lost family income during the hospitalization and rehabilitation period following injury. The Soldiers and Sailors Civil Relief Act (SSCRA) of 1940 and its renamed and amended successor, the Servicemembers Civil Relief Act (SCRA) of 2003, are capable of protecting service members from foreclosure due to non-payment while they are on active duty and 90 days following their return home [26]. In general terms SCRA is meant to help with economic and legal burdens that many military families face. While it can be seen as a safety net of sorts, it is not the answer to every financial or legal issue a service member and his/her family has [26]. Also, this legislation is not available to parent(s) who are looking at long-term relocation from their home to take care of their child.

Other potential stressors on caregivers include having to care for multiple people, including the seriously WII as well as an elderly adult or one or more young children. We found that families were given priority for free child care and that many day care centers had also designated a number of hours per month for "respite care" to allow the spouse to have a little free time. The norm for respite child care was about 12 to 16 hours/month, but it was reported that many families did not take advantage of this program. Proximity to the MTF and quality of available day care were concerns from families.

Summary

We found that access to information has not been consistent as it varies by service affiliation and location. Also caregivers who are not DoD beneficiaries do not understand the military system, which causes them difficulty. However, information for service members and caregivers is improving with the completion of the NRD and the *Compensation and Benefits Handbook*, which detail the recovery, rehabilitation, and reintegration process they are going through and the various resources that are available along the way. Similarly, benefits eligibility can be a concern. Respite opportunities for caregivers are important as is the ability for TBI and PTSD injured service members to have the benefits of a caregiver. Beyond the immediate needs, caregivers face challenges as they look to the future and ponder how they will handle caregiving long-term and potentially being the primary breadwinner. Hence, access to educational benefits for caregivers is an important issue.

Survey results: impact on caregivers

With the discussions of the immediate financial impact of injury and some of the challenges that caregivers face as a background, we present in this section the results of our survey of WII service members regarding the impact on their caregivers. A survey was necessary to gather these data as administrative data on caregivers and impact on caregivers do not exist. The survey targeted service members designated by their respective service wounded warrior program (Army Wounded Warrior Program or AW2, Navy Safe Harbor, Air Force Wounded Warrior Program, the Marine Corps' Wounded Warrior Regiment, and SOCOM's Wounded Warrior Program).[20] For the most part, these individuals were categorized as VSI/SI.[21]

For the individuals that these five programs identified, these programs sent each individual an email inviting him or her to participate in the survey with a link to the survey Web site. The email was accompanied by a letter from Mr. Michael L. Dominguez (then Principal Deputy Under Secretary of Defense for Personnel and Readiness) indicating the importance of the survey to DoD. If desired, the service member had the option to complete the survey in hardcopy. All but one response was through the Web option.

We provided to each of these service organizations a target number of service members we wanted them to identify and send an

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[20] We gratefully acknowledge the support we received from individuals at each of these wounded warrior programs in facilitating the fielding of the survey among those in their programs.

[21] Individuals identified by AW2 were not necessarily VSI/SI as "AW2 supports the most severely wounded Soldiers who have, or are expected to receive, an Army Physical Disability Evaluation System rating of 30% or greater in one or more specific categories or a combined rating of 50% or greater for conditions that are the result of combat or are combat related." (See www.aw2.army.mil/about/population.html.)

invitation to take the survey. The purpose of having the service organizations send the invitation was to ensure complete anonymity on the part of the researchers about who responded to the survey and give it legitimacy and increase the respose rate. Because we did not send out the invitations we cannot confirm the exact number of individuals that received one, but the number we requested to be sent was 500 for the Army, 300 for the Marine Corps, and 100 each for the Navy, Air Force, and SOCOM for a total of 1,100 WII service members. The survey was in the field approximately 1 month. We received 263 surveys of which 248 were complete.[22] Assuming 1,100 is approximately the number of survey invitations sent, the response rate is about one-quarter.

Given our estimate of the size of the VSI/SI population still on active duty, we estimate that the 248 completed surveys represent about 11 percent of the VSI/SI population. Given our sample and population size, we estimate that the minimum statistical precision of the estimates can be described as follows: we are 91 percent confident that our estimates are within 5 percentage points of the true value. We could also describe the precision as we are 96 percent confident that our estimates are within 6 percentage points of the true value.

This section presents the main findings and results of the survey. Appendix A shows the survey instrument including information on Institutional Review Board (IRB) approval of this research. Appendix B shows the weighted responses to each survey question. Note that we weighted the survey responses by service, component (active or reserve), and marital status, so that the survey responses would reflect the population of seriously wounded, ill, and injured service members.

Population characteristics and basic results

We begin with a discussion of population characteristics and basic results. The sections that follow discuss in more detail who the

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[22] The median time it took individuals to complete the survey was 8 minutes.

caregivers are, burdens on caregivers, and the financial impact on caregivers.

Table 1 provides estimates of some basic characteristics of WII service members. This group is predominantly male (96 percent), and there are more service members who are age 30 and older than under age 30. Not surprisingly, the Army and Marines are the services that are most heavily represented.

Table 1. Characteristics of WII service members responding

Category	Percentage
Age and gender	
Male under 30	42
Male 30 or older	53
Female under 30	2
Female 30 or older	4
Service and Active Duty status	
Army – Active Duty	39
Army – Guard / Reserve	12
Navy – Active Duty	5
Navy – Guard / Reserve	2
Air Force – Active Duty	5
Air Force – Guard / Reserve	1
Marines – Active Duty	31
Marines – Guard / Reserve	5
Paygrade	
E1 – E3	13
E4 – E6	48
E7 – E9	23
O1 – O3	8
O4 and higher	7
Marital status and children under age 21	
Single, no children	27
Single, with children	2
Married, no children	15
Married, with children	37
Separated or divorced, no children	7
Separate or divorced, with children	13

We provide information on paygrade because of our interest in the financial burden of caregiving. Almost half of the WII population is in paygrade E4-E6 group, which is a group in which many probably don't have much ability to easily absorb the financial burden imposed by caregiving.

We also provide information on family structure (i.e., marital status and presence of children under age 21) because of its potentially complex effect on the service member and the burden of caregiving. As we show later, married service members overwhelmingly rely on their spouses to be the primary person providing support and assistance. However, married service members with children also face the concern about how their spouse's caregiving might detract from other activities that support the family, such as paid employment and child care. The survey results show that the family structure that is most common (about a third of service members) is to be married and have children. After that, the next largest group is single service members with no children.

The remaining survey results that we present show more detail on the people providing support and assistance to the seriously WII service members and the kinds of burdens they face. Note that we decided to exclude female service members from the remaining results. This is because we expect that there are different issues and patterns in how male and female service members receive support and assistance, and so it would not make sense to group them together. However, the sample of women is unfortunately too small to investigate those issues just for women.

About 90 percent of male WII service members report that there is "a family member, loved one, or friend that has supported or assisted [them] in [their] treatment." Many different people provide at least some support, as shown in the first panel in table 2. Among the service members receiving support, almost three-fourths have a wife, fiancée, or girlfriend who assists them (72 percent), and mothers are the second largest group providing support (57 percent). The second panel in the table shows who is the primary support person, i.e., "the person that has spent the most time supporting and assisting" the service member. Note that while the survey asked about the primary support person (PSP), in this report we refer to these people as caregivers. Again, the largest group is wives, fiancées, or girlfriends (62 percent) with mothers as the second largest group (19 percent).

Table 2. Who provides support to male WII service members

Category	Percentage
Everyone who has been providing support	
Wife, fiancée, or girlfriend	72
Mother	57
Father	43
Sibling	37
Child	15
Other relative	12
Other non-relative	27
Caregiver (Primary support person (PSP))	
Wife, fiancée, or girlfriend	62
Mother	19
Father	3
Sibling	4
Child	0
Other relative	3
Other non-relative	6
No response	2
Age of caregiver (PSP)	
Under 30 years old	31
30 – 39 years old	31
40 – 54 years old	24
55 – 64 years old	13
65 or older	1

Note: Sample is the 90 percent of male service members reporting anyone providing support to them.

As table 3 shows, different caregivers bear different levels and types of burden in assisting seriously WII service members. It's most common for caregivers to provide an average of 10 or fewer hours of assistance per week, but one fifth of caregivers provide more than 40 hours. Note that the number of hours providing assistance is likely a result of multiple factors, such as how much assistance the service member needs (i.e., severity of injury), the time that the caregiver can make available, how much time other caregivers can provide, and the time since injury.

The demands of caregiving affect various aspects of caregivers' lives, including employment, education, and child care. About a quarter of caregivers quit their jobs to assist seriously WII service members, and over half of them did not resume work, presumably because caregiving demands were too great. Over two-fifths of caregivers are employed but take time off from their jobs to provide support. With respect to education, about a fifth of caregivers have either quit or taken time off from school. In addition, about a third of caregivers had to make new arrangements for child care in order to assist seriously WII service members.

Table 3. Burden on caregivers (PSPs) for male seriously WII service members

Type of burden	Percentage
Weekly hours spent providing support	
10 hours or less	43
11 – 20 hours	19
21 – 30 hours	8
31 – 40 hours	8
More than 40 hours	22
Actions necessary to provide support	
PSP quit previous job	27
PSP quit job and is not currently working	16
PSP takes time off from current job	44
PSP quit or is taking time off from school	18
PSP made new child care arrangements	34

Note: Sample is PSPs (caregivers) of the seriously WII male service members.

One of the main findings from the site visits was that providing support and assistance can create large financial burdens for families of seriously WII service members. Table 4 shows how much of a problem financial obligations are for caregivers. Specifically, about one third of caregivers had financial obligations that they were unable to meet while assisting their seriously WII service member. The most common unmet financial obligation was credit card payments, which was a problem for about one quarter of all caregivers. In addition, about two fifths of caregivers took on additional financial obligations while assisting seriously WII service members, with about a quarter of all caregivers borrowing money from family or friends (which was the most common source of additional obligations).

Table 4. Financial obligations of caregivers (PSPs) for male seriously WII service members

Type of financial obligation	Percentage
PSP unmet financial obligations	
Any unmet obligations	37
Rent or mortgage	14
Car payment or insurance	9
Health insurance	8
Credit card payments	24
Installment loan	7
Other	6
PSP additional financial obligations	
Any additional obligations	41
New loans	9
Home equity line of credit	3
New / additional credit card debt	17
Borrowed money from family or friends	26

Note: Sample is PSPs of the seriously WII male service members.

Who is providing support?

In most cases, the support service members receive from family and friends is more than a single individual. Spouses, mothers, fathers, siblings, fiancées, etc., travel to be at the service member's bedside following a serious wound, illness, or injury. This is often facilitated by the ITAs that allow up to three family members to travel to be with the service member during his inpatient stay. To get a sense of who supports service members in this way, we asked service members to identify all those individuals who have been supporting and assisting them. Table 5 summarizes the results for male service members.[23]

Table 5. Percent of service members reporting support by relation for male respondents

Relation of the support person to the service member	Under age 30		30 or older		All
	Not married[a]	Married	Not married[a]	Married	
Wife/fiancée/girlfriend	37	96	49	99	72
Mother	83	45	72	35	57
Father	61	35	47	33	43
Sibling	63	25	44	22	37
Child	1	8	12	31	15
Other relative	10	8	18	11	12
Other non-relative	35	17	40	17	27

a. Not married includes singe/never married, divorced, and separated.

For married service members, their support people include their wife in essentially every case. In addition to their wife, their support people include their mother in about half of the cases for those under 30 years old and in a third of the cases for those over 30. Fathers are a support person for married service members in about a third of the cases. For those who are not married (single/never married, divorced, or separated), mothers are the most common among support people followed by fathers and siblings. The next largest group is significant others—wives, fiancées, and girlfriends.

Once service members are no longer inpatients, they may still have a long period of recovery through continued medical treatment in an outpatient status. Because their medical conditions may require them to see medical personnel almost daily for an extended period, they often live at the medical facility for several months. During this period, they may still require support from family and friends. For medically qualifying service members, DoD provides ITA orders for an NMA to help them with activities of daily living during this period. To get a sense of these types of caregiving needs, we asked service members to identify their primary support person or

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[23] We report the results for males only as they account for 95 percent of respondents. Limiting the results to males provides a cleaner response.

caregiver.[24] Table 6 shows the survey results for the primary caregiver.

Table 6. Percent of primary caregivers by relation to the service for male respondents

Relation of the support person to the service member	Under age 30		30 or older		All
	Not married[a]	Married	Not married[a]	Married	
Wife/fiancée/girlfriend	12	96	34	96	62
Mother	47	0	33	0	19
Father	4	0	7	0	3
Sibling	10	0	7	1	4
Child	0	0	0	0	0
Other relative	2	0	12	1	3
Other non-relative	17	0	8	1	6
No response	7	4	0	0	2

a. Not married includes singe/never married, divorced, and separated.

The results show that for married individuals, the primary caregiver is almost exclusively the service member's wife. For not-married service members, the results are mixed. While mothers were the most common support person identified when service members were asked to identify all support persons, they were not the overwhelming primary caregiver. Mothers were the primary caregiver for those not married and under 30 years old in about half of the cases and in about a third of the cases for those 30 and over. The next most significant group of primary caregivers for those not married were wives, fiancées, and girlfriends. This group accounted for a third of primary caregivers for those 30 and over.

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[24] Note that the survey asked the service member to identify the primary support person without requiring that this person be explicitly assisting them with ADLs. The rationale for this was that some service members who do not require assistance with ADLs still require a support person or caregiver because they cannot drive or have very poor memory due to their medical conditions.

Burden on the primary caregiver

The survey results indicated that about 90 percent of service members responding to the survey had a primary support person—caregiver. Of those providing care, the survey asked about the average number of hours they spend providing care each week. The results show that 43 percent spend less than 10 hours per week providing assistance (see table 7). At the other end of the spectrum, 22 percent of caregivers spend more than 40 hours per week and 30 percent spend more than 30 hours per week. Also note that wives, fiancées, and girlfriends have the highest percent of those providing assistance more than 40 hours per week—28 percent compared to 10 percent for all others. Note that the distribution of caregiving hours per week is statistically different for wives, fiancées, and girlfriends from the distribution for all other types of caregivers.

Table 7. Hours of caregiver assistance per week for male respondents

Assistance per week	Significant other[a]	Parent	Other	All
10 hours or less	34	64	53	43
10 – 20 hours	21	13	17	19
21 – 30 hours	7	12	9	8
31 – 40 hours	9	2	10	8
More than 40 hours	28	10	10	22

a. Includes wife, fiancée, and girlfriend.

Providing consistent assistance to a seriously WII service member has other impacts. Given that they need to be providing care, it may affect their ability to work, go to school, and care for their children. It may also require them to make changes in their housing. For example, there is anecdotal evidence that many caregivers have to quit their jobs or take significant time off, quit or take time off from school, make new child care arrangements, or sell their home or make other housing adjustments to be a caregiver. What we don't know from these anecdotes is just how common such adjustments are. The survey explored these issues.

First, consider the impact on employment. The survey results indicate that 27 percent of all caregivers quit work, 63 percent took time off, and 66 percent did at least one of these (see table 8). For those who were working prior to acting as a caregiver, 35 percent quit work, 83 percent took time off, and 87 percent did at least one of these. What is more telling is that the percentage of caregivers quitting work or taking time off generally increases with the hours of caregiving assistance provided each week. For example, of those working prior to acting as a caregiver, 14 percent of those providing assistance less than 10 hours per week quit their job compared to 65 percent of those providing assistance more than 40 hours per week.

Table 8. Percent of caregivers with housing, employment, schooling, and child care impacts for male respondents by the hours of caregiving assistance per week

	Hours of caregiving assistance per week				
Type of impact	≤ 10	11-20	21-40	> 40	All
For all caregivers (PSPs)					
Quit or took time off from work	58	70	82	67	66
Quit	10	38	41	44	27
Took time off	56	66	79	63	63
Reduced schooling	12	34	21	16	18
Quit or took time off from work or school	66	72	88	74	72
For PSPs working/in school prior to caregiving					
Quit or took time off from work	82	82	95	100	87
Quit	14	45	47	65	35
Took time off	79	77	92	93	83
Reduced schooling	52	93	63	55	65
Quit or took time off from work or school	79	80	94	97	85
Any housing change	9	13	17	17	11
New child care arrangements	24	57	20	44	34

Turning to the impact on schooling, the results show that 18 percent of all caregivers reduced their school by either quitting or taking time off. For those in school prior to acting as a caregiver, this figure is 65 percent. Given that schooling is something that leads to future employment or improved future employment, we looked at the impact of caregiving on either of these. We found that across all caregivers, 72 percent quit or took time off from work or school. Limiting this figure to those caregivers working or in school prior to caregiving, this figure is 85 percent. Additionally, this percentage tends to increase with the weekly hours of assistance provided. The presumption is that more hours of caregiving are associated with more severely wounded, ill, or injured service members.

The survey explored various housing impacts that were related to being able to be a caregiver. Did caregivers sell their home, let go of their lease, or buy or rent a new home near the WII service member? As table 8 shows, 11 percent of all caregivers made at least one of these housing adjustments. Further, this figure was 9 percent of those providing assistance less than 10 hours per week compared to 17 percent for providing assistance more than 20 hours per week.

The survey looked at new child care arrangements to get a sense of the degree to which caregivers had to make these adjustments. The results show that about a third of all caregivers made these adjustments. Note that based on the information from our site visits the presumption is that typically this would involve leaving children with family or friends rather than hiring out the child care. Not surprisingly, these types of arrangements were more common with wives, fiancées, and girlfriends (43 percent) than they were with parents (11 percent).

Financial obligations of the primary caregiver

In addition to the burdens related to employment, schooling, housing, and child care, caregivers may face financial challenges that are a direct result of acting as a caregiver. These stem not only from reduced employment but also from the possibility of incurring new expenses such as having to maintain two households—their existing one and one near the service member. We explored these issues in the survey by asking about unmet financial obligations as well as additional financial obligations.

As table 9 shows, 37 percent of caregivers for male service members were reported to have at least one unmet financial obligation. The most common unmet obligation was credit card payment (24 percent) followed by rent/mortgage payments (14 percent). Note that generally the percentage of caregivers with unmet financial obligations is higher for those providing more hours of caregiving per week.

Table 9. Percent of caregivers with unmet or additional financial obligations for male respondents by the hours of caregiving assistance per week

	Hours of caregiving assistance per week				
Financial obligations	≤ 10	11-20	21-40	> 40	All
Unmet financial obligations					
Any unmet obligations	28	50	42	47	37
Rent or mortgage	9	37	7	14	14
Car payment or insurance	9	11	2	15	9
Health insurance	4	24	6	4	8
Credit card payments	16	42	30	25	24
Installment loan	3	5	17	12	7
Other	6	1	9	8	6
Additional financial obligations					
Any additional obligations	33	49	45	54	41
New loans	7	8	13	15	9
Home equity line of credit	1	0	9	4	3
New/additional credit card debt	11	34	19	18	17
Borrowed money (family /friends)	20	20	27	48	26

Turning to additional financial obligations caregivers have taken on while providing assistance, the results show that 41 percent of caregivers had additional obligations. One quarter of caregivers had borrowed money from family or friends, while 17 percent incurred additional credit card debt. Looking at the figures for caregivers providing more than 40 hours per week, 54 percent had additional obligations, 48 percent borrowed money from family or friends, 18 percent had new credit card debt, and 15 percent had taken out new loans.

Summary

The survey results show that for service members with a caregiver, the relation of the caregiver to the service member depends on the service member's marital status. If he is married, the caregiver is almost always his spouse. If he is not married, the caregivers are principally mothers and significant others.

The survey showed that there is a significant time commitment on the part of caregivers to provide assistance with 57 percent providing care at least 10 hours per week (for male service members). The impact on caregivers was also evident in the percentage of caregivers with employment, schooling, housing, and child care impacts. About three out of every four caregivers had quit or taken time off from either work or school. For those working or in school prior to caregiving, this figure is 85 percent. Eleven percent of surveyed caregivers had changed housing arrangements. And new child care arrangements affected a third of caregivers.

Finally, financial obligations affect many caregivers. Thirty-seven percent of caregivers had unmet financial obligations, and 41 percent of caregivers had new financial obligations. Generally, the percentage of caregivers with unmet or additional financial obligations is positively correlated with the number of hours of assistance the caregiver provides each week. The presumption is that more hours of caregiving is associated with more severely wounded, ill, or injured service members.

Estimates of caregiver economic losses

In this section, we address the estimation of caregiver economic losses. We found that economic losses principally consist of lost earnings and benefits as other caregiving expenses are generally covered through a combination of existing DoD programs such as ITAs, NGOs, and charities. To estimate earnings and benefits losses, we essentially need to know three things: (1) how many service members need a caregiver, (2) how long they need a caregiver, and (3) what the average earnings of caregivers are. We detail the answers to each of these questions in this section. With this information, we estimated average economic losses by simply multiplying them together. Note that our estimates reported in this section are a blend of information we reported previously in our preliminary report [2] and data obtained through our survey of WII service members regarding the impact on caregivers.

How many service members need a caregiver?

As discussed previously in this report, there is no perfect measure of the number of service members needing a caregiver. That is a medical determination made on a case-by-case basis. The challenge we faced was finding a reasonably proxy for estimating the relative magnitude or size of the seriously WII population. We chose the very seriously injured/seriously injured (VSI/SI) population as our proxy because it is the medical designation that starts the family member travel to the bedside.[25]

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[25] Note that not all VSI/SI need a caregiver. Similarly, not all who need a caregiver are labelled VSI/SI. These include individuals with TBI and PTSD who have need for caregiving support, but the nature of their medical conditions never placed them in a VSI/SI category.

Data

The VSI/SI population data comes from the Defense Manpower Data Center's Statistical Information Analysis Division (DMDC SIAD) Seriously Ill and Injured (source of information for non-hostile injuries) and the Wounded in Action (WIA) data systems. Both data systems are populated from casualty reports submitted via the Defense Casualty Information Processing System (DCIPS), which is designed to be an electronic casualty reporting and tracking system. Data prior to 2003 was both sparse and pre-Operation Iraqi Freedom (OIF). In the interest of focusing on the casualties that occurred as a result of OIF and OEF and the integrity of the statistical analysis, we restricted the observations to incidents that occurred during the period of 1 January 2003 to 31 December 2008. This resulted in a total of 4,542 observations representing both hostile and non-hostile injuries and illnesses. Approximately 69 percent of these casualties were hostile injuries.

In addition to the DMDC data, we identified 33 additional observations of personnel injured in 2008 from the Joint Patient Tracking Application who were reported to either have bilateral lower limb amputations or who had received third degree burns over greater than 30 percent of their body.[26] These additional 33 observations resulted in a total of 4,575 observations.

Demographically about one-third of the VSI/SI population is from the reserve component. The population is almost entirely male. Average age varies by service with the Marines having the lowest average age at 25.9 years compared to a high of 34.4 for the Air Force. As expected, the average age is higher in the reserves/guard (30.6) than among the active duty (27.5). Across DoD, 52 percent of the VSI/SI population is married. The extremes are the Marine Corps (45 percent) and the Air Force (68 percent). Similarly, the average number of children for these service members is 1.3 overall with a low of 0.8 in the Marine Corps and a high of 1.9 in the Air Force.

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26. Note that these 33 observations occurred in Iraq and were assumed to be at the lower end of the casualty status spectrum of SI vice VSI. Hence, we coded these observations as SI and hostile in nature.

The most common pay grade of the VSI/SI population is E4. Further, 56 percent of this population is either E4 or E5 and 80 percent of the population is in the E3 to E6 range. On average, 10 percent of the VSI/SI population has a Bachelor's degree or higher, with the Air Force being the most highly educated. Overall, the demographics of the VSI/SI population reflect the demographics of the military and the differences we observe between the services as a whole.

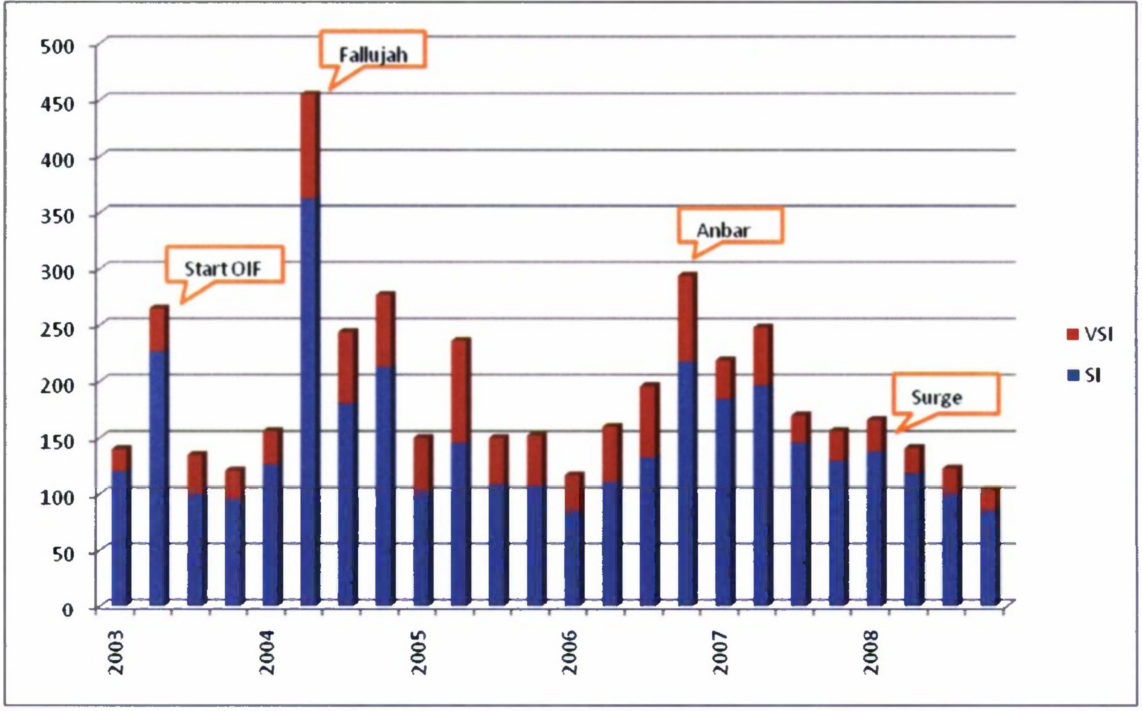
Our survey results confirm these general patterns. From our WII survey, we found that the respondents were predominantly male (95 percent), with 20 percent from the reserve component. The respondents were predominantly from the Army (51 percent) and the Marine Corps (36 percent). The average age was 32, which is generally consistent with the DMDC data. The percent married among our respondents was 52 percent, exactly the percentage based on DMDC data. We observed that 48 percent of the respondents were between E4 and E6. Overall, 52 percent of the respondents reported having children. One difference that we observed is that our survey respondents were more highly educated than the VSI/SI average from DMDC, with 24 percent having a Bachelor's degree or higher.

Estimates of the annual VSI/SI population

If DoD is going to develop programs to assist caregivers in the future, it will need to know how many there will be. While the number of VSI/SI cases coming out of Iraq was relatively low in 2008 compared to previous years, we decided to base our estimates for the size of the annual VSI/SI population on the DoD experience for the entire 2003-2008 period. Again, while the 2008 figures were relatively low, we don't know what the future will bring particularly if the number of service members in Afghanistan increases substantially. This seems the logical approach as our analysis of the data suggests that while there are peaks in the number of casualties during episodes of increased hostilities, the data becomes relatively consistent until the next surge of hostilities.

As figure 1 shows, there was a spike in casualties at the beginning of OIF in March 2003, but the data levels off again until the first battle of Fallujah in April 2004. Then again in November 2004, the second battle of Fallujah generated another spike in the casualty data. This was followed by relative stability until the battles within the Anbar province escalated in late 2006. Since late 2006, the data appears to have leveled off with a slight decrease in numbers.

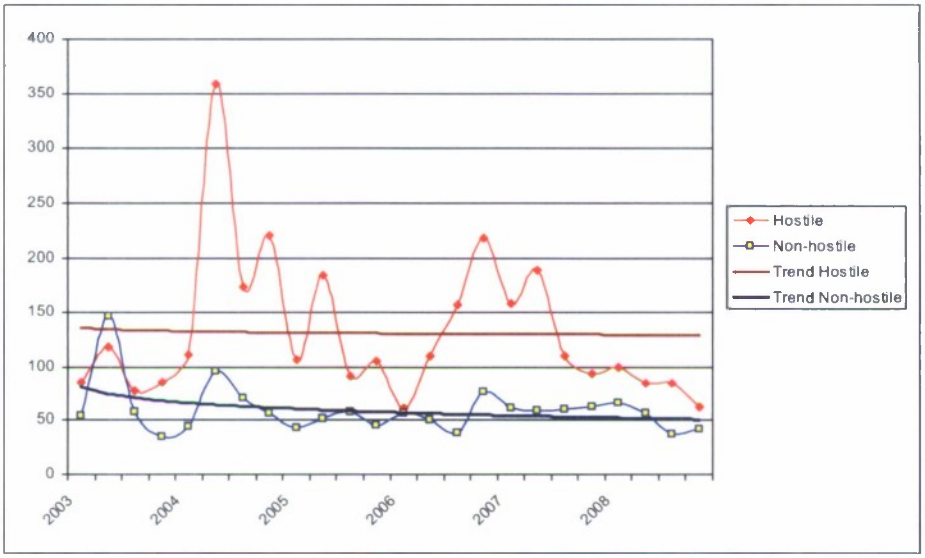
Figure 1. VSI/SI cases by quarter (2003-2008)



Taking this view of the data a step further, we conducted a statistical analysis of the trends to evaluate whether the changes over time were consistent and therefore relatively predictable, assuming that the current level of hostilities continues. This analysis looks at the data in the aggregate and then disaggregates the data into two categories of hostile and non-hostile injuries. Figure 2 presents the hostile and non-hostile data, with a logarithmic regression trend line. The trend line suggests that the number of hostile casualties also becomes relatively flat over time.

The quarterly averages begin to have virtually no difference when comparing the average quarterly averages during the period of 2005-2008 (120) are compared to those of the period of 2006-2008 (119). To lend further statistical validity to the observation that the means of the quarterly averages over these periods are similar, we conducted further statistical hypothesis testing and confirmed that there were no statistical differences in the means. Similarly note that even with the introduction of the escalation of hostilities of the start of OIF, the average number of hostile casualties was not vastly different, with an average of 92 casualties in 2003 compared to 83 casualties in 2008.

Figure 2. Hostile and non-hostile VSI/SI cases by quarter (2003-2008)



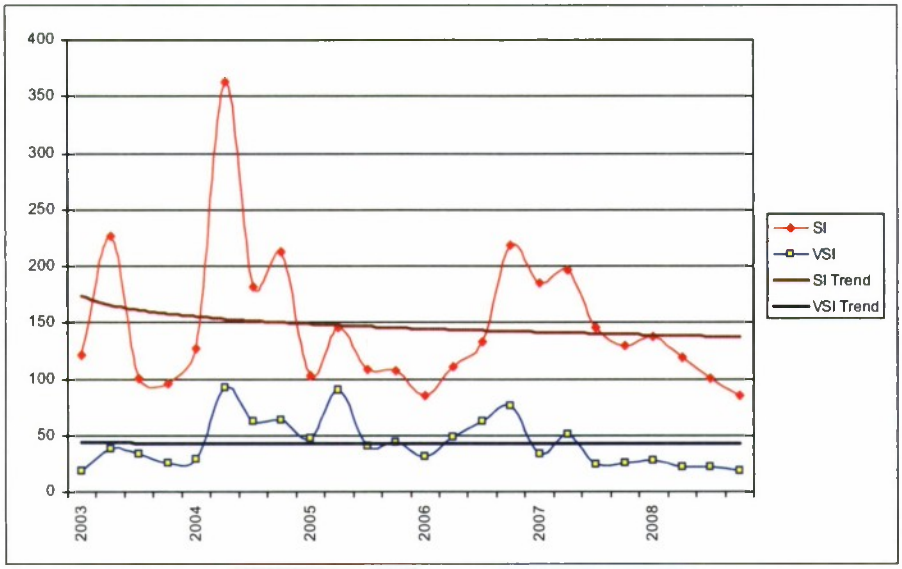
Hostile Quarterly Averages
2003-2008: 131
2004-2008: 139
2005-2008: 120
2006-2008: 119

Non-hostile Quarterly Averages
2003-2008: 59
2004-2008: 57
2005-2008: 54
2006-2008: 55

The non-hostile data demonstrate the same trends as the aggregate and hostile data, but have less variation in the average number of casualties. Again, the means testing suggests that there is not a statistically significant difference in the means.

Comparing the VSI to SI (both hostile and non-hostile) suggests similar trends in the quarterly data. We find that the apparent lack of variance in the means from each of the time periods is statistically evident. The trend line suggests that the number of VSI casualties, assuming no change in hostilities, should remain consistent at around 170 VSI casualties per year. Of interest in the VSI data presented in figure 3 are the spikes surrounding episodes of increased hostility (both battles of Fallujah and operations in the Anbar Province).

Figure 3. VSI and SI cases by quarter (2003-2008)



SI Quarterly Averages
2003-2008: 148
2004-2008: 150
2005-2008: 132
2006-2008: 138

VSI Quarterly Averages
2003-2008: 43
2004-2008: 46
2005-2008: 42
2006-2008: 37

Similarly, we find that the SI means are fairly consistent across the time periods. Again, we tested the means and found that there is no statistically significant difference in the means. Of interest is the ratio of SI to VSI casualties, which does vary with levels of increased hostility. Overall, the ratio of SI to VSI is approximately 3.7 SI to 1 VSI, except for the period of intense fighting in Fallujah where the ratio decreased to 2.4 VSI to 1 SI, with a low of 1.6 to 1 during the first battle of Fallujah.

Given the trends that we observe in the VSI/SI data, we estimate the annual number of service members needing a caregiver based on these trends. Specifically our estimate is 720 VSI/SI cases annually. If limiting to VSI only, our estimate is 170 annually. Note that these projects are the same regardless of whether we use the hostile-non-hostile or VSI-SI trend lines for our estimates.

How long will service members need a caregiver?

Getting an estimate of how long seriously WII service members need a caregiver has been challenging because no administrative data exist to help with this. Hence, we used the survey of WII service members to gather data on the length of caregiving needs. We also used a data call of case managers on samples of service members to look at length of caregiving needs. In addition to these estimates, we computed upper bounds on the length of caregiving needs for service members remaining on active duty using hazard analysis of the time from injury to Physical Evaluation Board (PEB) completion and the time from injury to separation from active duty. We begin with the estimates of time from injury to PEB completion.

Estimated incident-to-PEB completion time

The Army Wounded Warrior Program (AW2) program provided CNA with demographic information on 2,052 Soldiers in its program including the incident date and the PEB completion date. The data provided by AW2 are the most detailed of any of the services' data on their wounded warrior populations.

Demographics - Army

Demographically the data show that the AW2 population is 29 years old on average, 97 percent are male, 51 percent are married, the modal (most common) pay grade was E4, 84 percent have a hostile injury, and 23 percent are from the reserve component. More specifically, 23 percent are 18-24 years old, 36 percent are 25-29 years old, and the remaining 41 percent are 30 or more years old. Few (about 6 percent) are officers or warrant officers; 62 percent are either E4 or E5; and 77 percent are E4-E6. For Soldiers with a known education level, 80 percent have a high school education, 11 percent have attended some college, and 9 percent have at least a Bachelor's degree. These demographic values are consistent with the VSI/SI population for the Army [2].

These data also provide some information on the nature of the Soldier's primary injury or condition and group Soldiers into 45 categories by primary condition. We have further grouped these into 6 categories: extremity/amputation, burns/disfigurement, neuro, psych, vision, and other. The vast majority of Soldiers in each group typically fall into one category. For example, of those in the extremity/amputation group, 81 percent are in the amputation category. Similarly, 72 percent of the burns/disfigurement group is those with burns and 89 percent of the vision group is those in the blindness/vision loss category. As for the neuro and psych groups, 56 percent of the neuro group is those with TBI and 97 percent of the psych group is those with PTSD.

Time to PEB completion

The AW2 data report the date of injury or incident and the date of the PEB completion. To understand the impact of the service member's condition on his/her caregiver, we need to estimate the average time it took from the injury/incident date to PEB completion to calculate an upper bound for how long a service member may require a caregiver while on active duty. This is difficult to estimate because many of the AW2 population have not completed the PEB. We must account for this group when computing the average time between injury and PEB completion to avoid a downward biased estimate. We did this by using hazard rate analysis [2] to find out how the characteristics of cases are associated with the "risk" or likelihood of completing the PEB.[27]

The service member's primary condition is an important factor. Over a given time period, those with burns/disfigurement, neuro, psych, vision, or other condition are less likely to complete the PEB than those with an extremity/amputation condition (e.g., those in the burns/disfigurement group are 39 percent less likely to complete the PEB than those in the extremity/amputation group). We also found that senior enlisted are less likely than E4s to complete the PEB over a given time period. This may be due to Army efforts to retain experienced Soldiers with specific skills who are close to being eligible for a 20-year retirement from active duty. Those aged 18-24 years are more likely than any other age group to complete the PEB over a given time period.

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[27] Hazard rate analysis allows us to model this kind of time-to-loss duration data. We model the probability that a particular person will complete the PEB at a certain time while others will not, and how this probability is affected by selected variables. See [2] for details of the estimated models.

Our analysis shows that primary condition or injury is a key driver of how long it takes to complete the PEB. We determine how long it takes for a certain percent—like 50 percent (median)—to complete the PEB. It takes 1.40 years for those with an extremity/amputation condition to reach this point compared to 1.76, 1.80, 1.97, and 2.12 years for vision, neuro, psych, and burn/disfigurement conditions, respectively. Table 10 shows this information as well as the average time it takes to complete the PEB.

Table 10. Average and median time to complete the PEB

Category	Mean	Median	Category	Mean	Median
Overall	1.83	1.56	Age		
Condition			18-24	1.60	1.39
Extremity/amputation	1.62	1.40	25-29	1.96	1.66
Burns/disfigurement	2.35	2.12	30-34	2.25	1.98
Neuro	2.09	1.80	35-39	2.26	2.00
Psych	2.24	1.97	40 or more	2.28	2.02
Vision	2.04	1.76	Marital status		
Other	2.48	2.27	Not married	1.77	1.52
			Married	1.90	1.61

Overall, Soldiers complete the PEB about 1.83 years (22 months) after injury. The median time (time by which half of the injured complete the PEB) is a little less—1.56 years (nearly 19 months). The average and median time to complete varies by condition, age, and marital status. For those 30 years and older, it takes about 2.25 years to complete the PEB. In comparison, it is about 1.60 years for those 18-24 years old. As for marital status, it takes those who are married about 1.5 months more to complete the PEB compared to those who are not married.

Estimated incident-to-separation time

Similar to estimating the time from incident-to-PEB completion for the AW2 data, we estimated the time from incident-to-separation from the military using the VSI/SI data from DMDC and hazard rate analysis. For example, we found that for a given time interval, a RC service member was 10 percent less likely to have separated than an active duty individual and that those in the Navy, Air Force, and

Marines were less likely to have separated than those in the Army. These differences were statistically significant.

We also found statistically significant patterns by age. The older the service member, the lower the likelihood that a service member will have separated for a given time interval. Correlated to time is pay grade, which shows statistically significant patterns by rank for the enlisted. We also find that those who are married are about one-quarter less likely to have separated from the service over a given time interval than those who are not married, a statistically significant finding. These results are consistent with the incident-to-PEB-completion analysis. We do not find a significant impact of the number of dependents on the time to separation

The result of the hazard modeling is that the median time to separation is 2.65 years overall, and is a function of active/inactive status, service, age, and marital status. For example the median time to separation for married service members is 2.93 years compared to 2.29 years for those who are not married, or a difference of about 7.6 months. Similarly, those who are 40 or more years old have a median time to separation that is 1.34 years (16 months) longer than those who are 18-24 years old (see table 11).

Table 11. Median time to separate from the military

Category	Median	Category	Median
Overall	2.65	Age	
Active/inactive		18-24	2.39
Active duty	2.57	25-29	2.69
Reserve/guard	2.80	30-34	3.03
Service		35-39	3.19
Army	2.41	40 or more	3.73
Navy	2.99	Marital status	
Air Force	3.20	Not married	2.29
Marines	2.91	Married	2.93

Duration of need for caregiver assistance from the survey

The time to separation from the military, along with the time to the PEB for the Army, were used to provide upper bound estimates of the average amount of time that a service member may require a caregiver or an NMA during the period in which he or she remains on active duty. The respondents from the survey of WII service members also gave us information on how long they had been receiving assistance from their primary caregiver and also on how long they expected to continue to need caregiver assistance. On average, the respondents with a caregiver indicated that they had been receiving caregiver assistance from their primary support person for about 11 months, and that they expected to need caregiver assistance for about 8 additional months.[28]

Based on the WII survey respondents, a reasonable estimate of the average length of time that a WII service member might need caregiving assistance from a primary support person would be about 19 months. This is consistent with the upper bound estimates from the PEB (19 to 22 months) and the time to separation from active duty (an estimate of 31 months), because the survey estimate falls at or below these upper bounds.

Similarly, we conducted a data call of case managers for a sample of WII service members regarding how long these service members needed a caregiver. The estimate of how long seriously WII service members needed a caregiver from this source was 15 months. This is also consistent with the upper bound estimates of the duration of caregiving needs for the active duty period.

What are average caregiver losses?

The types of impacts family members of the seriously WII bear are generally well known, including lost income, lost employment and benefits, incurring of additional expenses, difficulty meeting financial obligations, and additional care arrangements, among others. Additional expenses caregivers incur are often the result of

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[28] For the respondents with a primary support person, 64 percent reported that they had been receiving caregiver assistance for 12 or more months. Regarding future expectations, 43 percent reported that their primary support person "may need to care for me for the long-term future, perhaps the rest of my life." Our 19-month estimate was based on using an assumption of 15 months of caregiving support for the "12 or more months" and the "for the long-term future" categories of responses.

maintaining both their primary residence and a second place to live near the seriously WII. Unmet financial obligations include rent, mortgages, utilities, and car payments.

Many of these financial impacts are covered by the government or by charities/NGOs. DoD provides for per diem and travel costs for up to three family members while the service member is an inpatient, and for per diem costs for an NMA or caregiver during the outpatient rehabilitative phase for qualified service members.

The exception is lost earnings and benefits, which DoD and charitable groups generally do not reimburse for or replace. Many of the difficulties of meeting financial obligations such as rent, mortgages, utilities, a second household, and car payments are aggravated by a loss of caregiver income. We estimate average earnings and benefits lost under the assumption that it will not be DoD policy to rely on charitable groups to cover the additional expenses and financial hardships of its seriously WII service members.

Given that lost earnings and benefits are not something that families are reimbursed for, we estimate in this section what we expect the typical caregiver wound have earned had he or she not had to be a caregiver. Because no database exists for earnings and benefits of the caregivers of the seriously WII, we estimate earnings using data from the Current Population Survey conducted by the Bureau of Labor Statistics in addition to the earnings information collected in our survey of WII service members. We also estimate benefits using data from a benefits survey conducted by the Hay Group for CNA. We first present the results of our literature review before looking at the earnings impact on caregivers.

Literature review of caregiver earnings

Previous research shows that survivors of service-disabled veterans have somewhat lower earnings and quality of life than widows/widowers in the general population [27]. While this is suggestive, it relates to a different group of people than those caring for seriously wounded warriors in the immediate months and years following injury. Although there are no studies that have specifically looked at the economic impact that caring for a seriously WII service member has on the caregiver, informal care provided to sick or disabled individuals by their family members has been studied by a large number of researchers across numerous disciplines. These studies have contributed to our understanding of how caregiving affects families, both in terms of economic effects and other effects such as caregivers' physical health or emotional well-being.

Nearly all research in this area has focused on informal care provided to the elderly. Note that the demographics of caregivers supporting seriously WII service members are likely to be much different from those of the caregivers supporting the elderly. However, the literature on informal care for the elderly may provide context for our analysis.

Many studies that investigated employment effects of caring for an elderly or disabled parent found labor supply differences by gender, noting that women are more likely than men to limit their work hours or drop out of the labor force [28-33]. In addition to the effects of informal care on employment, researchers have also found that caregivers reported only slightly worse physical health but that psychological distress, including anxiety, depression, and hostility, were prevalent [34-36].

Research on the effects on caregivers for a disabled child provides another reference point for the economic impact on caregivers. These sources generally find that the presence of a disabled child decreases the probability of employment by roughly 10 percent [37].

Caregiver demographics

To make reasonable estimates of average caregiver earnings and benefits, we need to know something about their demographics because demographics such as age, gender, and education are highly correlated with income. Our estimates are based on caregiver demographics from the WII survey. Table 12 shows that age-gender distribution of caregivers from the survey data.

Table 12. Age-gender distribution of primary caregivers

Age group	Male	Female	Total
Under 30	2.8%	27.7%	30.5%
30 – 39	1.6%	28.5%	30.1%
40 – 54	3.6%	20.0%	23.7%
55 – 64	2.0%	11.3%	13.4%
65 or more	1.2%	1.1%	2.3%
Total	11.3%	88.7%	100.0%

As the table shows, 89 percent of caregivers are women and 76 percent of caregivers are women under age 55. This corresponds to the high percentage of wives, fiancées, girlfriends, and mothers who act as the primary caregiver.

In addition to this age-gender information, the survey also provides information on the educational attainment of caregivers. The survey results show that 21 percent of caregivers have no more than a high school education while 33 percent have at least a Bachelor's degree. We used this educational information along with the age-gender distribution and CPS estimates of earnings to compute economic losses for caregivers.

CPS estimates of earnings

In [2] we estimated the average earnings of the general U.S. population for individuals with demographics similar to WII caregivers using the March 2006 Current Population Survey (CPS) from the Bureau of Labor Statistics (BLS). The CPS data contain an array of demographic information on both individuals and households, including earnings, labor force participation, sector of employment (government, military, private, or self-employed), hours typically worked, and veteran status.

Beyond earnings, benefits (e.g., social insurance, health care, disability, life insurance, retirement/pension contributions) constitute a substantial portion of compensation for many workers. Data on benefits can only be estimated from survey data. We obtained information on benefits from the Hay Group [38], a consulting firm that specializes in surveying employers about the cost of the benefits provided to employees. Those in the military have the largest benefits, followed by federal employees and the private sector (where "large" firms provide more benefits than "small" firms and part-time workers receive fewer benefits). For specific earnings and benefits figures for each age-gender-education combination, see [2].

Accordingly, we estimate that the average annual earnings and benefits of caregivers is $45,000 for those employed prior to being a caregiver. The WII survey found that 84 percent of caregivers were either working or in school prior to becoming a caregiver. So factoring in the fact that 16 percent of caregivers are zero earners, the average annual earnings of caregivers is $38,100.[29]

Note that the WII survey asked about the earnings of the job caregivers left before becoming a caregiver. The result was annual earnings of $35,000. Note that our CPS estimate of annual earnings—without imputed benefits—is $34,600 (with benefits, this figure is $45,000). The closeness of these estimates validates our using CPS earnings data to make our estimates.

Estimates of economic impacts

Now that we have estimated (1) how many service members need a caregiver, (2) how long they need a caregiver, and (3) what are the average earnings of caregivers, we can compute average economic losses per caregiver as well as average annual losses across all caregivers.

Assuming that seriously WII service members need caregivers an average of 19 months and that on average their economic losses are $38,100 annually, total economic losses average $60,300 per caregiver.

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[29] Note that while many individuals in school would not have earnings, we do not factor these individuals in as zero earnings because their educational pursuits are linked to improved future earning capacity. By treating these individuals as non-zero earners in our estimates, we are recognizing the economic impact reduced education can have.

Assuming that the average annual number of seriously WII service members needing caregivers is 720, total annual losses across all caregivers is $43.4 million. If we limited the number of seriously WII services members needing caregivers to the roughly 170 VSI cases, total annual losses across all caregivers would be $10.2 million.[30]

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[30] We note for completeness that some may argue that economic losses of caregivers are covered by TSGLI. Regardless of congressional intent, TSGLI is an insurance policy and not required to be used as income replacement for caregivers or anything else. Additionally, if DoD were to pay some form of caregiver compensation or cover average earnings and benefits losses, the cost to DoD would also include the cost of administering the benefit. DFAS estimates the administrative costs to be about $35 per month for each person receiving the benefit

Summary

The purpose of this study was to estimate the economic burdens borne by the family and friends who provide non-medical care, support, and assistance for wounded warriors. We found that injury has an immediate economic impact on service members and families. Categorization of medical conditions as VSI/SI sets in motion ITA orders for family members to travel to the beside. If the medical condition so requires, a medical provider can authorize an NMA at the appropriate time. Service members' pays and tax status change as they move from deployment to hospitalization to outpatient status to eventual return to duty or transition to VA. At the same time, the financial challenges on caregivers begin to mount as they leave work and educational pursuits to be a caregiver. FMLA provides some job protection, but the time away from work under FMLA is unpaid and not all employers are subject to FMLA.

Impact on caregivers

Family and friends face many challenges as caregivers. These include access to information, benefits eligibility, provision of care long-term, employment/earnings loss, and unmet and new financial obligations. Information access is not consistent as it varies by service affiliation and location. Also caregivers who are not DoD beneficiaries do not understand the military system, which causes them difficulty in understanding and navigating the system. Despite this challenge, information for service members and caregivers is improving with the completion of the NRD and the *Compensation and Benefits Handbook*, which detail the recovery, rehabilitation, and reintegration process they are going through and the various resources that are available along the way.

Similarly, benefits eligibility can be a concern. Respite opportunities for caregivers are important as is the ability for TBI and PTSD injured service members to have the benefits of a caregiver. Most resources are available for those combat-injured during OEF/OIF, particularly from charitable organizations that specifically support those groups. Additionally, more benefits seem to be available to those with visible injuries such as amputations than for those with hidden wounds like TBI and PTSD. This is true from both government and non-governmental organizations. TSGLI is harder to get for TBI and not available for PTSD, and some charities target those with visible injures.

To qualify for an NMA (who receives per diem), a service member must require help with some activities of daily living. Generally service members with TBI or PTSD do not need help with these activities, so they do not have NMAs who are on per diem. However, the families of the TBI and PTSD injured must provide a caregiver to remind the service members of appointments, drive them to appointments, and sit with them during appointments because their memories are poor and because they are medically not allowed to drive. Essentially, these caregivers are acting as NMAs without the benefit of per diem.

Beyond, the immediate needs, caregivers face challenges as they ponder the future and how they will handle caregiving long-term and potentially being the primary breadwinner. Education resources such as the New GI bill that allows for the potential transfer of educational benefits from the service member to a spouse (or child) will be helpful.

Our survey of WII service members showed that there is a significant time commitment on the part of caregivers to provide assistance, with 57 percent providing care at least 10 hours per week (for male service members). The effect on caregivers was also evident in the percentage of caregivers with employment, schooling, housing, and childcare impacts. About three out of every four caregivers had quit or taken time off from either work or school. For those working or in school prior to caregiving, this figure is 85 percent. Eleven percent of caregivers had to make housing changes. And new child care arrangements affected a third of caregivers.

Finally, financial obligations affect many caregivers. Thirty-seven percent of caregivers had unmet financial obligations, and 41 percent of caregivers had new financial obligations. Generally, the percentage of caregivers with unmet or additional financial obligations is positively correlated with the number of hours of assistance the caregiver provides each week. The presumption is that more hours of caregiving are associated with more seriously WII service members.

Economic losses of caregivers

As previously mentioned, to estimate the economic impact on the caregivers of the seriously WII, we need to know (1) how many service members need caregivers, (2) how long they need caregivers, and (3) caregivers' average economic losses per time period.

We estimate that the average annual incidence of seriously WII service members needing a caregiver is 720. This estimate is based on the number of "very seriously ill or injured" or "seriously ill or injured" (VSI/SI) service members. We used VSI/SI as a proxy for the seriously WII population because VSI/SI categorization starts the process for family travel to the service member's bedside. Note that this estimate is based on the VSI/SI experience from 2003 through 2008. The implicit assumption is that number of seriously WII going forward will reflect past experience.

How long the seriously WII need caregivers or NMAs is highly variable by case and condition. According to our survey fielded in November 2008, seriously WII service members need a caregiver for an average of 19 months. (Our data call of case managers for a sample of seriously WII indicates that average length of the caregiver period is 15 months.)

We estimate average earnings and benefits losses of caregivers based on earnings data from the Bureau of Labor Statistics' Current Population Survey and with imputed benefits based on survey data. Applying average earnings and benefits from the general population to the age-gender-education distribution of caregivers, we estimate that the average earnings and benefits of caregivers is $38,100 annually or $3,200 per month.

Bringing together the information on the number of service members needing a caregiver each year, how long they need a caregiver, and average losses per caregiver, we estimate that if a caregiver is needed for 19 months, the earnings and benefits losses for a caregiver are $60,300. Across all 720 caregivers, annual economic losses are $43.4 million. If we limit this to the approximate 170 VSI cases, annual losses are $10.2 million.

Appendix A: Survey Instrument

RCS DD-HA(OT2336) Exp 30 Sept 2011

WOUNDED, ILL, AND INJURED

SUPPORT AND ASSISTANCE SURVEY

SURVEY INFORMATION

You have been selected to take part in a survey of service members' experiences during treatment, recovery, and rehabilitation of injuries sustained during active duty. The survey is sponsored by the Deputy Assistant Secretary of the Air Force for Force Management Integration, to support issues important to the Senior Oversight Committee co-chaired by the Deputy Secretary of Defense and the Deputy Secretary of the Department of Veterans Affairs (VA), and is being conducted by the Center for Naval Analyses (CNA), an independent civilian-run company.

PARTICIPATION: COMPLETION OF THIS SURVEY IS ENTIRELY VOLUNTARY. Failure to answer any of the questions will NOT result in any penalties except lack of representation of your opinions in the results of the survey. You may stop taking the survey at any time without penalty. There is no direct benefit to you from filling out this survey; however, your participation may help DoD find ways to improve the provision of support and assistance services.

RISK: The only risk to you is the inappropriate disclosure of your responses. This risk is minimized by procedures that CNA has established to ensure that your responses will be protected, and by not associating your name or other identifying information with your responses.

YOUR RESPONSES TO THIS SURVEY WILL BE KEPT PRIVATE. Because this survey does not collect any personally identifiable information, there is no link between your name, address, or any other identifying information and your completed survey. Your completed survey will be assigned a random respondent code that will be used when your responses are stored by CNA and in all analyses CNA performs. Neither your name nor any personal identifiers will be associated with any of your responses. You can be assured that your individual responses will be reported only in combination with other responses, in aggregate form.

QUESTIONS: If you have any questions about this survey, please contact the CNA Project Director at The Center for Naval Analyses, Wounded, Ill and Injured Survey, 4825 Mark Center Drive, Alexandria, VA 22311; or you may send an email to WII-survey@cna.org.

PROTECTION OF HUMAN SUBJECTS: The protocol for this survey (Protocol Number NNMC.2008.0050) has been reviewed by the National Naval Medical Center (NNMC), with a secondary review by the Office of the Under Secretary of Defense (Personnel & Readiness) (OUSD/P&R). For any questions about your rights as a human subject participating in this survey, call the NNMC at 301-295-2275, or OUSD/P&R at 703-575-2677 or hrpp@tma.osd.mil.

INFORMED CONSENT: By completing this survey and returning it, you voluntarily agree to participate in this survey.

Please TURN THE PAGE to Section A to complete the survey now.

➡

INSTRUCTIONS: Please check your response to each question, and write in information where applicable. RCS DD-HA(OT2336) Exp 30 Sept 2011

A. INTRODUCTION

1. When did you first receive your current wound, illness, or injury?

___ / _____
MM YYYY

2. Where did you **first** receive treatment in the Continental U.S.?
   - ☐ Brooke Army Medical Center, Ft. Sam Houston
   - ☐ National Naval Medical Center, Bethesda
   - ☐ Walter Reed Army Medical Center, Washington DC
   - ☐ Blanchfield Army Community Hospital, Ft. Campbell
   - ☐ Darnall Army Medical Center, Ft. Hood
   - ☐ Eisenhower Army Medical Center, Ft. Gordon
   - ☐ Madigan Army Medical Center, Ft. Lewis
   - ☐ Naval Hospital Camp Lejeune, North Carolina
   - ☐ Naval Hospital Camp Pendleton, California
   - ☐ Womack Army Medical Center, Ft. Bragg
   - ☐ Other Military Hospital (name, location): ____________________
   - ☐ VA Medical Center (name, location): ____________________
   - ☐ Other: (name, location) ____________________

3. How long did you stay, or have you been, at your **first** medical treatment facility in CONUS?
   - ☐ Less than 1 month
   - ☐ 1 – 2 months
   - ☐ 3 – 4 months
   - ☐ More than 4 months

4. Where are you **currently** receiving treatment?
   - ☐ Brooke Army Medical Center, Ft. Sam Houston
   - ☐ National Naval Medical Center, Bethesda
   - ☐ Walter Reed Army Medical Center, Washington DC
   - ☐ Blanchfield Army Community Hospital, Ft. Campbell
   - ☐ Darnall Army Medical Center, Ft. Hood
   - ☐ Eisenhower Army Medical Center, Ft. Gordon
   - ☐ Madigan Army Medical Center, Ft. Lewis
   - ☐ Naval Hospital Camp Lejeune, North Carolina
   - ☐ Naval Hospital Camp Pendleton, California
   - ☐ Womack Army Medical Center, Ft. Bragg
   - ☐ Other Military Hospital (name, location): ____________________
   - ☐ VA Medical Center (name, location): ____________________
   - ☐ Other (name, location): ____________________

5. If you moved to another medical treatment facility in the Continental U.S., why did you move? *(Check all that apply)*
   - ☐ The current facility better suits my medical needs
   - ☐ To be closer to family
   - ☐ To be closer to parent command
   - ☐ Other: ____________________
   - ☐ Did not move facilities

B. SUPPORT AND ASSISTANCE

6. Do you have a family member, loved one or friend that has supported or assisted you in your treatment, rehabilitation, and recovery transition?
   - ☐ Yes
   - ☐ No **[SKIP TO Section D – LAST PAGE]**

7. Among your family, friends and loved ones, who has been supporting or assisting you? *(Check all that apply)*
   - ☐ Wife
   - ☐ Husband
   - ☐ Fiancée
   - ☐ Fiancé
   - ☐ Girlfriend
   - ☐ Boyfriend
   - ☐ Mother
   - ☐ Father
   - ☐ Sister
   - ☐ Brother
   - ☐ Daughter
   - ☐ Son
   - ☐ Other Female Relative
   - ☐ Other Male Relative
   - ☐ Female Non-relative
   - ☐ Male Non-relative

8. Who has been your **primary** support person (the person that has spent the most time supporting and assisting you)? *(Check only one)*
   - ☐ Wife
   - ☐ Husband
   - ☐ Fiancée
   - ☐ Fiancé
   - ☐ Girlfriend
   - ☐ Boyfriend
   - ☐ Mother
   - ☐ Father
   - ☐ Sister
   - ☐ Brother
   - ☐ Daughter
   - ☐ Son
   - ☐ Other Female Relative
   - ☐ Other Male Relative
   - ☐ Female Non-relative
   - ☐ Male Non-relative

9. How old is your primary support person?
   - ☐ Under 30 years old
   - ☐ 30 – 39 years
   - ☐ 40 – 54 years
   - ☐ 55 – 64 years
   - ☐ 65 years and older

10. How far away does your primary support person live from where you are receiving treatment?
    - ☐ In the general area (within 50 miles)
    - ☐ 50-100 miles
    - ☐ 100-200 miles
    - ☐ More than 200 miles

11. What is the highest level of education your primary support person has completed?
    - ☐ Less than high school completion
    - ☐ High school degree/GED/equivalent
    - ☐ Some college, no degree
    - ☐ Associate's degree
    - ☐ Bachelor's degree
    - ☐ Master's, doctorate, or professional degree
    - ☐ Do not know

12. How did this person travel from their home to be with you? *(Check all that apply)*
    - ☐ Their own car
    - ☐ Airplane or train
    - ☐ Rental car
    - ☐ Taxi or bus

13. Where does this person stay while assisting you?
    - ☐ Their own apartment/house – they live close enough to commute
    - ☐ With nearby family or friends
    - ☐ They are renting a room/apartment/house
    - ☐ In a hotel/motel
    - ☐ In housing provided by the hospital or medical center
    - ☐ In housing provided by the military or a government agency
    - ☐ In housing provided by a non-government organization
    - ☐ Other

14. How does this person travel locally to be with you each day? *(Check all that apply)*
    - ☐ Their own car
    - ☐ Rental car
    - ☐ Taxi, bus, subway
    - ☐ Shared ride – shuttle, friends
    - ☐ They are close enough to walk
    - ☐ Other

C. LIFESTYLE CHANGES

The next set of questions is about any lifestyle changes your PRIMARY support person has had to make in order to support or assist you.

15. Have they done any of the following in order to come help you? *(Check all that apply)*
    - ☐ Sold their house or apartment
    - ☐ Let go of the lease on their house or apartment
    - ☐ Bought an house or apartment close by
    - ☐ Rented a house or apartment close by
    - ☐ None of the above

16. Were they working at a paid job before they came to help you?
    - ☐ No **[SKIP TO Question 20]**
    - ☐ Yes **[GO TO Question 17]**

    17. Did they quit their job to come help you?
        - ☐ No **[SKIP TO Question 20]**
        - ☐ Yes

    18. What was their approximate annual income in the job they left?
        - ☐ Less than $25,000
        - ☐ $25,000 to $49,999
        - ☐ $50,000 to $74,999
        - ☐ $75,000 to $99,999
        - ☐ $100,000 or more

    19. Are they currently looking for a job?
        - ☐ Yes – they are looking for a job
        - ☐ No – they are not looking for a job

20. Are they currently working at a paid job?
    - ☐ No **[SKIP TO Question 23]**
    - ☐ Yes **[GO TO Question 21]**

    21. Have they had to take time off from their job to come help you? *(Check all that apply)*
        - ☐ No
        - ☐ Yes – they are using their vacation time
        - ☐ Yes – they are on unpaid leave from their job
        - ☐ Yes – they cut back their hours

    22. What is their current approximate annual income?
        - ☐ Less than $25,000
        - ☐ $25,000 to $49,999
        - ☐ $50,000 to $74,999
        - ☐ $75,000 to $99,999
        - ☐ $100,000 or more

23. Did they have to quit or take time off from school to come help you?
    - ☐ They were not in school
    - ☐ No
    - ☐ Yes – they quit school
    - ☐ Yes – they are taking time off from school

24. How many children have they had to place in child care or someone else's care in order to be able to help you?
    - ☐ None
    - ☐ 1 child
    - ☐ 2 children
    - ☐ 3 or more children

25. In an average week, how much time does this person spend assisting and supporting you?
    - ☐ 10 hours or less
    - ☐ 11 – 20 hours
    - ☐ 21 – 30 hours
    - ☐ 31 – 40 hours
    - ☐ More than 40 hours

26. What personal financial obligations has this person continued to have while assisting you? *(Check all that apply)*
    - ☐ Rent or mortgage payments
    - ☐ Car payments/insurance
    - ☐ Health insurance
    - ☐ Care givers for other family members (not including child care)

27. Have there been any financial obligations this person has been unable to meet while they have been assisting you? *(Check all that apply)*
    - ☐ Rent or mortgage payment
    - ☐ Car payment/insurance
    - ☐ Health insurance
    - ☐ Credit card payment
    - ☐ Installment loan
    - ☐ Other: ______________________________

28. Has this person taken on additional financial obligations while they have been assisting you? *(Check all that apply)*
    - ☐ Taken out loans
    - ☐ Home equity line of credit
    - ☐ New/additional credit card debt
    - ☐ Borrowed money from family or friends
    - ☐ Other: ______________________________

29. How long has your primary support person been at your side?
    - ☐ Less than one month
    - ☐ 1 – 3 months
    - ☐ 4 – 6 months
    - ☐ 7 – 9 months
    - ☐ 10 – 12 months
    - ☐ More than 12 months

30. How much longer do you expect to have your primary support person at your side?
    - ☐ Less than one month
    - ☐ 1 – 3 months
    - ☐ 4 – 6 months
    - ☐ 7 – 9 months
    - ☐ 10 – 12 months
    - ☐ They may need to care for me for the long-term future, perhaps the rest of my life

D. DEMOGRAPHICS

31. What was your military status when you received your wound, illness, or injury?
    - ☐ Active Component
    - ☐ Guard / Reserve Component

32. With which service are you affiliated?
    - ☐ Army
    - ☐ Navy
    - ☐ Air Force
    - ☐ Marine Corps

33. What is your pay grade?
    - ☐ E1 – E3
    - ☐ E4 – E6
    - ☐ E7 – E-9
    - ☐ O1 – O3
    - ☐ O4 and up

34. Are you...?
    - ☐ Male
    - ☐ Female

35. How old are you?

    __________ years

36. What is your current marital status?
    - ☐ Single, never married
    - ☐ Married
    - ☐ Separated
    - ☐ Divorced
    - ☐ Widowed

37. How many children under the age of 21 do you have or provide care for?
    - ☐ None
    - ☐ 1 child
    - ☐ 2 children
    - ☐ 3 or more children

38. How many years of military service do you have?

    _____________ years

39. What is the highest level of education you have completed?
    - ☐ Less than high school completion
    - ☐ High school degree/GED/equivalent
    - ☐ Some college, no degree
    - ☐ Associate's degree
    - ☐ Bachelor's degree
    - ☐ Master's, doctorate, or professional degree

40. Did you have to obtain information from your primary support person in order to complete this survey?
    - ☐ Yes
    - ☐ No

Please share any additional comments on the financial hardships you or your primary support person are experiencing due to your current wound, injury, or illness below.

____

____

____

THANK YOU!

Appendix B: Survey Results

The tables in this appendix show the weighted responses to each survey question.

Question 1

When did you first receive your current wound, illness, or injury? (n=237)

Year	Percent
2001	0.5%
2002	1.0%
2003	9.3%
2004	14.8%
2005	11.1%
2006	23.6%
2007	21.3%
2008	18.4%

Question 2

Where did you first receive treatment in the Continental U.S.? (n=231)

Location	Percent
Walter Reed Army Medical Center, Washington DC	29.4%
National Naval Medical Center, Bethesda	15.2%
Naval Medical Center San Diego, CA	6.3%
Womack Army Medical Center, Ft. Bragg	7.8%
Brooke Army Medical Center, Ft. Sam Houston	10.6%
Naval Hospital Camp Pendleton, CA	4.7%
Darnall Army Medical Center, Ft. Hood	2.8%
Naval Medical Center Portmouth, VA	2.4%
Naval Hospital Camp Lejeune, NC	3.4%
Wilford hall Medical Center, Lackland AFB, TX	3.0%
Madigan Army Medical Center, Ft. Lewis	7.9%
Eisenhower Army Medical Center, Ft. Gordon	6.2%
Other MTF	0.3%

Question 3

How long did you stay, or have you been, at you first medical treatment facility in CONUS?
(n=239)

Time	Percent
Less than 1 month	33.5%
1 - 2 months	25.6%
3 - 4 months	10.3%
More than 4 months	30.6%

Question 4

Where are you currently receiving treatment?
(n=219)

Location	Percent
Walter Reed Army Medical Center, Washington DC	4.3%
National Naval Medical Center, Bethesda	2.0%
Naval Medical Center San Diego, CA	16.6%
Womack Army Medical Center, Ft. Bragg	6.1%
Brooke Army Medical Center, Ft. Sam Houston	3.8%
Naval Hospital Camp Pendleton, CA	5.5%
Darnall Army Medical Center, Ft. Hood	4.0%
Naval Medical Center Portmouth, VA	0.4%
Naval Hospital Camp Lejeune, NC	5.9%
Wilford hall Medical Center, Lackland AFB, TX	0.3%
Madigan Army Medical Center, Ft. Lewis	3.6%
Eisenhower Army Medical Center, Ft. Gordon	1.0%
Other MTF	12.6%
Civilian hospital	7.6%
VA Medical Center	17.9%
No current treatment	8.4%

Question 5

If you moved to another medical treatment facility in the Continental U.S., why did you move?
(n=248)

Reason	Percent
The current facility better suits my medical needs	15.7%
To be closer to family	16.7%
To be closer to parent command	18.8%
Did not move facilities	35.3%
Other	16.2%

Question 6

Do you have a family member, loved one or friend that has supported or assisted you in your treatment, rehabilitation, and recovery transition?
(n=248)

Response	Percent
No	10.5%
Yes	89.5%

Question 7

Among your family, friends and loved ones, who has been supporting or assisting you?
(n=248)

Person	Percent
Wife	47.6%
Husband	1.5%
Fiancee	3.7%
Fiance	1.6%
Girlfriend	10.5%
Boyfriend	0.0%
Mother	50.4%
Father	37.9%
Sister	20.9%
Brother	19.8%
Daughter	9.6%
son	10.6%
Other Female Relative	8.8%
Other Male Relative	7.1%
Female Non-relative	15.1%
Male Non-relative	21.0%

Question 8
Who has been your primary support person (the person that has spent the most time supporting and assisting you)?
(n=212)

Person	Percent
Wife	53.5%
Husband	1.6%
Fiancee	1.8%
Fiance	1.4%
Girlfriend	5.2%
Mother	18.7%
Father	3.7%
Sister	2.3%
Brother	2.1%
Other Female relative	3.4%
Femaler Non-relative	3.3%
Male Non-relative	3.3%

Question 9
How old is your primary support person?
(n=212)

Age	Percent
Under 30 years old	30.5%
30-39 years old	30.1%
40-54 years	23.7%
55-64 years	13.4%
65 years and older	2.3%

Question 10
How far away does your primary support person live from where you are receiving treatment?
(n=210)

Distance	Percent
In the general area (within 50 miles)	53.9%
50-100 miles	9.8%
100-200 miles	3.7%
More than 200 miles	32.6%

Question 11

What is the highest level of education your primary support person has completed?
(n=209)

Education	Percent
Less than high school	1.2%
High school degree/GED/equivalent	19.6%
Some college, no degree	34.1%
Associate's degree	11.8%
Bachelor's degree	21.6%
Master's, doctorate, or professional degree	11.7%

Question 12

How did this person travel from their home to be with you?
(n=248)

Transportation	Percent
Their own car	55.2%
Airplane or train	33.1%
Rental car	6.4%
Taxi or bus	1.0%

Question 13

Where does this person stay while assisting you?
(n=202)

Housing	Percent
Their own apartment/house-they live close enough to commute	35.0%
With nearby family or friends	0.9%
They are renting a room/apartment/house	0.9%
In a hotel/motel	14.8%
In housing provided by the hospital or medical center	9.8%
In housing provide by the military or a government agency	9.1%
Other	29.5%

Question 14

How does this person travel locally to be with you each day?
(n=248)

Transportation	Percent
Their own car	42.0%
Rental car	11.0%
Taxi, bus, subway	1.5%
Shared ride - shuttle, friends	3.5%
They are close enough to walk	10.2%
Other	20.4%

Question 15

Have they done any of the following in order to come help you?
(n=248)

Action	Percent
Sold their house or apartment	2.2%
Let go of the lease on their house or apartment	5.3%
Bought a house or apartment close by	2.1%
Rented a house or apartment close by	4.9%
None of the above	73.7%

Question 16

Were they working at a paid job before they came to help you?
(n=214)

Working	Percent
No	24.0%
Yes	76.0%

Question 17

Did they quit their job to come help you?
(n=159)

Quit Work	Percent
No	64.4%
Yes	35.6%

Question 18

What was their approximate annual income in the job they left?
(n=59)

Amount	Percent
Less than $25,000	30.6%
$25,000 to $49,999	50.5%
$50,000 to $74,999	17.1%
$75,000 to $99,999	1.7%

Question 19

Are they currently looking for a job?
(n=58)

Currently looking for work	Percent
No	53.1%
Yes	46.9%

Question 20

Are they currently working at a paid job?
(n=216)

Currently working	Percent
No	40.0%
Yes	60.0%

Question 21

Have they had to take time off from their job to come help you?
(n=248)

Time off	Percent
Yes - they are using their vacation time	20.4%
Yes - they are on unpaid leave from their job	16.3%
Yes - they cut back their hours	10.9%
No	16.1%

Question 22

What is their current approximate annual income?
(n=117)

Amount	Percent
Less than $25,000	29.6%
$25,000 to $49,999	43.6%
$50,000 to 74,999	20.2%
$75,000 to $99,999	1.5%
$100,000 or more	5.1%

Question 23

Did they have to quit or take time off from school to come help you?
(n=216)

Schooling status	Percent
They were not in school	72.3%
No	9.9%
Yes - they quit school	4.5%
Yes - they are taking time off from school	13.2%

Question 24

How many children have they had to place in child care or someone else's care in order to be able to help you?
(n=215)

Number	Percent
None	65.72%
1 child	13.55%
2 children	16.49%
3 or more children	4.24%

Question 25

In an average week, how much time does this person spend assisting and supporting you?
(n=213)

Hours	Percent
10 hours or less	44.0%
11 - 20 hours	18.1%
21 - 30 hours	8.2%
31 - 40 hours	7.4%
More than 40 hours	22.4%

Question 26

What personal financial obligations has this person continued to have while assisting you?
(n=248)

Obligation	Percent
Rent or mortgage payment	61.8%
Car payments/insurance	61.3%
Health insurance	32.5%
Care givers for other family members (not including child care)	13.6%

Question 27

Have there been any financial obligations this person has been unable to meet while they have been assisting you?
(n=248)

Obligation	Percent
Rent or mortgage payment	12.9%
Car payment/insurance	8.3%
Health insurance	7.2%
Cred card payment	21.5%
Installment loan	6.0%
Other	6.1%

Question 28

Has this person taken on additional financial obligations while they have been assisting you?
(n=248)

Obligation	Percent
Taken out loans	8.3%
Home equity line of credit	3.2%
New/additional credit card debt	15.8%
Borrowed money from family or friends	24.4%
Other	0.0%

Question 29

How long has your primary support person been at your side?
(n=209)

Months	Percent
Less than one month	6.6%
1 - 3 months	12.1%
4 - 6 months	9.2%
7 - 9 months	3.1%
10 - 12 months	5.1%
More than 12 months	63.9%

Question 30

How much longer do you expect to have your primary support person at your side?
(n=209)

Months	Percent
Less than one month	21.8%
1 - 3 months	6.2%
4 - 6 months	4.1%
7 - 9 months	3.0%
10 - 12 months	9.9%
They may need to care for me for the long-term future, perhaps the rest of my life	43.0%

Question 31

What was your military status when you received your wound, illness, or injury?
(n=248)

Component	Percent
Active Component	80.0%
Guard/Reserve Component	20.0%

Question 32

With which service are you affiliated?
(n=238)

Service	Percent
Army	50.6%
Navy	6.9%
Air Force	6.0%
Marine Corps	36.5%

Question 33

What is your pay grade?
(n=248)

Pay Grade	Percent
E1 - E3	13.4%
E4 - E6	48.1%
E7 - E9	23.2%
O1 - O3	8.2%
O4 and up	7.1%

Question 34

Are you female or male?
(n=247)

Gender	Percent
Female	5.2%
Male	94.8%

Question 35

How old are you?
(n=246)

Age	Average
Average age in years	34.3

Question 36

What is your current marital status?
(n=247)

Marital Status	Percent
Single, never married	28.5%
Married	51.7%
Separated	4.3%
Divorced	15.6%
Widowed	0.0%

Question 37

How many children under the age of 21 do you have or provide care for?
(n=246)

Amount	Percent
None	48.4%
1 child	19.3%
2 children	21.7%
3 or more children	10.7%

Question 38

How many years of military service do you have?
(n=247)

Military service	Average
Average years of military service	10.8

Question 39

What is the highest level of education you have completed?
(n=248)

Education	Percent
High school degree/GED/equivalent	23.2%
Some college, no degree	40.4%
Associate's degree	12.7%
Bachelor's degree	16.7%
Master's, doctorate, or professional degree	7.0%

Question 40

Did you have to obtain information from your primary support person in order to complete this survey?
(n=245)

Response	Percent
No	83.7%
Yes	16.3%

List of Tables

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