

**2013-2014 Behavioral Health Risk  
Assessment Data Report (BH-RADR)**

PHR No. S.0008056-14

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**Clinical Public Health and Epidemiology Directorate**  
**Division of Behavioral and Social Health Outcomes Practice**

**2013-2014 Behavioral Health Risk Assessment Data Report  
(BH-RADR)**

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**2013-2014 Behavioral Health Risk Assessment Data Report**

## **1 Summary**

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### **1.1 Purpose**

The US Army has implemented systematic screening processes to identify Soldiers at risk for behavioral health (BH) outcomes at Touch Points (TP) during the Army Force Generation (ARFORGEN) cycle. In order to improve individual and unit readiness, it is imperative that the findings from the screenings are used to target appropriate interventions at multiple levels to prevent negative outcomes. The inaugural BH-RADR used 2011 data from only two TPs (184,912 PDHAs and 109,602 PDHRAs) to analyze self-reported risk for BH-related outcomes. The current report includes two years of data and 1,508,504 analyzed health assessments. This report characterizes self-reported risks for BH-related outcomes such as post-traumatic stress disorder (PTSD) symptoms, depression symptoms, and hazardous drinking behavior using the health assessment survey data. The information included in the current report presents data from 2013 through 2014 on all Army Soldiers who completed TP1: Pre-Deployment Health Assessment (Pre-DHA); TP3: Post Deployment Health Assessment (PDHA); TP4: Post Deployment Health Re-Assessment (PDHRA); and/or TP5: Periodic Health Assessment (PHA).

Army leadership can use the findings in the current report to target intervention efforts to identify at-risk Soldiers and subsequently prevent negative outcomes. The data is useful for targeting many aspects within Army culture including the individual Soldier's personal risk and protective factors; interactions with the Soldier's Family; and the company, battalion, and brigade policies and practices.

### **1.2 Findings**

- During 2013 and 2014, Army Soldiers completed 348,899 Pre-DHAs, 212,155 PDHAs, 191,124 PDHRAs, and 1,437,448 PHAs. The current report included the most recently completed health assessment at each TP per Soldier resulting in 203,823 Pre-DHAs, 184,383 PDHAs, 184,747 PDHRAs, and 935,549 PHAs. Compared to the 2011 BH-RADR<sup>1</sup>, the TP populations in the current report are a better representation of the total Army population who should be completing the health assessments.
- The proportion of Soldiers screening positive on the Primary Care – Post Traumatic Stress Disorder (PC-PTSD) tool varied across the deployment-related health assessments: 4% positive at TP1, 9% positive at TP3, and 13% at TP4. These findings are consistent with a previous study that reported an increase in PTSD symptoms after Soldiers return from deployment with the highest levels displayed at TP4.<sup>2</sup>
- During TP1, TP4, and TP5, 13-19% of the Soldiers who completed the PTSD Checklist – Civilian (PCL-C) and/or Patient Health Questionnaire – 8 (PHQ-8) reported moderate to severe PTSD symptoms and/or depression symptoms and reported the symptoms made it very or extremely difficult to function. Among those Soldiers, 83-89% had at least one BH encounter prior to the TP. This may indicate that Soldiers at the highest risk (clinical impairment) have already sought and/or are under care prior to the health assessment. If the majority of the high risk Soldiers sought care and/or were already under care prior to the health assessment, this may explain why only 50-55% of those Soldiers were referred by the healthcare provider administering the health assessment.

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- During TP1 and TP4, 99% of the Soldiers who screened positive on the PC-PTSD completed the PCL-C and 99% who screened positive on the Patient Health Questionnaire – 2 (PHQ-2) completed a PHQ-8 (the PCL-C and PHQ-8 were not available at TP3). Compared to the 2011 BH-RADR findings, the Army's transition to electronic administration versus paper administration of the health assessments has greatly improved the compliance and completeness of the BH screening process.
- Self-reported hazardous drinking behavior on the Alcohol Use Disorders Identification Tool – Consumption (AUDIT-C) varied substantially between TP3 and TP4 with 4% and 16%, respectively, reporting hazardous drinking behavior. This finding supports the recommendation to target prevention efforts during the 6 months following reintegration.
- At TP5, previously deployed Soldiers screened substantially higher on the PC-PTSD and PHQ-2 compared to Soldiers reporting no deployments in the past 5 years (PC-PTSD: 13% v 4%; PHQ-2: 10% v 5%). Conversely, differences in the positive AUDIT-C screenings were less substantial with 10% of previously deployed and 8% of non-deployed Soldiers reporting hazardous drinking behavior. While it is expected to see an increase in PTSD and depression symptoms in the previously deployed population<sup>2-3</sup>, the findings suggest hazardous drinking behavior remains a concern across the entire Army population. Hazardous drinking behavior in the Army has been linked to elevated motor vehicle injuries/deaths, suicides, homicides, and legal issues.<sup>4</sup> Evolving Army culture and experiences may pose unique risk factors for Soldiers. Therefore, healthcare providers and leadership should continue to be vigilant to identify and adapt prevention and treatment efforts.
- Consistent with previous studies<sup>2,5-7</sup>, a larger proportion of Soldiers who reported combat exposure screened positive for PTSD symptoms (TP3, 19%; TP4, 22%) and depression symptoms (TP3, 9%; TP4, 10%) than those reporting no combat exposure.
- Across all TPs, over a third (36-44%) of Soldiers had a history of at least one BH encounter prior to the TP. Future reports aim to further characterize this finding to monitor changes in BH utilization over time.
- Of Soldiers with no prior BH history, 93-99% did not receive a BH referral from the provider administering the health assessment and of those 5-11% had their first BH encounter within 6 months after the TP. This population represents Soldiers new to the Army's clinical BH care system who sought care outside the required TP screenings. Information on non-clinical BH care provided by Chaplains, Military OneSource, Family Advocacy Program, or other support programs was not available for the current report. Future reports will explore this population to identify demographic or military characteristics that may differ from the Soldiers who received a referral and/or Soldiers with a BH history prior to the TPs.

## 2 References

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See Appendix A.

## 3 Authority

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Army Regulation (AR) 40-5 (Preventive Medicine, 25 May 2007), Section 2-19.

## 4 Background

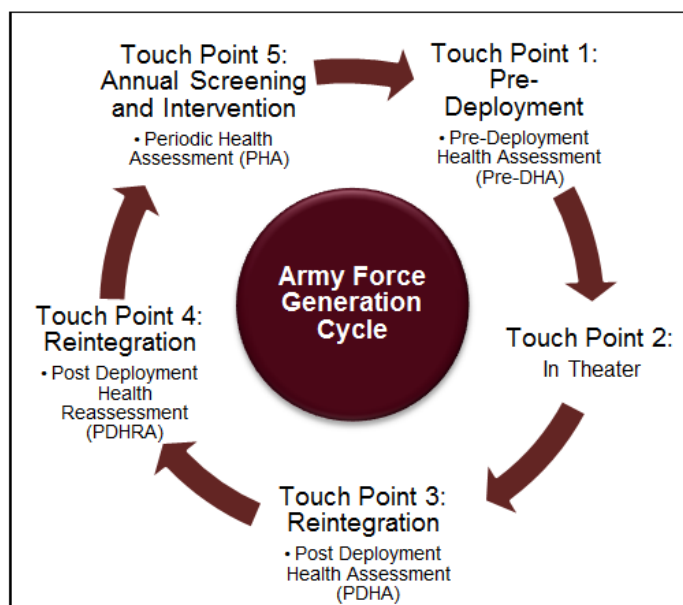
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The Behavioral and Social Health Outcomes Practice (BSHOP) Division of the Army Public Health Center (APHC) collects, analyzes, and disseminates surveillance data on behavioral health (BH)

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risk among active-duty (Regular Army), activated National Guard, and activated Army Reserve Soldiers in the US Army. The Behavioral Health Risk Assessment Data Report (BH-RADR) describes the characteristics of Soldiers who completed a behavioral health BH screening at four Touch Points (TP) of the Army Force Generation (ARFORGEN) cycle. This publication characterizes self-reported risk for BH-related outcomes such as PTSD symptoms, depression symptoms, and hazardous drinking behavior. The information included in this publication presents data from Soldiers who completed a Pre-Deployment Health Assessment (Pre-DHA)<sup>8</sup>, Post Deployment Health Assessment (PDHA)<sup>9</sup>, Post Deployment Health Re-Assessment (PDHRA)<sup>10</sup>, and/or Periodic Health Assessment (PHA)<sup>11</sup> during 2013 and 2014. These data were also linked to administrative medical data to assess healthcare utilization before and after the screening. For this report, the terms depression symptoms and post-traumatic stress disorder (PTSD) symptoms refer to a Soldier's self-response to items on the screening instruments while the terms major depressive disorder (MDD) and PTSD refer to a diagnosis in the Soldier's medical records.

Deployment health assessments are congressionally mandated and developed by the Department of Defense (DoD). The ARFORGEN model became policy via Army Regulation 525-29 and consists of five TPs (Figure 1). The Pre-DHA is completed within 120 days prior to a Soldier's deployment (TP1), the PDHA is completed +/- 30 days following return from deployment (TP3), the PDHRA is completed 90–180 days following return from deployment (TP4), and the PHA is completed every year during the Soldier's birth month (TP5). BSHOP does not receive data from BH screenings conducted in theater (TP2).



**Figure 1. BH Screening TPs in the ARFORGEN Cycle**

The DoD implemented new versions of the Pre-DHA, PDHA, and PDHRA in September 2012. In addition to incorporating an enhanced two-stage BH screening process, the health assessments are now completed electronically using service-specific data systems. For the Army, the health assessments are completed using the Medical Protection System (MEDPROS).



## 5 Methods

BH-related medical data any time prior or within 6 months following the TPs are reported in this publication. Counts and proportions of BH diagnoses and BH encounters were obtained from the Military Health System Data Repository (MDR) which includes the Comprehensive Ambulatory/Provider Encounter Record -Enhanced (CAPER), the Standard Ambulatory Data Record (SADR), the Standard Inpatient Data Record (SIDR), the TRICARE Encounter Data Institutional (TEDI), and the TRICARE Encounter Data Non-Institutional (TED-NI). This report utilizes ten categories to define a BH diagnosis (Table 1). The categories include adjustment disorders, alcohol use disorders, anxiety disorders (excludes PTSD), bipolar disorders, MDD, other depressive disorders, personality disorders, psychoses, PTSD, and substance use disorders (excluding tobacco use). For inpatient records, a BH International Classification of Disease Codes, 9<sup>th</sup> Edition (ICD-9) code in any diagnostic position (Dx1-Dx8) was counted as a BH diagnosis. For outpatient records, a BH ICD-9 code in the first diagnostic position (Dx1) was considered a diagnosis; this is based on a Healthcare Effectiveness Data and Information Set (HEDIS) guideline from the National Committee for Quality Assurance (NCQA). BH ICD-9 codes in the second through fourth outpatient diagnostic positions (Dx2-Dx4) indicate a BH diagnosis only if a second code from the same group of BH ICD-9 codes occurred in Dx2-Dx4 within a year, but not on the same day. An incident BH diagnosis refers to a new diagnosis among one of the 10 BH diagnosis categories listed in Table 1 within 6 months after the screening.

**Table 1. ICD-9 Codes Used to Construct BH Diagnoses**

BH Diagnoses	ICD-9 Codes <sup>a</sup>
Adjustment Disorders	309-309.8, 309.82-309.9
Alcohol Use Disorders	291, 303-305.0
Anxiety Disorders (excludes PTSD)	300.0, 300.10, 300.2, 300.3
Bipolar Disorders	296.0, 296.4-296.8
MDD	296.2-296.3
Other Depressive Disorders	296.99, 300.4, 311
Personality Disorders	301
Psychoses	290.8, 290.9, 295, 297, 298
PTSD	309.81
Substance Use Disorders (excluding tobacco use)	291, 292, 303-305.0, 305.2-305.9

Notes: <sup>a</sup> Each code includes all subordinate codes, (e.g., 301 includes 301.0-301.9).

HEDIS guidelines do not apply to reporting BH encounters. A BH encounter is any BH-related ICD-9 code or BH-related V or E code (Table B-2) in the Soldier's medical record (inpatient Dx1-Dx8 or outpatient Dx1-Dx4) from any provider. Incident BH encounters described in this report refer ONLY to those Soldiers with no BH encounters prior to the TP screening, but at least one BH encounter within 6 months after the TP screening.

Soldiers with an incident BH encounter represent those new to the clinical BH care system and reflect the increased behavioral health demand the Army experiences during the 6 months following each health assessment. Information on non-clinical BH care provided by Chaplains, Military OneSource, Family Advocacy Program, or other support programs was not available for the current report. In addition, period prevalent diagnoses represent the overall burden of behavioral health issues among the screened population. The incidence and period prevalence findings are not mutually exclusive and aim to illustrate two timeframes of care utilization and burden. This report

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utilizes administrative electronic medical records from a Soldier's Army career while covered under the Army's healthcare program. The findings do not include any clinical record reviews, only encounter and diagnostic indicators from administrative medical data.

Refer to Appendix B for available data elements and a detailed description of the variables used in each section.

Period prevalent BH diagnosis refers to any BH diagnosis prior to the screening or within 6 months after the screening.

Incident BH diagnosis refers to a new diagnosis of one of the 10 BH diagnosis categories listed in Table 1 within 6 months after the screening. By this definition, a Soldier with prior BH history can be counted as an incident diagnosis if the diagnosis is the first diagnosis in a given category. For example, a Soldier with a history of MDD prior to the screening and a first PTSD diagnosis occurring within 6 months after the screening would be considered to have an incident diagnosis of PTSD.

Incident BH encounter refers to any ICD-9 code, V code, or E code within 6 months after the screening among Soldiers with no prior BH history (Appendix B).

Positive PCL-C was defined as a score of 40 or greater (range: 17-85).

Positive PHQ-8 was defined as a score of 15 or greater (range: 0-24).

Clinical Level PTSD refers to a score of 40 or greater on the PCL-C and a self-reported level of functioning of "Very Difficult" or "Extremely Difficult."

Clinical Level Depression refers to a score of 15 or greater on the PHQ-8 and self-reported level of functioning of "Very Difficult" or "Extremely Difficult."

Denominators for specific self-reported variables may vary 1-3% due to missing or incomplete information.

This report provides valuable information on Soldier risk; however, several important caveats must be considered when interpreting the data. First, the screening data is self-reported and subject to recall bias and underreporting. Second, the outcomes reported in this document are not exhaustive. Third, this report only includes medical information from the military healthcare system and does not contain data for BH care or treatment a Soldier received prior to joining the Army or BH care obtained through private insurance. Therefore, results could underestimate the true burden of disease. Fourth, period prevalence data (proportions calculated for single time periods) are not necessarily representative of past or future time points. Finally, the data presented here are proportions and not rates. Although proportions are appropriate for public health planning, potential differences in the underlying U.S. Army population over time are not taken into account.

During 2013 and 2014, Army Soldiers completed 348,899 Pre-DHA, 212,155 PDHA, 191,124 PDHRA, and 1,437,448 PHA forms. For each TP, the most recent health assessment completed by each Soldier during 2013 and 2014 is utilized in the analysis. This method ensures that each individual Soldier is represented only once in each TP population (Figure 2).

Unless otherwise indicated, after each subtitle (e.g., demographic characteristics) the summary paragraph presents prevalence of key characteristics and behaviors during the specified screening period and incident BH indicators within 6 months after the screening.

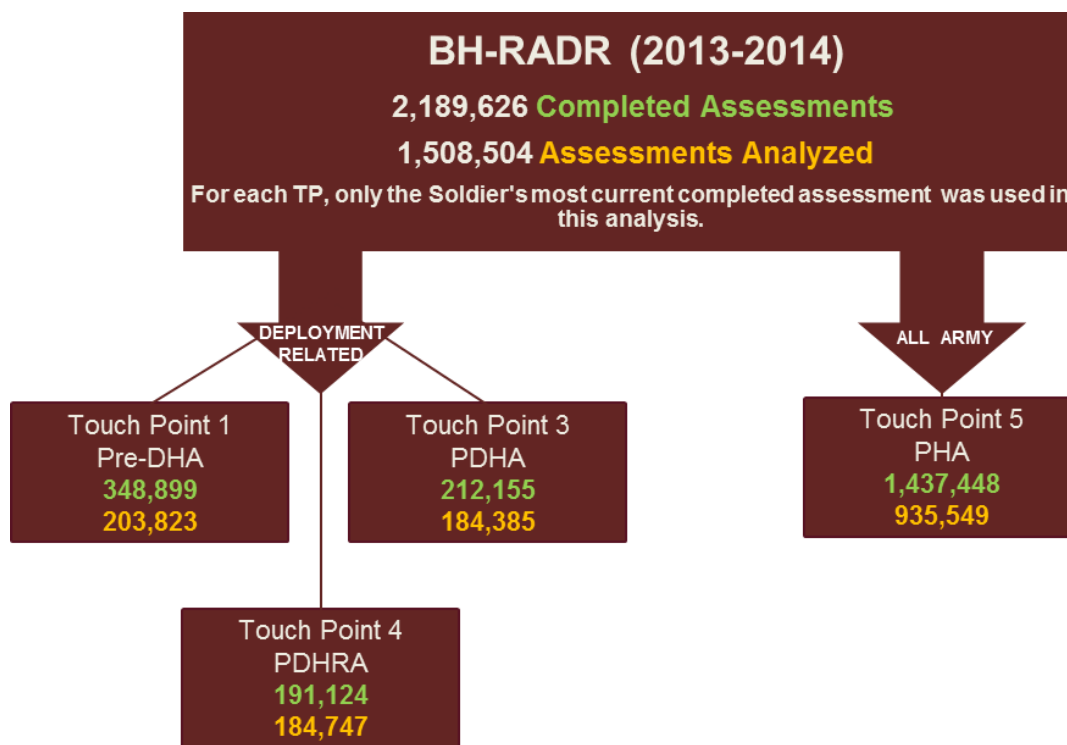


Figure 2. Health Assessments Completed and Analyzed, 2013-2014

## 6 Findings and Discussion

### 6.1 Demographics, Military Characteristics, BH Screening, Incident, and Prevalent Diagnoses across All Touch Points

Across all TPs, the majority of Soldiers were enlisted males between the ages of 17 and 30. National Guard and Army Reserve Soldiers represented a greater proportion of completed Periodic Health Assessments than the three deployment health assessments (Table 2). For this report, TP5 represents an all-Army population since it includes recently deployed, non-deployable, and never deployed Army Soldiers. Therefore TP5 serves as the all Army comparison for the deployment-related TPs (TP1, TP3, and TP4) outcomes presented in the current report.

**Table 2. Demographic and Military Characteristics among Soldiers Included in the Analysis**

Characteristics* n (%)	<b>TP1 (Pre-DHA)</b> (n=203,823)	<b>TP3 (PDHA)</b> (n=184,385)	<b>TP4 (PDHRA)</b> (n=184,747)	<b>TP5 (PHA)</b> (n=935,549)
<b>Component</b>				
Regular Army	176,030 (86)	128,557 (70)	131,278 (71)	322,356 (42)
National Guard	12,474 (6)	33,570 (18)	33,908 (18)	394,196 (34)
Army Reserve	15,319 (8)	22,258 (12)	19,561 (11)	218,997 (23)
<b>Sex</b>				
Male	181,467 (89)	163,835 (89)	165,282 (89)	779,346 (83)
Female	22,356 (11)	20,550 (11)	19,465 (11)	156,202 (17)
<b>Age</b>				
17–25	80,314 (39)	58,849 (32)	52,718 (29)	349,686 (37)
26–30	51,379 (25)	48,280 (26)	51,664 (28)	194,735 (21)
31–35	31,741 (16)	30,812 (17)	32,588 (18)	138,816 (15)
36–40	19,988 (10)	19,863 (11)	20,861 (11)	95,107 (10)
>40	20,401 (10)	26,581 (14)	26,916 (15)	157,205 (17)
<b>Rank</b>				
E1-E4	97,053 (48)	71,450 (39)	69,621 (38)	438,085 (47)
E5-E9	72,623 (36)	77,340 (42)	81,804 (44)	346,655 (37)
W1-W5	6,301 (3)	6,475 (4)	6,331 (3)	18,175 (2)
O1-O4	24,227 (12)	24,337 (13)	23,228 (13)	107,702 (12)
O5-O10	2,978 (1)	4,072 (2)	3,687 (2)	24,794 (3)

Legend: TP – Touch Point; Pre-DHA – Pre-Deployment Health Assessment; PDHA – Post-Deployment Health Assessment; PDHRA – Post-Deployment Health Reassessment; PHA – Periodic Health Assessment; E – Enlisted; W – Warrant; O – Officer.

Notes: \*Variables may have missing data which contributed to 1-3% of the overall population sample. Therefore, individual variable sample sizes vary. Reported proportions for these variables only represent the population with available data.

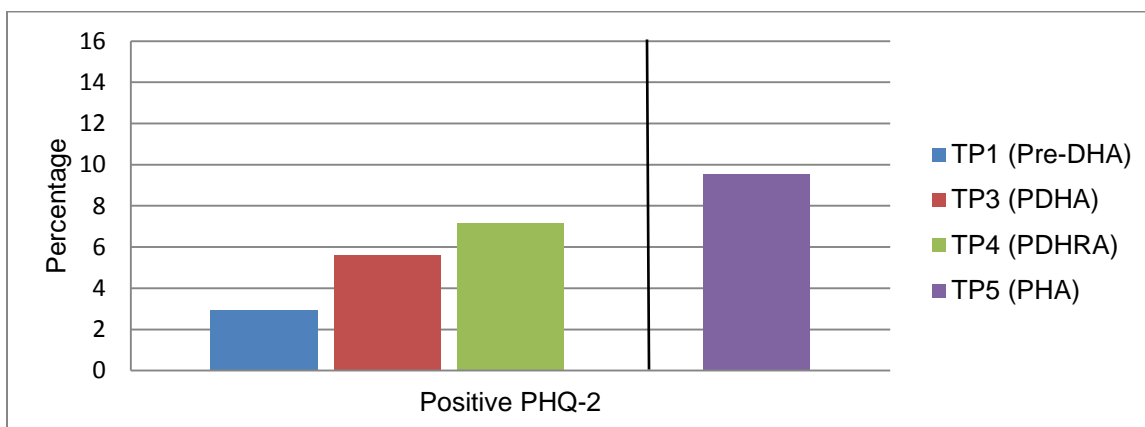
Prevalence of PTSD varied by TP with 3% at TP1, 4% at TP3, 5% at TP4, and 4% at TP5 (Table 3). Of the 6,560 Soldiers with a prevalent PTSD diagnosis at TP3, 31% (n=2,061) received an incident PTSD diagnosis within 6 months following TP3. Of the 4,401 Soldiers with a prevalent MDD diagnosis, 23% (n=1,020) received an incident MDD diagnosis within 6 months following TP3 (Table 3).

**Table 3. Post-Traumatic Stress Disorder (PTSD) and Major Depressive Disorder (MDD) Prevalent and Incident Diagnosis**

Diagnosis - n (%)	TP1 (Pre-DHA) (n=203,823)	TP3 (PDHA) (n=184,385)	TP4 (PDHRA) (n=184,747)	TP5 (PHA) (n=935,549)
<b>Prevalent Diagnosis<sup>a</sup></b>				
PTSD	6,666 (3)	6,560 (4)	9,107 (5)	40,647 (4)
MDD	4,997 (2)	4,401 (2)	5,658 (3)	31,786 (3)
<b>Incident Diagnosis<sup>b</sup></b>				
PTSD	948 (<1)	2,061 (1)	1,892 (1)	5,202 (<1)
MDD	807 (<1)	1,020 (1)	1,026 (1)	4,073 (<1)

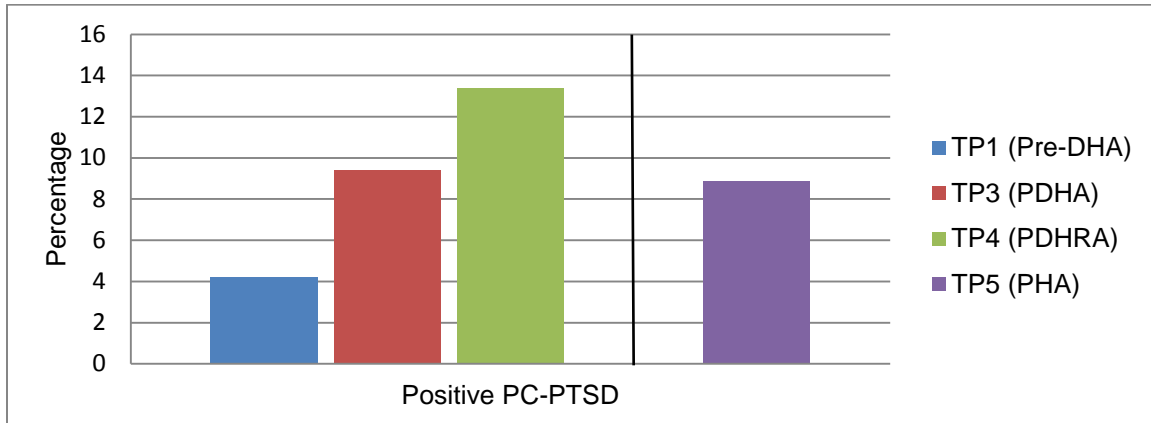
Notes: <sup>a</sup> Soldiers who received an ICD-9 code of 309.81 (PTSD) or 296.2-296.3 (MDD) any time prior to or within 6 months after the screening. <sup>b</sup> A new ICD-9 code of 309.81 (PTSD) or 296.2-296.3 (MDD) within 6 months of the BH screening.

The PHQ-2 is a two-question self-reported screening tool utilized at each TP to evaluate depression symptoms. The PHQ-2 asks a Soldier to recall how often over the last two weeks they have been bothered by having little interest or pleasure in doing things and/or feeling down, depressed, or hopeless. The Soldier has four options to choose from to answer the two questions: not at all, few or several days, more than half the days, or nearly every day. A response of “more than half the days” or “nearly every day” to at least one of the two questions indicates a positive screen for depression symptoms. The percentage of Soldiers who screened positive on the PHQ-2 also varied by TP (Figure 3). However, these data are cross-sectional and do not necessarily represent increases over time in a single population. Please see section 6.5 for results from the longitudinal analysis.



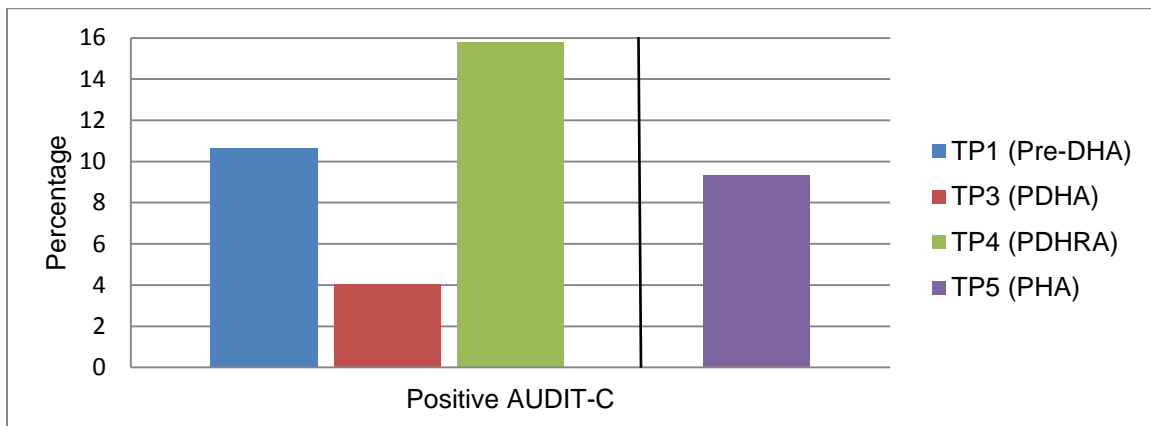
**Figure 3. Patient Health Questionnaire – 2 (PHQ-2) Results across All Touch Points, 2013-2014**

The PC-PTSD is a four-question self-reported screening tool utilized at each TP to evaluate PTSD symptoms. Earlier versions of the PHA did not contain the PC-PTSD; therefore, reporting for the PC-PTSD at TP5 includes only those who completed the PC-PTSD on the 2014 version of the PHA, resulting in a population size of 94,152 Soldiers. The percentage of Soldiers screening positive on the PC-PTSD varied across the deployment-related health assessments: 4% positive at TP1, 9% positive at TP3, and 13% at TP4 (Figure 4).



**Figure 4. Primary Care – Post-Traumatic Stress Disorder (PC-PTSD) Results, 2013-2014**

The Alcohol Use Disorders Identification Tool – Consumption (AUDIT-C) is a three question self-reported screening tool utilized at each TP to evaluate hazardous drinking behavior. Using the provider guidelines from the health assessments, a score of 5 or more for men and 4 or more for women was considered positive for hazardous drinking behavior. The proportion of Soldiers reporting hazardous drinking behavior was substantially lower at TP3 (4%) than at TP4 (16%) (Figure 5).



**Figure 5. Alcohol Use Disorders Identification Tool – Consumption (AUDIT-C), 2013-2014**

## 6.2 Touch Point 1 (Pre-DHA)

### 6.2.1 Demographic and Military Characteristics at TP1 (Table 2)

Most Soldiers (n=203,823) were:

- Male – 89% (n=181,467)
- 17-30 years of age – 65% (n=131,693)
- Regular Army – 86% (n=176,030)
- Enlisted – 84% (n=169,676)
- At least one prior deployment – 57% (n=116,616)

### 6.2.2 BH Referrals, Encounters, & Diagnoses at TP1

Of the Soldiers who completed the Pre-DHA (n=203,823):

- 61% (n=123,921) had no history of BH encounters prior to completing the survey. Among those Soldiers:
  - 3% (n=3,222) screened positive on the PC-PTSD and/or PHQ-2; of those:
    - 19% (n=610) received a BH referral by the provider administering the screening
    - 24% (n=788) had an incident BH encounter
    - 14% (n=461) had an incident BH diagnosis
  - 1% (n=1,055) received a BH referral by the provider administering the screening; of those:
    - 45% (n=476) had an incident BH encounter
    - 27% (n=282) had an incident BH diagnosis
  - 99% (n=122,866) were not referred at the time of the screening; of those:
    - 5% (n=6,538) had an incident BH encounter
    - 2% (n=2,765) had an incident BH diagnosis
- 4% (n=8,538) screened positive on the PC-PTSD for PTSD symptoms. Among those Soldiers:
  - 79% (n=6,769) had at least one BH encounter prior to TP1
  - 54% (n=4,620) had at least one BH encounter within 6 months after TP1
  - 24% (n=2,063) had a prevalent diagnosis of PTSD of those:

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- 17% (n=349) had an incident PTSD diagnosis
- 16% (n=1,397) screened positive for clinical level PTSD symptoms on the PCL-C; of those:
  - 89% (n=1,250) had at least one BH encounter prior to TP1
  - 82% (n=1,146) had at least one BH encounter within 6 months after TP1
  - 38% (n=507) had a prevalent diagnosis of PTSD
    - 21% (n=106) had an incident PTSD diagnosis

### **6.2.3 Hazardous Drinking Behavior at TP1**

Of the Soldiers who completed the Pre-DHA (n=203,823):

- 11% (n=21,691) reported hazardous drinking behavior. Among those Soldiers:
  - 13% (n=2,781) screened positive on the PC-PTSD and/or PHQ-2
  - 6% (n=1,302) received a BH referral by the provider administering the screening
  - 1% (n=125) were referred to the Army Substance Abuse Program (ASAP)
  - 2% (n=356) had an incident BH diagnosis for alcohol abuse or dependence

### **6.2.4 PCL-C and PHQ-8 Results at TP1**

Of the Soldiers who completed the PCL-C and/or PHQ-8 at TP1 (n=11,964):

- 15% (n=1,759) reported moderate to severe PTSD symptoms and/or depression symptoms and reported that the symptoms made it very or extremely difficult for them to function. Among those Soldiers:
  - 55% (n=963) received a BH referral by the provider administering the screening
  - 89% (n=1,557) had at least one BH encounter prior to TP1
  - 80% (n=1,415) had at least one BH encounter within 6 months after TP1
  - 7% (n=124) had an incident diagnosis for PTSD
  - 6% (n=101) had an incident diagnosis for MDD

## **6.3 Touch Point 3 (PDHA)**

### **6.3.1 Demographic and Military Characteristics at TP3 (Table 2)**

Most Soldiers (n=184,385) were:

- Male – 89% (n=163,835)



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- 17-30 years of age – 58% (n=107,129)
- Regular Army – 70% (n=128,557)
- Enlisted – 81% (n=148,790)

### 6.3.2 BH Referrals, Encounters & Diagnoses at TP3

Of the Soldiers who completed the PDHA (n=184,385):

- 64% (n=118,418) had no history of BH encounters prior to completing the survey. Among those Soldiers:

- 9% (n=10,485) screened positive on the PC-PTSD and/or PHQ-2; of those:
  - 28% (n=2896) received a BH referral by the provider administering the screening
  - 35% (n=3,704) had an incident BH encounter
  - 17% (n=1,789) had an incident BH diagnosis
- 4% (n=5,265) received a BH referral by the provider administering the screening; of those:
  - 56% (n=2,931) had an incident BH encounter
  - 27% (n=1,402) had an incident BH diagnosis
- 96% (n=113,153) were not referred at the time of the screening; of those:
  - 11% (n=12,664) had an incident BH encounter
  - 4% (n=4,014) had an incident BH diagnosis

- 9% (n=17,259) screened positive on the PC-PTSD and/or PHQ-2; of those:
  - 56% (n=9,780) had at least one BH encounter prior to TP3
  - 52% (n=8,997) had at least one BH encounter within 6 months after TP3
  - 17% (n=2,909) had a prevalent diagnosis of PTSD, of those:
    - 42% (n=1,122) had an incident PTSD diagnosis

### 6.3.3 Hazardous Drinking Behavior at TP3

Of the Soldiers who completed the PDHA (n=184,385):

- 4% (n=7,439) reported hazardous drinking behavior. Among those Soldiers:
  - 23% (n=1,781) screened positive on the PC-PTSD and/or PHQ-2
  - 14% (n=1,016) received a BH referral by the provider administering the screening

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- 1% (n=47) were referred to ASAP
- 2% (n=160) received an incident BH diagnosis for alcohol abuse or dependence

### 6.3.4 Requests for BH Services at TP3

Of the Soldiers who completed the PDHA (n=184,385):

- 24% (n=44,958) requested BH services during the screening process. Among those Soldiers:
  - 27% (n=11,946) screened positive for PTSD symptoms and/or depression symptoms
  - 5% (n=2,349) reported hazardous drinking behavior
  - 17% (n=7,670) received a BH referral by the provider administering the screening
  - 51% (n=22,850) had no history of BH encounters prior to completing the survey; of those:
    - 24% (n=5,513) had an incident BH encounter
    - 10% (n=2,173) had an incident BH diagnosis
  - 49% (n=22,108) had a history of at least one BH encounter prior to completing the survey; of those, 15% (n=3,288) had an incident BH diagnosis
- 76% (n=138,978) did not request BH services during the screening. Among those Soldiers:
  - 8% (n=10,759) screened positive for PTSD symptoms and/or depression symptoms
  - 4% (n=5,085) reported hazardous drinking behavior
  - 4% (n=5,269) received a BH referral by the provider administering the screening
  - 69% (n=95,292) had no history of BH encounters prior to completing the survey; of those:
    - 11% (n=10,041) had an incident BH encounter
    - 3% (n=3,226) had an incident BH diagnosis
  - 31% (n=43,686) had a history of at least one BH encounter prior to completing the survey of which 7% (n=2,935) had an incident BH diagnosis

### 6.3.5 Combat Exposure at TP3

Of the Soldiers who completed the PDHA (n=184,385):

- 33% (n=60,079) reported combat exposure. Among those Soldiers:
  - 19% (n=11,351) screened positive for PTSD symptoms on the PC-PTSD
  - 9% (n=5,221) screened positive for depression symptoms on the PHQ-2

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- 67% (n=123,873) reported no combat exposure. Among those Soldiers:
  - 5% (n=5,897) screened positive for PTSD symptoms on the PC-PTSD
  - 4% (n=5,120) screened positive for depression symptoms on the PHQ-2

### 6.4 Touch Point 4 (PDHRA)

#### 6.4.1 Demographic and Military Characteristics at TP4 (Table 2)

Most Soldiers (n=184,747) were:

- Male – 89% (n=165,282)
- 17-30 years of age – 57% (n=104,382)
- Regular Army – 71% (n=131,278)
- Enlisted – 82% (n=151,425)

#### 6.4.2 BH Referrals, Encounters & Diagnoses at TP4

Of the Soldiers who completed the PDHRA (n=184,747):

- 56% (n=102,964) had no history of BH encounters prior to completing the survey. Among those Soldiers:
  - 9% (n=9,536) screened positive on the PC-PTSD and/or PHQ-2; of those:
    - 42% (n=3,993) received a BH referral by the provider administering the screening
    - 20% (n=1,893) had an incident BH encounter
    - 11% (n=1,041) had an incident BH diagnosis
  - 7% (n=6,890) received a BH referral by the provider administering the screening; of those:
    - 20% (n=1,380) had an incident BH encounter
    - 11% (n=770) had an incident BH diagnosis
  - 93% (n=96,074) were not referred at the time of the screening; of those:
    - 8% (n=7,201) had an incident BH encounter
    - 3% (n=2,726) had an incident BH diagnosis
- 13% (n=24,636) screened positive for PTSD symptoms on the PC-PTSD. Among those Soldiers:
  - 70% (n=17,209) had at least one BH encounter prior to TP4

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- 46% (n=11,233) had at least one BH encounter within 6 months after TP4
- 27% (n=5,379) had a prevalent diagnosis of PTSD; of those:
  - 20% (n=1,090) had an incident PTSD diagnosis
- 20% (n=4,929) screened positive for clinical level PTSD symptoms on the PCL-C; of those:
  - 84% (n=4,128) had at least one BH encounter prior to TP4
  - 63% (n=3,083) had at least one BH encounter within 6 months after TP4
  - 46% (n=2,026) had a prevalent PTSD diagnosis; of those:
    - 17% (n=339) had an incident PTSD diagnosis

### **6.4.3 Hazardous Drinking Behavior at TP4**

Of the Soldiers who completed the PDHRA (n=184,747):

- 16% (n=28,857) reported hazardous drinking behavior. Among those Soldiers:
  - 28% (n=8,028) screened positive on the PC-PTSD and/or PHQ-2
  - 17% (n=4,968) received a BH referral by the provider administering the screening
  - 1% (n=176) were referred to ASAP
  - 2% (n=455) had an incident BH diagnosis for alcohol abuse or dependence

### **6.4.4 Requests for BH Services at TP4**

Of the Soldiers who completed the PDHRA (n=184,747):

- 22% (n=40,302) requested BH services during the screening process. Among those Soldiers:
  - 34% (n=13,649) screened positive on the PC-PTSD and/or PHQ-2; of those:
    - 20% (n=8,093) reported hazardous drinking behavior
    - 23% (n=9,430) received a BH referral by the provider administering the screening
  - 45% (n=18,201) had no history of BH encounters prior to completing the survey; of those:
    - 16% (n=2,828) had an incident BH encounter
    - 7% (n=1,240) had an incident BH diagnosis
  - 55% (n=22,108) had a history of at least one BH encounter prior to completing the survey; of those, 13% (n=2,937) had an incident BH diagnosis

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- 78% (n=143,711) did not request BH services during the screening
  - 8% (n=10,759) screened positive on the PC-PTSD and/or PHQ-2
  - 4% (n=5,085) reported hazardous drinking behavior
  - 4% (n=5,269) received a BH referral by the provider administering the screening
  - 59% (n=84,413) had no history of BH encounters prior to completing the survey; of those:
    - 7% (n=5,713) had an incident BH encounter
    - 3% (n=2,242) had an incident BH diagnosis
  - 41% (n=59,298) had a history of at least one BH encounter prior to completing the survey of those 7% (n=3,885) had an incident BH diagnosis

### 6.4.5 Combat Exposure at TP4

Of the Soldiers who completed the PDHRA (n=184,747):

- 46% (n=84,499) reported combat exposure. Among those Soldiers:
  - 22% (n=18,983) screened positive for PTSD symptoms on the PC-PTSD
  - 10% (n=8,841) screened positive for depression symptoms on the PHQ-2
- 54% (n=99,346) reported no combat exposure. Among those Soldiers:
  - 6% (n=5,612) screened positive for PTSD symptoms on the PC-PTSD
  - 4% (n=4,311) screened positive for depression symptoms on the PHQ-2

### 6.4.6 PCL-C and PHQ-8 Results at TP4

Of the Soldiers who completed the PCL-C and/or PHQ-8 at TP4 (n=29,651):

- 19% (n=5,717) reported moderate to severe PTSD symptoms and/or depression symptoms and reported the symptoms made it very or extremely difficult to function. Among those Soldiers:
  - 50% (n=2,860) received a BH referral by the provider administering the screening
  - 83% (n=4,752) had at least one BH encounter prior to TP4
  - 63% (n=3,575) had at least one BH encounter within 6 months after TP4
  - 7% (n=382) had an incident diagnosis for PTSD
  - 4% (n=239) had an incident diagnosis for MDD

## 6.5 Longitudinal Population across TP1, TP3, and TP4

The longitudinal population consists of Soldiers who completed a Pre-DHA, PDHA, and PDHRA during 2013-2014 (n=31,029). Section 6.5 reports information on the same population of Soldiers across the three deployment-related health assessments. A Soldier's health assessments had to be completed in consecutive order to be consistent with the ARFORGEN cycle.

### 6.5.1 Demographics and Military Characteristics across TP1, TP3, and TP4

At TP1, Most Soldiers (n=31,029) were:

- Male – 90% (n=27,951)
- 17-30 years of age – 64% (n=19,781)
- Regular Army – 81% (n=25,203)
- Enlisted – 80% (n=24,907)

### 6.5.2 BH Referrals, Encounters & Diagnoses across TP1, TP3, and TP4

**Table 4. Longitudinal BH Encounters and Diagnoses<sup>a</sup>**

BH Encounter <sup>b</sup> – n (%)	TP1 (Pre-DHA)	TP3 (PDHA)	TP4 (PDHRA)
	(n=31,029)		
BH Encounter Prior to the TP	10,769 (35)	11,174 (36)	13,129 (42)
Incident BH Encounter <sup>c</sup>	459 (1)	2,765 (9)	1,574 (5)
<b>Prevalent Diagnosis<sup>d</sup></b>			
PTSD	701 (2)	1,060 (3)	1,242 (4)
MDD	20 (<1)	332 (1)	285 (1)
<b>Incident Diagnosis<sup>e</sup></b>			
PTSD <sup>e</sup>	529 (2)	726 (2)	847 (3)
MDD <sup>f</sup>	11 (<1)	184 (1)	190 (1)

Notes: <sup>a</sup> Includes Soldiers who completed TP1, TP3, and TP4 during 2013-2014. <sup>b</sup> A BH-related ICD-9 code or BH-related V or E code in the inpatient (Dx1–Dx8) or outpatient (Dx1–Dx4) medical data. <sup>c</sup> No BH encounters prior to the TP but had a BH encounter within 6 months of the screening. <sup>d</sup> Soldiers who received an ICD-9 code of 309.81 (PTSD) or 296.2-296.3 (MDD) any time prior to or within 6 months after the screening. <sup>e</sup> A new ICD-9 code of 309.81 within 6 months of the BH screening. <sup>f</sup> A new ICD-9 code of 296.2-296.3 within 6 months of the BH screening.

- At TP1, 65% (n=20,260) had no history of BH encounters prior to completing the survey. Among those Soldiers:

- 2% (n=354) screened positive on the PC-PTSD and/or PHQ-2; of those:
  - 14% (n=49) received a BH referral by the provider administering the screening
  - 9% (n=29) had an incident BH encounter
  - 3% (n=12) had an incident BH diagnosis

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- At TP3, 64% (n=19,855) had no history of BH encounters prior to completing the survey. Among those Soldiers:

- 8% (n=1,626) screened positive on the PC-PTSD and/or PHQ-2; of those:

- 31% (n=501) received a BH referral by the provider administering the screening
- 36% (n=580) had an incident BH encounter
- 18% (n=291) had an incident BH diagnosis

- At TP4, 57% (n=17,900) had no history of BH encounters prior to completing the survey. Among those Soldiers:

- 7% (n=1,310) screened positive on the PC-PTSD and/or PHQ-2; of those:

- 39% (n=507) received a BH referral by the provider administering the screening
- 24% (n=318) had an incident BH encounter
- 12% (n=159) had an incident BH diagnosis

**Table 5. Longitudinal Self-Reported Screening<sup>a</sup>**

Self-Reported Screening Tool – n (%)	TP1 (Pre-DHA)	TP3 (PDHA)	TP4 (PDHRA)
	(n=31,029)		
PC-PTSD <sup>b</sup>	754 (2)	2,506 (8)	3,107 (10)
PHQ-2 <sup>c</sup>	462 (1)	1,633 (5)	1,805 (6)
AUDIT-C <sup>d</sup>	3,383 (11)	1,041 (3)	4,541 (15)
Poor or Fair Health <sup>e</sup>	670 (2)	2,865 (9)	3,703 (12)

Notes: <sup>a</sup> Includes Soldiers who completed TP1, TP3, and TP4 during 2013-2014. <sup>b</sup> A “Yes” response to two or more of the four PC-PTSD questions. <sup>c</sup> Responding “More than half the days” or “Nearly every day” for at least one question on the PHQ-2. <sup>d</sup> A score of 4 or more for women and 5 or more for men on the AUDIT-C indicate hazardous drinking behavior. <sup>e</sup> A response of “Fair” or “Poor” when asked “Overall, how would you rate your health during the past month?”

**6.6 Deployment History and BH Outcomes at TP5 (PHA, 2014v)**

Of the 935,549 Soldiers who completed a PHA during 2013-2014, only 95,110 Soldiers completed the 2014 version of the PHA which included a question on deployment history. While no Soldiers completed the 2014 version of the PHA in 2013, Soldiers did complete the 2013 PHA version in 2014 until the full implementation occurred across all components in 2015. More detailed information can be found in Appendix F.

### 6.6.1 Demographic and Military Characteristics

**Table 6. Demographic and Military Characteristics at TP5, 2014**

Demographics – n (%)	Previously Deployed <sup>a</sup> (n=51,561)	Non-Deployed <sup>b</sup> (n=43,549)
Male	44,900 (87)	35,491 (82)
17–30 (Age)	21,318 (41)	37,737 (87)
Regular Army	50,575 (98)	43,015 (99)
E1–E9	39,585 (77)	37,772 (87)

Legend: TP5 – Touch Point 5; Periodic Health Assessment (PHA); E – Enlisted.

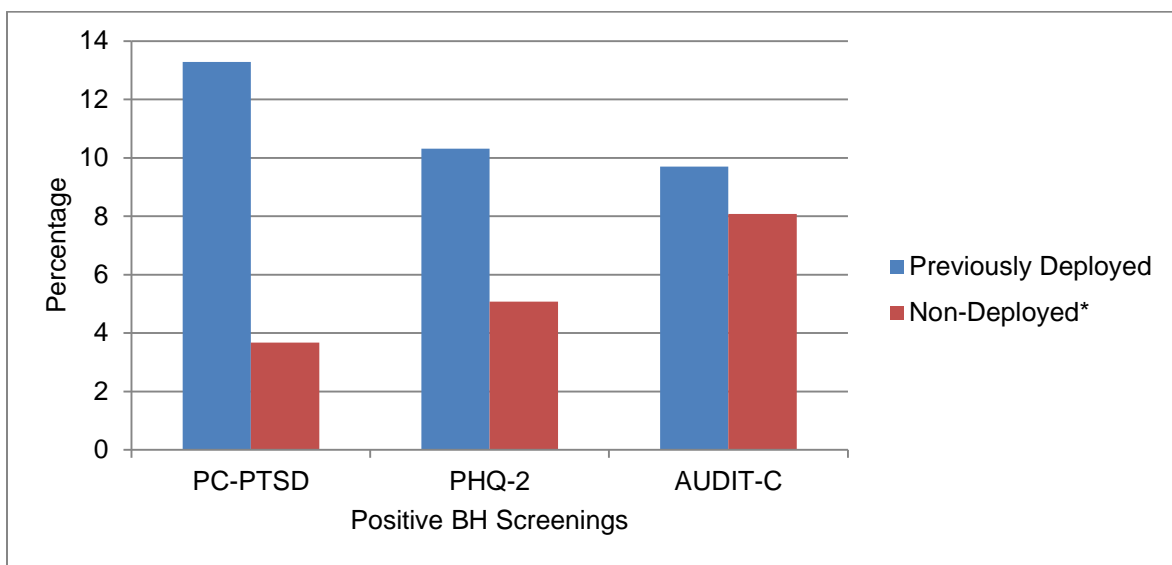
Notes: <sup>a</sup> Reported going on at least one deployment in the last five years on the PHA. <sup>b</sup> Reported no deployments in the past five years on the PHA.

### 6.6.2 BH Screening at TP5 (Figure 6)

Of the 95,110 Soldiers who completed the 2014 PHA version during 2014:

- 54% (n=51,561) reported at least one deployment in the last five years; of those:
  - 13% (n=6,779) screened positive on the PC-PTSD for PTSD symptoms
  - 9% (n=4,750) screened positive on the PHQ-2 for depression symptoms
  - 10% (n=5,000) screened positive on the AUDIT-C for hazardous drinking behavior
- 46% (n=43,549) reported no deployments in the last five years; of those:
  - 4% (n=1,581) screened positive on the PC-PTSD for PTSD symptoms
  - 4% (n=1,954) screened positive on the PHQ-2 for depression symptoms
  - 8% (n=3,519) screened positive on the AUDIT-C for hazardous drinking behavior





\*Did not report a deployment within the past 5 years on the Periodic Health Assessment

**Figure 6. BH Screening for Soldiers Reporting at Least One Previous Deployment versus No Deployments within the Last Five Years**

The previously deployed population had a larger proportion of Soldiers who had a BH encounter prior to the TP as well as prevalent PTSD and MDD diagnoses, while the non-deployed population had a larger proportion of Soldiers receiving an incident BH encounter within 6 months after the TP (Table 6).

**Table 6. BH Encounters and Diagnoses for Previously Deployed and Non-Deployed Soldiers at TP5 (PHA)**

Encounters and Diagnoses – n (%)	Previously Deployed <sup>a</sup> (n=51,561)	Non-Deployed <sup>b</sup> (n=43,549)
<b>BH Encounter<sup>c</sup></b>		
BH Encounter Prior to TP5	33,541 (65)	11,767 (27)
Incident BH Encounter <sup>d</sup>	1,687 (3)	2,960 (7)
<b>Prevalent Diagnosis<sup>e</sup></b>		
PTSD	4,833 (9)	601 (1)
MDD	2,947 (6)	1,121 (3)
<b>Incident Diagnosis</b>		
PTSD <sup>f</sup>	703 (1)	154 (<1)
MDD <sup>g</sup>	406 (1)	266 (1)

Notes: <sup>a</sup> Reported at least one deployment in the last five years. <sup>b</sup> Reported no deployments in the past five years. <sup>c</sup> A BH-related ICD-9 code or BH-related V or E code in the inpatient (Dx1–Dx8) or outpatient (Dx1–Dx4) medical data. <sup>d</sup> No BH encounters prior to the TP but had a BH encounter within 6 months of the screening. <sup>e</sup> Soldiers who received an ICD-9 code of 309.81 (PTSD) or 296.2-296.3 (MDD) any time prior to or within 6 months after the screening. <sup>f</sup> A new ICD-9 code of 309.81 within 6 months of the BH screening. <sup>g</sup> A new ICD-9 code of 296.2-296.3 within 6 months of the BH screening.

### 6.7 Touch Point 5 (PHA)

Sections 6.7.2 and 6.7.3 present findings for the Regular Army population only. National Guard and Army Reserve Soldiers returning from deployment in support of contingency operations receive free

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TRICARE coverage for 180 days after leaving active-duty status.<sup>11</sup> When the free TRICARE coverage ends, deactivated Soldiers have the option to purchase TRICARE Reserve Select or return to private sector health insurance coverage. Because National Guard and Army Reserve Soldiers have limited access to military treatment facilities and TRICARE coverage, we cannot report on healthcare outcomes. BSHOP does not receive data on purchased care outside of the TRICARE network; as a result, by excluding National Guard and Army Reserve from the BH medical findings, the report reduces the likelihood of underreporting. Appendix C provides detailed information on screening results for the entire PHA population. Appendix D and E provides detailed screening information for each component.

### 6.7.1 Demographics and Military Characteristics at TP5

**Table 7. Demographic and Military Characteristics at TP5, 2013-2014**

Characteristics – n (%)	Regular Army (n=394,196)	Army Reserve (n=218,997)	National Guard (n=322,356)
Male	334,873 (85)	170,081 (78)	273,672 (85)
17–30 (Age)	238,086 (60)	121,314 (55)	186,021 (58)
E1–E9	319,992 (81)	183,264 (84)	281,484 (87)

Legend: TP5 – Touch Point 5 - Periodic Health Assessment (PHA); E – Enlisted.

### 6.7.2 BH Encounters & Diagnoses at TP5

Of the Regular Army Soldiers who completed the PHA (n=394,196):

- 64% (n=198,546) had no history of BH encounters prior to completing the survey. Among those Soldiers:
  - 9% (n=18,590) had an incident BH encounter
  - 4% (n=8,319) had an incident BH diagnosis
  - 8% (n=16,410) reported hazardous drinking behavior
- 11% (n=43,567) screened positive for depression symptoms on the PHQ-2
- 24% (n=92,646) of the Soldiers completed the 2014 version of the PHA which included the PC-PTSD. Among those Soldiers:
  - 9% (n=8,151) screened positive for PTSD symptoms on the PC-PTSD; of those:
    - 87% (n=7,128) had at least one BH encounter prior to TP5
    - 68% (n=5,504) had at least one BH encounter within 6 months after TP5
    - 35% (n=2,865) had a prevalent PTSD diagnosis; of those:
      - 15% (n=444) had their first PTSD diagnosis within the 6 months following TP5

### 6.7.3 PCL-C and PHQ-8 Results at TP5

The PCL-C was only available on the 2014 version of the PHA, which greatly reduces the population size for the screening results.

Of the Soldiers who completed the PCL-C and/or PHQ-8 at TP5 (n=46,863):

- 13% (n=6,121) of Soldiers completed the PCL-C and/or PHQ-8 and reported moderate to severe PTSD symptoms and/or depression symptoms and reported those symptoms made it very or extremely difficult to function. Among those Soldiers:

- 96% (n=5,886) had at least one BH encounter prior to TP5
- 89% (n=5,446) had at least one BH encounter within 6 months after TP5
- 6% (n=338) had an incident diagnosis for PTSD
- 5% (n=295) had an incident diagnosis for MDD

## 7 Conclusions

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### 7.1 Preceding Analyses

The 2011 BH-RADR presented the limitations and variable administration of the Standardized Assessment Tool (SAT I and SAT II) as the stopgap measure to fulfill the 2010 NDAA that mandated an enhanced BH screening process. Unlike the 2011 BH-RADR, which included both paper and electronically administered screening tools, all of the health assessments included in the current report were completed electronically through the MEDPROS. Electronic administration of health assessments reduces a Soldier's ability to skip or respond incorrectly to questions thereby increasing the response rate for each question. The benefits of the electronic health assessments can be seen when comparing BH screening responses from the 2011 BH-RADR and the 2013-2014 BH-RADR. The 2011 BH-RADR indicated only 24% and 35% of the Soldiers who screened positive on the PC-PTSD or PHQ-2 received the longer PCL-C or PHQ-8 at TP3 and TP4, respectively. Conversely, in the current report 99% of the Soldiers who screened positive on the PC-PTSD completed the PCL-C, and 99% who screened positive on the PHQ-2 completed a PHQ-8 at TP1 and TP4 (the PCL-C and PHQ-8 are not included at TP3).

### 7.2 Current Analyses

The current report presents demographics, military characteristics, and BH-related outcomes for Army Soldiers who were screened during 2013-2014. Overall, across the deployment-related health assessments (Pre-DHA, PDHA, and PDHRA) the proportion of Soldiers who screened positive on the BH screenings is substantially higher than the preceding TP. This might suggest an exacerbation of symptoms as Soldiers are re-acclimating to garrison life, an increase in reporting over time within the deployment cycle, or new diagnoses. Additionally, of the Soldiers with no prior BH history, 93-99% did not receive a BH referral from the provider administering the health assessment. Five to eleven percent of those Soldiers had a first BH encounter within 6 months of the TP. This population represents Soldiers new to the Army's clinical BH care system that sought care outside the required TP screenings. Information on non-clinical BH care provided by Chaplains, Military OneSource, Family Advocacy Program, or other support programs was not available for the current report. Future reports will explore this population to identify demographic or military characteristics that may differ from the Soldiers who received a referral and/or Soldiers with

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a BH history prior to the TPs. Conversely, it could also highlight a “missed opportunity” during the health assessment to identify a Soldier in need of BH-care services. Self-reported hazardous drinking behavior on the AUDIT-C varied substantially between TP3 and TP4 with 4% and 16%, respectively, reporting hazardous drinking behavior. This result was not unexpected given that Milliken and colleagues found that symptoms and stressors related to PTSD and depression after deployment are more prevalent and identifiable at the TP4 time point.<sup>2</sup> Moreover, the literature suggests that alcohol consumption is often used as a means to self-medicate among Soldiers expressing these symptoms.<sup>13</sup> At TP5, previously deployed Soldiers screened substantially higher on the PC-PTSD and PHQ-2 compared to Soldiers reporting no deployments in the past 5 years (PC-PTSD: 13% v 4%; PHQ-2: 10% v 5%). Conversely, differences in the positive AUDIT-C screenings were less substantial with 10% of previously deployed and 8% of non-deployed Soldiers reporting hazardous drinking behavior. While it is expected to see an increase in PTSD and depression symptoms in the previously deployed population<sup>2-3</sup>, the findings suggest that hazardous drinking behavior remains a concern across the entire Army population. Hazardous drinking behavior in the Army has been linked to elevated motor vehicle injuries/deaths, suicides, homicides, and legal issues.<sup>4</sup> Evolving Army culture and experiences may pose unique risk factors for Soldiers; therefore, healthcare providers and leadership should continue to be vigilant to identify and adapt prevention efforts.

Throughout the TPs, over a third (36-44%) of the Soldiers at each TP had a history of at least one BH encounter prior to the TP. Additionally, 56-87% of the Soldiers who screened positive on the PC-PTSD had at least one BH encounter prior to the respective TP. At TP1, TP4, and TP5, 83-89% of the Soldiers who reported clinical level PTSD and/or depression symptoms had at least one BH encounter prior to the respective TP. The findings may indicate that Soldiers with BH-related symptoms are obtaining needed care, either through self-referrals, identification during the health assessment process, or by other means. If a majority of the high risk Soldiers sought care and/or were already under care prior the health assessment this may explain why only 50-55% of those Soldiers were referred by the healthcare provider administering the health assessment.

The goal of the BH-RADR is to offer relevant, accurate, and useful information related to the burden of BH issues and risk for the US Army. The information presented in the current report enhances the Army’s ability to monitor the BH screening process and BH encounters and diagnoses for all Army Soldiers, as well as influence policies related to behavioral and social health prevention and intervention initiatives. Future iterations of the BH-RADR will aim to provide more detailed contextual information regarding BH-related stressors, risk factors, and outcomes for the US Army.

### 7.3 Future Analyses

Future analyses will:

- Provide more in-depth descriptions of subpopulations such as differences across sex, rank, and deployment location to possibly identify specific areas in need of prevention and intervention initiatives.
- Assess BH indicators and BH care utilization across military installations/treatment facilities in order to better identify areas of need for additional resources, training, prevention and/or intervention efforts.

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- Conduct additional longitudinal analyses of changes in BH history and screening results from TP1 to TP4 to assess changes in BH symptomology related to the deployment experience.
- Examine the BH outcomes occurring between TP4 and TP5 in order to better understand the BH needs and risk factors for Soldiers during the extended timeframe between the TPs.

## **8 Point of Contact**

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## Appendix A

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## Appendix B

### Definitions and Data Elements

#### B-1 Available Data Elements for Each Touch Point

Table B-1 illustrates the available data elements analyzed at each TP. The table does not represent all the data elements available at each TP.

**Table B-1. Available Data Elements on each Touch Point (TP)**

	<u>TP1 (Pre-DHA)</u>	<u>TP3 (PDHA)</u>	<u>TP4 (PDHRA)</u>	<u>TP5 (PHA)</u>
<b>Characteristics</b>				
Component	●	●	●	●
Sex	●	●	●	●
Age	●	●	●	●
Rank	●	●	●	●
<b>Referrals</b>				
BH Referral	●	●	●	○
ASAP Referral	●	●	●	○
<b>BH Screening Tools</b>				
PC-PTSD	●	●	●	●
PHQ-2	●	●	●	●
PCL-C	●	○	●	●
PHQ-8	●	○	●	●
AUDIT-C	●	●	●	●
<b>Other</b>				
Request for BH Services	○	●	●	○
Combat Exposure	○	●	●	○
Number of Deployments in the Last 5 Years	●	○	○	●

Legend: BH- Behavioral Health; ASAP - Army Substance Abuse Program; PC-PTSD- Primary Care Post-Traumatic Stress Disorder; PHQ-2- Patient Health Questionnaire-2; PCL-C – Patient Checklist – Civilian; PHQ-8- Patient Health Questionnaire-8; AUDIT-C – Alcohol Use Disorders Identification Tool – Consumption;

● = Data element available; ○ = Data element not available.

#### B-2 Post-Traumatic Stress Disorder Symptoms and Depression Symptoms

PTSD symptoms were assessed using the four- question validated PC-PTSD screening tool on the health assessments. A “Yes” response to at least two of the questions indicated a positive screen for PTSD. Depression symptoms were assessed using the two-question PHQ-2, a validated screen for depression symptoms on the health assessments. The response choices were “Not at all,” “Few or several days,” “More than half the days,” or “Nearly every day.” A response of “More than half of the days” or “Nearly every day” on either PHQ-2 question indicated a positive screen for depression symptoms.

### B-3 Referrals

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On the Pre-DHA, PDHA, and PDHRA under “Referral Information,” the health care provider administering the screening could refer the Soldier to “Behavioral Health in Primary Care” or “Mental Health Specialty Care” using the scales: “Within 24 hours,” “Within 7 days,” or “Within 30 days.” Selection of any of those options was considered a referral for BH care.

### B-4 Request for BH Services

---

On the PDHA and PDHRA the Soldiers were asked if they were interested in receiving information or assistance for stress, emotional or alcohol concerns, family or relationship concerns or if they would like to schedule a visit with a chaplain or community support counselor. A response of “Yes” to any of these questions indicated that the Soldier requested BH services.

### B-5 Combat Exposure

---

Several questions on the PDHA and PDHRA were used to evaluate combat exposure. Soldiers were asked, for example, about fear of being killed, seeing people killed, and engaging in direct combat where they discharged a weapon. A response of “Yes” to any of the questions indicated combat exposure.

### B-6 Definition of Behavioral Health Encounters and Diagnoses

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Medical information in this report is based on data from the Military Health System, which includes medical encounter data from military treatment facilities and administrative medical data from civilian care facilities that are submitted for payment by the government. Medical data use codes from the International Classification of Disease 9<sup>th</sup> revision, Clinical Modification (ICD-9). V-codes may indicate encounters but not diagnoses.

- **Encounters:** In inpatient data, an ICD-9 code for the condition in any diagnostic position Dx1-Dx8 is considered an encounter for that condition. In outpatient data, an ICD-9 code for the condition in any diagnostic position Dx1-Dx4 is considered an encounter for that condition.
- **Diagnosis:** In inpatient data, an ICD-9 code for the condition in any diagnostic position Dx1-Dx8 is considered a diagnosis of that condition. In outpatient data, an ICD-9 code for the condition in the first diagnostic position (Dx1) is considered a diagnosis of the condition. ICD-9 codes in the second through fourth diagnostic positions (Dx2-Dx4) in outpatient data are also considered to indicate a diagnosis if a second code from the same group of ICD-9 codes occurs in Dx2-Dx4 within a year but not on the same day. For example, a Soldier with an ICD-9 code of 300.00 (anxiety state) in the third position would be considered to have a diagnosis of anxiety only if he or she later had a second ICD-9 code from the same range (300.00-300.3) in Dx2-Dx4 within a year but not on the same day. These definitions follow a Healthcare Effectiveness Data and Information Set (HEDIS) guideline from the National Committee for Quality Assurance.

### B-7 Behavioral Health Encounters and Diagnoses

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In this analysis, BH ICD-9 codes include those in the range 290–319.99 (excluding tobacco use diagnoses), as well as certain codes related to sleep disorders, and V-codes related to counseling and maltreatment.

- *Any mood disorder* includes major depression (296.2 or 296.3), dysthymia (300.4), depression not otherwise specified (311.0), bipolar disorder (296.0, 296.4, 296.8), and other mood disorders (296, 296.1, 296.9).
- *Posttraumatic stress disorder (PTSD)* includes the ICD-9 code 309.81.



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- *Other anxiety disorders* (i.e., anxiety disorders other than PTSD) include the ICD-9 codes 300.0, 300.1, 300.2, and 300.3.
- *Adjustment disorder* includes disorders in the 309 range, except 309.81 (PTSD).
- *Substance use disorders* include disorders related to alcohol and drug use (291, 292, 303, and 305.2–305.9) and exclude codes related to tobacco use (305.1–305.12).
- *Personality disorders* include the ICD-9 codes 301–301.9.
- *Psychoses* include the ICD-9 codes 290.8, 290.9, 295, 297, and 298.
- *Any BH disorder* includes only those disorders listed above.

**Table B-2. International Classification of Disease Codes, 9th Edition (ICD-9), V Codes, and E Codes Used to Construct Behavioral Health Encounters**

<b>Behavioral Health Encounters</b>	<b>ICD-9, E and V codes<sup>a</sup></b>
General Behavioral Health	290-319.99 (excluding tobacco, 305.1)
Sleep Disorders	327-327.80, 780.5-780.56, 780.58, V69.4
Suicidal Ideation	V62.84
Partner Relationship	V61-V61.10
Family Circumstances	V61.2-V61.29
Maltreatment	995.8-995.85, V61.11, V61.12, V61.21, V61.22, V62.83
Life Circumstances	V62-V62.50, V62.8-V62.90
Mental or Behavioral Problems/Substance Abuse Counseling	V40, V40.2, V40.3, V40.9, V65.42
Personal Trauma	995.5-995.59, V15.4-V15.41
Suicide and Self-Injury	E95-E95.9, E98-E98.9

Notes: <sup>a</sup> Each code includes all subordinate codes, (e.g., 301 includes 301.0-301.9).

## Appendix C

### Tables and Figures, All Touch Points

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**Table C-1. Demographics and Military Characteristics, by Touch Point (TP), 2013-2014**

<b>Characteristics* - n (%)</b>	<b>TP 1<sup>a</sup></b> (n=203,823)	<b>TP 3<sup>b</sup></b> (n=184,385)	<b>TP 4<sup>c</sup></b> (n=184,747)	<b>TP 5<sup>d</sup></b> (n=935,549)
<b>Component</b>				
Regular Army	176,030 (86)	128,557 (70)	131,278 (71)	394,196 (42)
National Guard	12,474 (6)	33,570 (18)	33,908 (18)	322,356 (34)
Army Reserve	15,319 (8)	22,258 (12)	19,561 (11)	218,997 (23)
<b>Sex</b>				
Male	181,467 (89)	163,835 (89)	165,282 (89)	779,346 (83)
Female	22,356 (11)	20,550 (11)	19,465 (11)	156,202 (17)
<b>Age</b>				
17–25	80,314 (39)	58,849 (32)	52,718 (29)	349,686 (37)
26–30	51,379 (25)	48,280 (26)	51,664 (28)	194,735 (21)
31–35	31,741 (16)	30,812 (17)	32,588 (18)	138,816 (15)
36–40	19,988 (10)	19,863 (11)	20,861 (11)	95,107 (10)
>40	20,401 (10)	26,581 (14)	26,916 (15)	157,205 (17)
<b>Rank</b>				
E1-E4	97,053 (48)	71,450 (39)	69,621 (38)	438,085 (47)
E5-E9	72,623 (36)	77,340 (42)	81,804 (44)	346,655 (37)
W1-W5	6,301 (3)	6,475 (4)	6,331 (3)	18,175 (2)
O1-O4	24,227 (12)	24,337 (13)	23,228 (13)	107,702 (12)
O5-O10	2,978 (1)	4,072 (2)	3,687 (2)	24,794 (3)

Legend: E – Enlisted; W – Warrant; O – Officer.

Notes:\*Variables may have missing data which contributed to 1-3% of the overall population sample. Therefore, individual variable sample sizes vary. Reported proportion for these variables only represents the population where data were available. All variables obtained from the corresponding health assessment. <sup>a</sup> Pre-Deployment Health Assessment. <sup>b</sup> Post-Deployment Health Assessment. <sup>c</sup> Post-Deployment Health Re-Assessment. <sup>d</sup> Periodic Health Assessment.

**Table C-2. Behavioral Health (BH) Medical Data, by Touch Point (TP), 2013-2014**

Medical Data - n (%)	TP 1 <sup>a</sup> (n=203,823)	TP 3 <sup>b</sup> (n=184,385)	TP 4 <sup>c</sup> (n=184,747)	TP 5 <sup>d</sup> (n=935,549)
<b>BH Encounters<sup>e</sup></b>				
Prevalent cases <sup>f</sup>	86,916 (43)	81,562 (44)	90,364 (49)	363,831 (39)
Incident cases <sup>g</sup>	7,014 (3)	15,595 (8)	8,581 (5)	25,273 (3)
<b>BH Incident Diagnoses</b>				
Incident BH Diagnosis <sup>h</sup>	7,408 (4)	11,659 (6)	10,348 (6)	32,892 (4)
Adjustment Disorders	3,071 (2)	5,372 (3)	4,375 (2)	11,813 (1)
Alcohol Use Disorders	1,262 (1)	1,409 (1)	1,287 (1)	4,162 (<1)
Anxiety Disorders (Excluding PTSD) <sup>i</sup>	1,938 (1)	3,583 (2)	2,940 (2)	8,985 (1)
Bipolar Disorder	133 (<1)	160 (<1)	132 (<1)	643 (<1)
Major Depression	807 (<1)	1,020 (1)	1,026 (1)	4,073 (<1)
Other Depressive Disorders	1,549 (1)	2,342 (1)	1,878 (1)	7,413 (1)
Personality Disorders <sup>j</sup>	223 (<1)	153 (<1)	153 (<1)	760 (<1)
Psychoses	120 (<1)	89 (<1)	101 (<1)	440 (<1)
PTSD	948 (<1)	2,061 (1)	1,892 (1)	5,023 (1)
Substance Use Disorders <sup>k</sup>	1,535 (1)	1,655 (1)	1,543 (1)	5,202 (1)

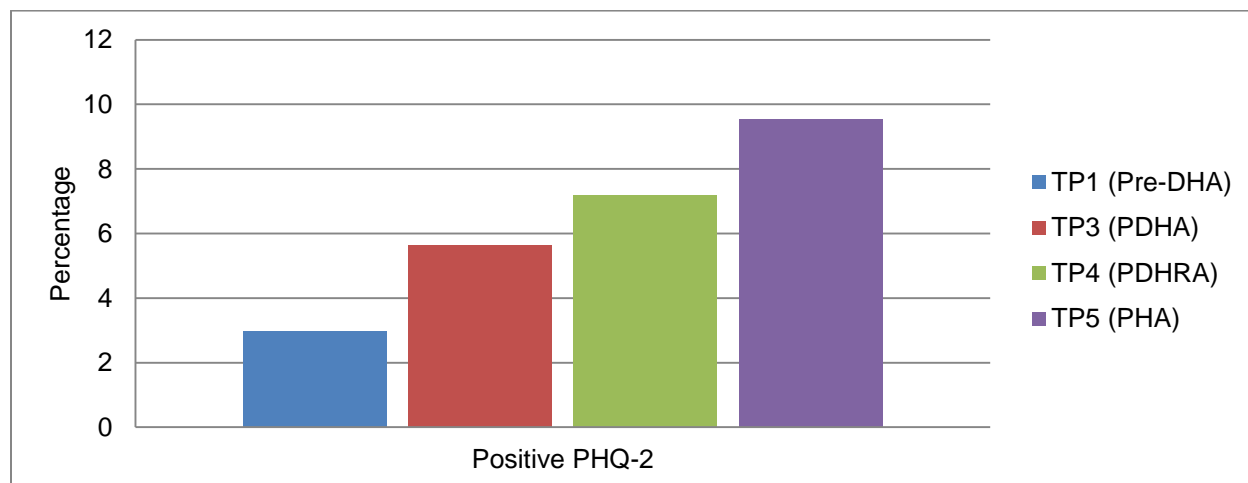
Notes: <sup>a</sup> Pre-Deployment Health Assessment. <sup>b</sup> Post-Deployment Health Assessment. <sup>c</sup> Post-Deployment Health Re-Assessment. <sup>d</sup> Periodic Health Assessment. <sup>e</sup> A BH-related ICD-9 code or BH-related V or E code in the inpatient (Dx1–Dx8) or outpatient (Dx1–Dx4) medical data. <sup>f</sup> Includes BH-related encounters prior to the TP screening and within 6 months after the screening. <sup>g</sup> No BH encounters prior to the TP but had a BH encounter within 6 months after the screening. <sup>h</sup> Presence of an incident BH-related ICD-9 code among one of the 10 BH diagnosis categories in the inpatient (Dx1-Dx8) medical data or the first diagnostic position (Dx1) or two BH diagnoses of the same group in the second through fourth diagnostic positions (Dx2-Dx4) occurring twice within a year but not on the same day in the outpatient medical data. <sup>i</sup> Such as Panic Disorder, Generalized Anxiety Disorder, or Obsessive-Compulsive Disorder. <sup>j</sup> Such as Borderline or Antisocial Personality Disorder. <sup>k</sup> Includes Drug- or Alcohol-related Disorders

**Table C-3. Screening for Depression Symptoms, by Touch Point (TP), 2013-2014<sup>a</sup>**

Screening Tool - n (%)	TP 1 <sup>b</sup> (n=203,823)	TP 3 <sup>c</sup> (n=184,385)	TP 4 <sup>d</sup> (n=184,747)	TP 5 <sup>e</sup> (n=935,549)
<b>COMPLETED</b>	<b>(n=203,660)</b>	<b>(n=183,944)</b>	<b>(n=183,871)</b>	<b>(n=924,140)</b>
<b>POSITIVE PHQ-2<sup>f</sup></b>	6,019 (3)	10,350 (6)	13,176 (7)	88,113 (10)
<b>COMPLETED</b>	<b>(n=5,978)</b>		<b>(n=13,001)</b>	<b>(n=87,168)</b>
<b>POSITIVE PHQ-8<sup>g</sup></b>	1,762 (29)	---	5,101 (39)	15,397 (18)

Legend: PHQ- Patient Health Questionnaire.

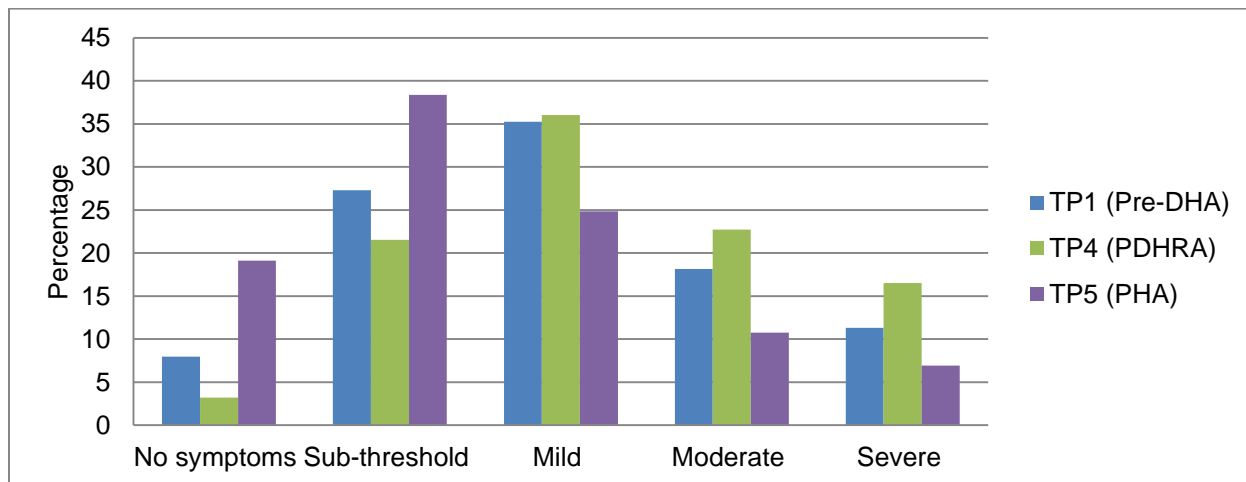
Notes: <sup>a</sup> Includes Regular Army, Army Reserve, and National Guard. <sup>b</sup> Pre-Deployment Health Assessment (Pre-DHA). <sup>c</sup> Post-Deployment Health Assessment (PDHA). <sup>d</sup> Post-Deployment Health Re-Assessment (PDHRA). <sup>e</sup> Periodic Health Assessment (PHA) <sup>f</sup> Responding "More than half the days" or "Nearly every day" for at least one question on the PHQ-2. <sup>g</sup> A score of 15 or greater (range 0-24).



**Figure C-1. Percent Positive on the Patient Health Questionnaire (PHQ)-2, by Touch Point (TP), 2013-2014**

Legend: Pre-DHA - Pre-Deployment Health Assessment; PDHA - Post-Deployment Health Assessment; PDHRA - Post-Deployment Health Re-Assessment; PHA - Periodic Health Assessment.

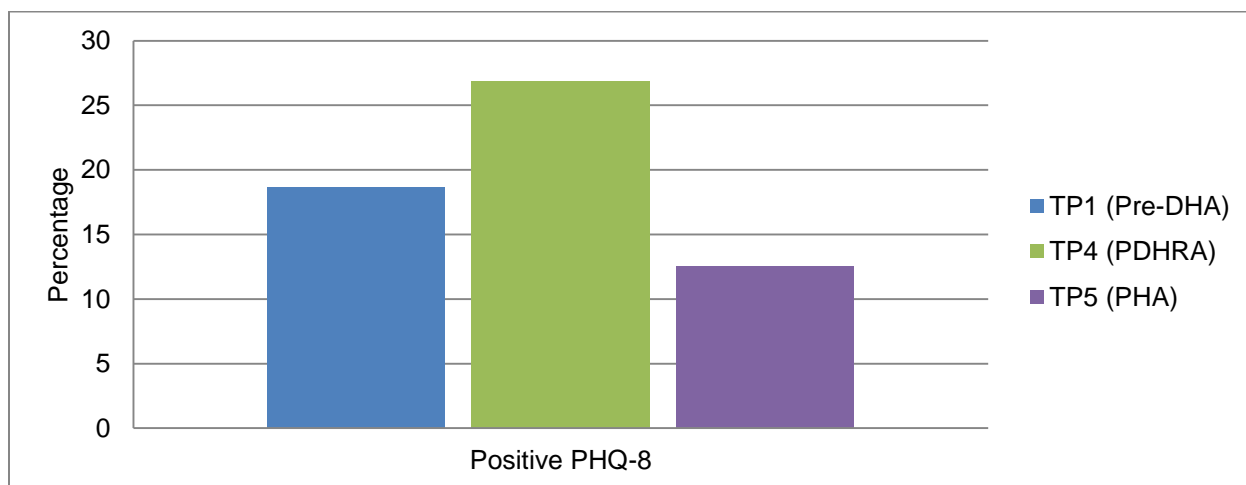
Notes: A Positive PHQ-2 screening was indicated by responding "More than half the days" or "Nearly every day" for at least one question on the PHQ-2.



**Figure C-2. Percent Positive on the Patient Health Questionnaire (PHQ)-8, by Touch Point (TP), 2013-2014**

Legend: Pre-DHA - Pre-Deployment Health Assessment; PDHRA - Post-Deployment Health Re-Assessment; PHA - Periodic Health Assessment.

Notes: TP3 does not contain the PHQ-8. PHQ-8 score 1-4 indicated no symptoms. PHQ-8 score 5-9 indicated sub-threshold symptoms. PHQ-8 score 10-14 indicated mild symptoms, PHQ-8 score 15-18 indicated moderate symptoms. PHQ-8 score 19-24 indicated severe symptoms.



**Figure C-3. Percent Positive for Clinical Level of Depression Using the PHQ-8, by Touch Point (TP), 2013-2014**

Legend: Pre-DHA - Pre-Deployment Health Assessment; PDHRA - Post-Deployment Health Re-Assessment; PHA - Periodic Health Assessment; Patient Health Questionnaire – 8 (PHQ-8).

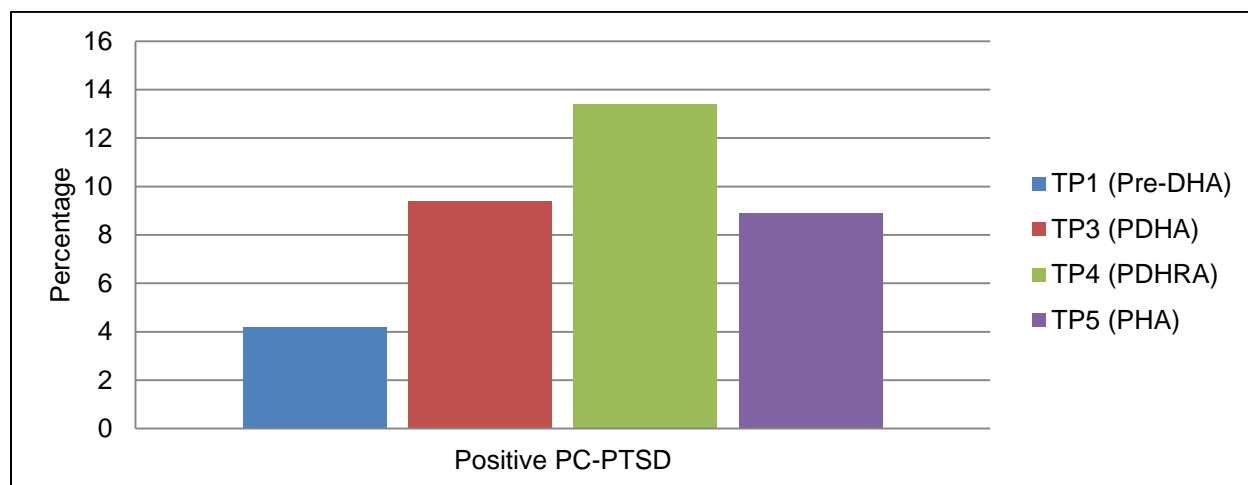
Notes: TP3 does not contain the PHQ-8. Clinical level was indicated by a score of 15 or greater on the PHQ-8 and self-reported level of functioning of "Very Difficult" or "Extremely Difficult."

**Table C-4. Screening for PTSD Symptoms, by Touch Point, 2013-2014<sup>a</sup>**

Screening Tool - n (%)	TP 1 <sup>b</sup> (n=203,823)	TP 3 <sup>c</sup> (n=184,385)	TP 4 <sup>d</sup> (n=184,747)	TP 5 <sup>e</sup> (n=935,549)
<b>COMPLETED</b>	<b>(n=203,562)</b>	<b>(n=183,575)</b>	<b>(n=183,834)</b>	<b>(n=94,152)</b>
<b>POSITIVE PC-PTSD<sup>f</sup></b>	8,538 (4)	17,259 (9)	24,636 (13)	8,360 (9)
<b>COMPLETED</b>	<b>(n=8,482)</b>		<b>(n=24,317)</b>	<b>(n=8,153)</b>
<b>POSITIVE PCL-C<sup>g</sup></b>	3,920 (46)	---	11,535 (47)	4,593 (56)

Legend: PTSD – Post Traumatic Stress Disorder; TP – Touch Point; PC-PTSD – Primary Care Post Traumatic Stress Disorder; PCL-C - PTSD Checklist – Civilian.

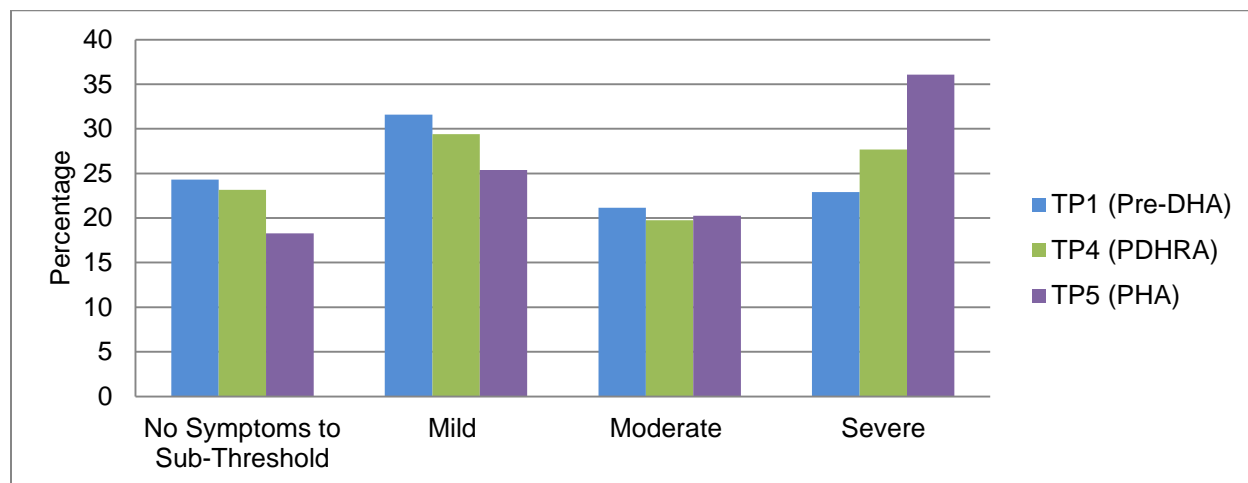
Notes: <sup>a</sup> Includes Regular Army, Army Reserve, and National Guard. <sup>b</sup> Pre-Deployment Health Assessment (Pre-DHA). <sup>c</sup> Post-Deployment Health Assessment (PDHA). <sup>d</sup> Post-Deployment Health Re-Assessment (PDHRA). <sup>e</sup> Periodic Health Assessment (PHA). <sup>f</sup> A “Yes” response to two or more of the four PC-PTSD questions. <sup>g</sup> A score of 40 or greater (range 17-85).



**Figure C-4. Percent Positive on the Primary Care – Post-Traumatic Stress Disorder (PC-PTSD), by Touch Point (TP), 2013-2014**

Legend: Pre-DHA - Pre-Deployment Health Assessment; PDHA - Post-Deployment Health Assessment; PDHRA - Post-Deployment Health Re-Assessment; PHA - Periodic Health Assessment.

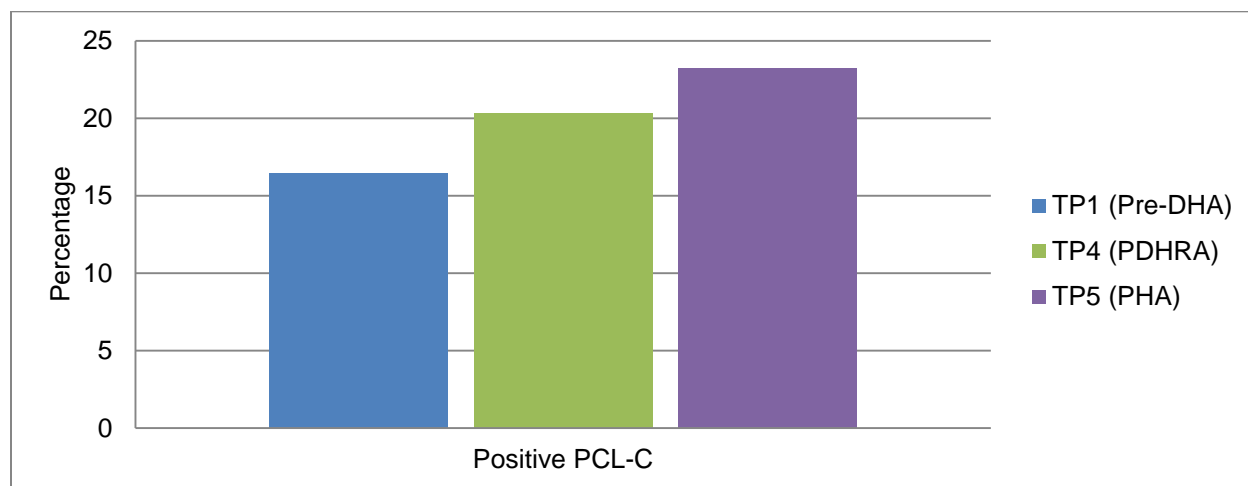
Notes: Positive PC-PTSD screening was indicated with a “Yes” response to two or more of the four questions on the PC-PTSD.



**Figure C-5. Percent Positive on the PTSD Checklist – Civilian Version (PCL-C), by Touch Point (TP), 2013-2014**

Legend: Pre-DHA - Pre-Deployment Health Assessment; PDHRA - Post-Deployment Health Re-Assessment; PHA - Periodic Health Assessment; PTSD – Post Traumatic Stress Disorder.

Notes: TP3 does not contain the PCL-C. A PCL-C score 17-29 indicated no symptoms to sub-threshold symptoms. PCL-C score 30-39 indicated mild symptoms. PCL-C score 40-49 indicated moderate symptoms. PCL-S score 50 or greater indicated severe symptoms.



**Figure C-6. Percent Positive for Clinical Level PTSD using the PCL-C, by Touch Point (TP), 2013-2014**

Legend: Pre-DHA - Pre-Deployment Health Assessment; PDHRA - Post-Deployment Health Re-Assessment; PHA - Periodic Health Assessment; PTSD – Post Traumatic Stress Disorder; PCL-C – PTSD Checklist – Civilian.

Notes: TP3 does not contain the PCL-C. Clinical Level PTSD was indicated with a score of 40 or greater (range 17-85) and a self-reported level of functioning of “Very Difficult” or “Extremely Difficult.”



**Table C-5. Referrals Received During the Health Assessments, by Touch Point (TP), 2013-2014<sup>a</sup>**

	TP 1 <sup>b</sup> (n=203,823)	TP 3 <sup>c</sup> (n=184,385)	TP 4 <sup>d</sup> (n=184,747)	TP 5 <sup>e</sup> (n=935,549)
<b>REFERRALS - n (%)</b>				
Any Referral <sup>f</sup>	19,421 (10)	59,528 (32)	54,103 (29)	---
Behavioral Health In Primary Care	3,506 (2)	7,867 (4)	12,944 (7)	---
Mental Health Specialty Care	2,790 (1)	5,651 (3)	5,224 (3)	---
Substance Abuse Program	220 (<1)	77 (<1)	201 (<1)	---

Notes: <sup>a</sup> Includes Regular Army, Army Reserve, and National Guard. <sup>b</sup> Question 12 on the Pre-Deployment Health Assessment. <sup>c</sup> Question 20 on the Post-Deployment Health Assessment. <sup>d</sup> Question 17 on the Post-Deployment Health Re-Assessment. <sup>e</sup> Unable to determine standardized referral questions and answer choices for the Periodic Health Assessment. <sup>f</sup> Includes any recommended referrals indicated by the provider (primary care, dental, ob/gyn, immunization clinic, laboratory, other, etc.).

**Table C-6. Combat Exposure, by Touch Point (TP), 2013-2014<sup>a</sup>**

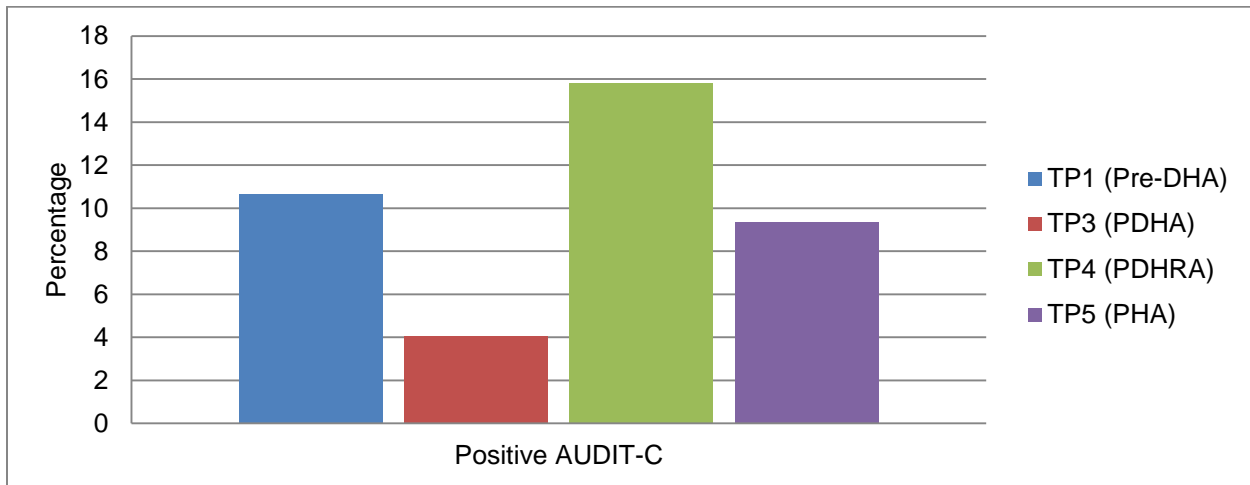
	TP 1 <sup>b</sup> (n=203,823)	TP 3 <sup>c</sup> (n=184,385)	TP 4 <sup>d</sup> (n=184,747)	TP 5 <sup>e</sup> (n=935,549)
<b>Combat Exposure<sup>f</sup> - n (%)</b>				
Witness someone wounded/killed	-----	38,318 (21)	58,650 (32)	-----
Discharged weapon	-----	14,092 (8)	24,381 (13)	-----
Felt in danger of being killed	-----	41,229 (22)	63,247 (34)	-----
≥1 of the above	-----	60,079 (33)	84,499 (46)	-----

Notes: <sup>a</sup> Includes Regular Army, Army Reserve, and National Guard. <sup>b</sup> Pre-Deployment Health Assessment, does not contain combat related questions. <sup>c</sup> Post-Deployment Health Assessment. <sup>d</sup> Post-Deployment Health Re-Assessment. <sup>e</sup> Periodic Health Assessment, does not contain combat related questions. <sup>f</sup> Responded "Yes" to combat exposure during deployment.

**Table C-7. Screening for Hazardous Drinking Behavior on the AUDIT-C, by Touch Point (TP), 2013-2014<sup>a</sup>**

Screening Tool - n (%)	TP 1 <sup>b</sup> (n=203,823)	TP 3 <sup>c</sup> (n=184,385)	TP 4 <sup>d</sup> (n=184,747)	TP 5 <sup>e</sup> (n=935,549)
<b>POSITIVE AUDIT-C<sup>f</sup></b>	21,690 (11)	7,439 (4)	28,857 (16)	87,319 (9)

Legend: AUDIT-C – Alcohol Use Disorder Identification Test – Consumption.  
 Notes: <sup>a</sup> Includes Regular Army, Army Reserve, and National Guard. <sup>b</sup> Pre-Deployment Health Assessment (Pre-DHA). <sup>c</sup> Post-Deployment Health Assessment (PDHA). <sup>d</sup> Post-Deployment Health Re-Assessment (PDHRA). <sup>e</sup> Periodic Health Assessment (PHA). <sup>f</sup> A score of 4 or more for women and 5 or more for men on the AUDIT-C indicates hazardous drinking behavior.



**Figure C-7. Percent Positive for Hazardous Drinking Behavior on the AUDIT-C, by Touch Point (TP), 2013-2014**

Legend: Pre-DHA - Pre-Deployment Health Assessment; PDHA - Post-Deployment Health Assessment; PDHRA - Post-Deployment Health Re-Assessment; PHA - Periodic Health Assessment; AUDIT-C – Alcohol Use Disorders Identification Test – Consumption.  
 Notes: A score of 4 or more for women and 5 or more for men indicates hazardous drinking behavior.

## Appendix D

### Tables, All Touch Points, by Component

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**Table D-1. Demographic and Military Characteristics, Regular Army, 2013-2014<sup>a</sup>**

Characteristics* n (%)	TP 1 <sup>b</sup> (n=176,030)		TP 3 <sup>c</sup> (n=128,557)		TP 4 <sup>d</sup> (n=131,278)		TP 5 <sup>e</sup> (n=394,196)	
<b>SEX</b>								
Male	158,424	(90)	116,415	(90)	118,885	(91)	334,873	(85)
Female	17,606	(10)	12,142	(9)	12,393	(9)	59,323	(15)
<b>AGE (YR)</b>								
17–25	71,720	(41)	44,177	(34)	40,114	(31)	153,435	(39)
26–30	45,370	(26)	35,862	(28)	38,377	(29)	84,651	(22)
31–35	27,640	(16)	22,275	(17)	23,892	(18)	62,761	(16)
36–40	17,233	(10)	14,075	(11)	15,173	(12)	45,386	(12)
41+	14,067	(8)	12,168	(9)	13,722	(10)	47,963	(12)
<b>RANK</b>								
E1–E4	86,070	(49)	52,759	(41)	50,786	(39)	168,651	(43)
E5–E9	61,586	(35)	51,814	(40)	56,756	(43)	151,341	(38)
W1–W5	5,474	(3)	4,669	(4)	4,599	(4)	9,086	(2)
O1–O4	20,479	(12)	16,984	(13)	16,963	(13)	53,022	(13)
O5–O10	2,117	(1)	2,013	(2)	2,104	(2)	12,028	(3)

Legend: TP – Touch Point; E – Enlisted; W – Warrant; O – Officer.

Notes: \*Variables may have missing data which contributed to 1-3% of the overall population sample. Therefore, individual variable sample sizes vary. Reported proportion for these variables only represents the population where data were available. All variables obtained from the corresponding health assessment. <sup>a</sup> Reported “Active Duty” as component on the respective TP. <sup>b</sup> TP1- Pre-Deployment Health Assessment. <sup>c</sup> TP3 – Post-Deployment Health Assessment. <sup>d</sup> TP4 – Post-Deployment Health Reassessment. <sup>e</sup> TP5 – Periodic Health Assessment.

**Table D-2. Demographic and Military Characteristics, Army Reserve, 2013-2014<sup>a</sup>**

Characteristics* n (%)	TP 1 <sup>b</sup> (n=15,319)	TP 3 <sup>c</sup> (n=22,258)	TP 4 <sup>d</sup> (n=19,561)	TP 5 <sup>e</sup> (n=218,997)
<b>SEX</b>				
Male	12,175 (79)	17,795 (80)	16,293 (83)	170,081 (78)
Female	3,144 (21)	4,463 (20)	3,268 (17)	48,196 (22)
<b>AGE (YR)</b>				
17–25	4,485 (29)	5,102 (23)	3,837 (20)	74,487 (34)
26–30	3,200 (21)	4,431 (20)	4,749 (24)	45,827 (21)
31–35	2,261 (15)	3,287 (15)	3,134 (16)	30,731 (14)
36–40	1,561 (10)	2,375 (11)	2,107 (11)	19,706 (9)
41+	3,812 (25)	7,063 (32)	5,734 (29)	48,246 (22)
<b>RANK</b>				
E1–E4	5,893 (39)	6,359 (29)	6,333 (32)	120,040 (55)
E5–E9	5,765 (38)	9,716 (44)	8,733 (45)	63,224 (29)
W1–W5	362 (2)	514 (2)	442 (2)	2,645 (1)
O1–O4	2,310 (15)	3,740 (17)	2,931 (15)	25,613 (12)
O5–O10	666 (4)	1,541 (8)	1,120 (6)	7,454 (3)

Legend: TP – Touch Point; E – Enlisted; W – Warrant; O – Officer.

Notes: \*Variables may have missing data which contributed to 1-3% of the overall population sample. Therefore, individual variable sample sizes vary. Reported proportion for these variables only represents the population where data were available. All variables obtained from the corresponding health assessment. <sup>a</sup> Reported "Reserves" as component on the respective TP. <sup>b</sup> TP1- Pre-Deployment Health Assessment. <sup>c</sup> TP3 – Post-Deployment Health Assessment. <sup>d</sup> TP4 – Post-Deployment Health Reassessment. <sup>e</sup> TP5 – Periodic Health Assessment.

**Table D-3. Demographic and Military Characteristics, National Guard, 2013-2014<sup>a</sup>**

Characteristics* n (%)	TP 1 <sup>b</sup> (n=12,474)	TP 3 <sup>c</sup> (n=33,570)	TP 4 <sup>d</sup> (n=33,908)	TP 5 <sup>e</sup> (n=322,356)
<b>SEX</b>				
Male	10,868 (87)	29,625 (88)	30,104 (89)	273,672 (85)
Female	1,606 (13)	3,945 (12)	3,804 (11)	48,683 (15)
<b>AGE (YR)</b>				
17–25	4,109 (33)	9,570 (29)	8,767 (26)	121,764 (38)
26–30	2,809 (23)	7,987 (24)	8,538 (25)	64,257 (20)
31–35	1,840 (15)	5,250 (16)	5,562 (16)	45,324 (14)
36–40	1,194 (10)	3,413 (10)	3,581 (11)	30,015 (10)
41+	2,522 (20)	7,350 (22)	7,460 (22)	60,996 (19)
<b>RANK</b>				
E1–E4	5,090 (41)	12,332 (37)	12,502 (37)	149,394 (47)
E5–E9	5,272 (42)	15,810 (47)	16,315 (48)	132,090 (37)
W1–W5	465 (4)	1,292 (4)	1,290 (4)	6,444 (2)
O1–O4	1,438 (12)	3,613 (11)	3,334 (10)	29,067 (12)
O5–O10	195 (2)	518 (2)	463 (1)	5,312 (3)

Legend: TP – Touch Point; E – Enlisted; W – Warrant; O – Officer.

Notes: \*Variables may have missing data which contributed to 1-3% of the overall population sample. Therefore, individual variable sample sizes vary. Reported proportion for these variables only represents the population where data were available. All variables obtained from the corresponding health assessment. <sup>a</sup> Reported “National Guard” as component on the respective TP. <sup>b</sup> TP1- Pre-Deployment Health Assessment. <sup>c</sup> TP3 – Post-Deployment Health Assessment. <sup>d</sup> TP4 – Post-Deployment Health Reassessment. <sup>e</sup> TP5 – Periodic Health Assessment.

**Table D-4. Behavioral Health Medical Data, Regular Army, 2013-2014**

Medical Data - n (%)	TP 1 <sup>a</sup> (n=176,030)	TP 3 <sup>b</sup> (n=128,557)	TP 4 <sup>c</sup> (n=131,278)	TP 5 <sup>d</sup> (n=394,196)
<b>BH Encounters<sup>e</sup></b>				
Prevalent cases <sup>f</sup>	80,031 (45)	64,306 (50)	73,372 (56)	214,240 (54)
Incident cases <sup>g</sup>	6,374 (4)	12,094 (9)	7,910 (6)	18,590 (5)
<b>BH Diagnoses<sup>h</sup></b>				
Prevalent PTSD <sup>i</sup>	6,195 (4)	4,941 (4)	7,116 (5)	26,673 (7)
Prevalent MDD <sup>i</sup>	4,552 (3)	3,298 (3)	4,458 (3)	19,180 (5)
Incident BH Diagnosis <sup>j</sup>	7,004 (4)	9,537 (7)	9,362 (7)	25,338 (6)

Legend: TP – Touch Point; BH – Behavioral Health; PTSD- Post Traumatic Stress Disorder; MDD- Major Depressive Disorder. Notes: <sup>a</sup> Pre-Deployment Health Assessment. <sup>b</sup> Post-Deployment Health Assessment. <sup>c</sup> Post-Deployment Health Re-Assessment. <sup>d</sup> Periodic Health Assessment. <sup>e</sup> A BH-related ICD-9 code or BH-related V or E code in the inpatient (Dx1–Dx8) or outpatient (Dx1–Dx4) medical data. <sup>f</sup> Includes BH-related encounters prior to the TP screening and within 6 months after the screening. <sup>g</sup> No BH encounters prior to the TP but had a BH encounter within 6 months after the screening. <sup>h</sup> Presence of an incident BH-related ICD-9 code among one of the 10 BH diagnosis categories in the inpatient (Dx1-Dx8) medical data or the first diagnosis position (Dx1) or two BH diagnoses of the same group in the second through fourth diagnosis positions (Dx2-Dx4) occurring twice within a year but not on the same day in the outpatient medical data. <sup>i</sup> Occurring any time prior to the TP or within the 6 months following the TP. <sup>j</sup> Occurring within the 6 months following the TP.

**Table D-5. Behavioral Health Medical Data, Army Reserve, 2013-2014**

Medical Data - n (%)	TP 1 <sup>a</sup> (n=15,319)	TP 3 <sup>b</sup> (n=22,258)	TP 4 <sup>c</sup> (n=19,561)	TP 5 <sup>d</sup> (n=218,997)
<b>BH Encounters<sup>e</sup></b>				
Prevalent cases <sup>f</sup>	4,133 (27)	7,778 (35)	6,927 (35)	71,925 (33)
Incident cases <sup>g</sup>	395 (3)	1,323 (6)	242 (1)	3,272 (1)
<b>BH Diagnoses<sup>h</sup></b>				
Prevalent PTSD <sup>i</sup>	277 (2)	758 (3)	774 (4)	6,462 (3)
Prevalent MDD <sup>i</sup>	276 (2)	555 (2)	520 (3)	6,331 (3)
Incident BH Diagnosis <sup>j</sup>	260 (2)	924 (4)	359 (2)	3,820 (2)

Legend: TP – Touch Point; BH – Behavioral Health; PTSD- Post Traumatic Stress Disorder; MDD- Major Depressive Disorder. Notes: <sup>a</sup> Pre-Deployment Health Assessment. <sup>b</sup> Post-Deployment Health Assessment. <sup>c</sup> Post-Deployment Health Re-Assessment. <sup>d</sup> Periodic Health Assessment. <sup>e</sup> A BH-related ICD-9 code or BH-related V or E code in the inpatient (Dx1–Dx8) or outpatient (Dx1–Dx4) medical data. <sup>f</sup> Includes BH-related encounters prior to the TP screening and within 6 months after the screening. <sup>g</sup> No BH encounters prior to the TP but had a BH encounter within 6 months after the screening. <sup>h</sup> Presence of an incident BH-related ICD-9 code among one of the 10 BH diagnosis categories in the inpatient (Dx1-Dx8) medical data or the first diagnostic position (Dx1) or two BH diagnoses of the same group in the second through fourth diagnostic positions (Dx2-Dx4) occurring twice within a year but not on the same day in the outpatient medical data. <sup>i</sup> Occurring any time prior to the TP or within the 6 months following the TP. <sup>j</sup> Occurring within the 6 months following the TP.

**Table D-6. Behavioral Health Medical Data, National Guard, 2013-2014**

Medical Data - n (%)	TP 1 <sup>a</sup> (n=12,474)	TP 3 <sup>b</sup> (n=33,570)	TP 4 <sup>c</sup> (n=33,908)	TP 5 <sup>d</sup> (n=322,356)
<b>BH Encounters<sup>e</sup></b>				
Prevalent cases <sup>f</sup>	2,752 (22)	9,478 (28)	10,065 (30)	77,666 (24)
Incident cases <sup>g</sup>	245 (2)	2,178 (6)	429 (1)	3,411 (1)
<b>BH Diagnoses<sup>h</sup></b>				
Prevalent PTSD <sup>i</sup>	194 (2)	861 (3)	1,217 (4)	7,512 (2)
Prevalent MDD <sup>i</sup>	169 (1)	548 (2)	680 (2)	6,275 (2)
Incident BH Diagnosis <sup>j</sup>	144 (1)	1,198 (4)	628 (2)	3,734 (1)

Legend: TP – Touch Point; BH – Behavioral Health; PTSD- Post Traumatic Stress Disorder; MDD- Major Depressive Disorder.  
Notes: <sup>a</sup> Pre-Deployment Health Assessment. <sup>b</sup> Post-Deployment Health Assessment. <sup>c</sup> Post-Deployment Health Re-Assessment. <sup>d</sup> Periodic Health Assessment. <sup>e</sup> A BH-related ICD-9 code or BH-related V or E code in the inpatient (Dx1–Dx8) or outpatient (Dx1–Dx4) medical data. <sup>f</sup> Includes BH-related encounters prior to the TP screening and within 6 months after the screening. <sup>g</sup> No BH encounters prior to the TP but had a BH encounter within 6 months after the screening. <sup>h</sup> Presence of an incident BH-related ICD-9 code among one of the 10 BH diagnosis categories in the inpatient (Dx1-Dx8) medical data or the first diagnostic position (Dx1) or two BH diagnoses of the same group in the second through fourth diagnostic positions (Dx2-Dx4) occurring twice within a year but not on the same day in the outpatient medical data. <sup>i</sup> Occurring any time prior to the TP or within the 6 months following the TP. <sup>j</sup> Occurring within the 6 months following the TP.

**Table D-7. Screening for PTSD Symptoms, Regular Army, 2013-2014<sup>a</sup>**

Screening Tools - n (%)	TP 1 <sup>b</sup> (n=176,030)	TP 3 <sup>c</sup> (n=128,557)	TP 4 <sup>d</sup> (n=131,278)	TP 5 <sup>e</sup> (n=394,196)
<b>COMPLETED</b>	<b>(n=175,796)</b>	<b>(n=127,897)</b>	<b>(n=130,494)</b>	<b>(n=92,646)</b>
<b>POSITIVE PC-PTSD<sup>f</sup></b>	<b>8,093 (5)</b>	<b>12,138 (9)</b>	<b>16,342 (13)</b>	<b>8,151 (9)</b>
<b>COMPLETED</b>	<b>(n=8,041)</b>		<b>(n=16,104)</b>	<b>(n=7,949)</b>
<b>POSITIVE PCL-C<sup>g</sup></b>	<b>3,587 (45)</b>	<b>--</b>	<b>2,988 (19)</b>	<b>4,473 (56)</b>

Legend: PTSD – Post Traumatic Stress Disorder; TP – Touch Point; PC-PTSD – Primary Care PTSD; PCL-C – PTSD Checklist – Civilian.

Notes: <sup>a</sup> Reported “Active Duty” as component on the respective TP. <sup>b</sup> TP1- Pre-Deployment Health Assessment. <sup>c</sup> TP3 – Post-Deployment Health Assessment. <sup>d</sup> TP4 – Post-Deployment Health Reassessment. <sup>e</sup> TP5 – Periodic Health Assessment. <sup>f</sup> A “Yes” response to two or more of the four PC-PTSD questions. <sup>g</sup> A score greater or equal to 40 (range 17-85).



**Table D-8. Screening for PTSD Symptoms, Army Reserve, 2013-2014<sup>a</sup>**

Screening Tools - n (%)	TP 1 <sup>b</sup> (n=15,319)	TP 3 <sup>c</sup> (n=22,258)	TP 4 <sup>d</sup> (n=19,561)	TP 5 <sup>e</sup> (n=218,997)
<b>COMPLETED</b>	<b>(n=15,309)</b>	<b>(n=22,168)</b>	<b>(n=19,526)</b>	<b>(n=1,335)</b>
<b>POSITIVE PC-PTSD<sup>f</sup></b>	302 (2)	2,193 (10)	3,464 (18)	176 (13)
<b>COMPLETED</b>	<b>(n=298)</b>		<b>(n=3,434)</b>	<b>(n=174)</b>
<b>POSITIVE PCL-C<sup>g</sup></b>	113 (38)	--	1,842 (54)	106 (61)

Legend: PTSD – Post Traumatic Stress Disorder; TP – Touch Point; PC-PTSD – Primary Care Post Traumatic Stress Disorder; PCL-C – PTSD Checklist – Civilian.

Notes: <sup>a</sup> Reported “Reserves” as component on the respective TP. <sup>b</sup> TP1- Pre-Deployment Health Assessment. <sup>c</sup> TP3 – Post-Deployment Health Assessment. <sup>d</sup> TP4 – Post-Deployment Health Reassessment. <sup>e</sup> TP5 – Periodic Health Assessment. <sup>f</sup> A “Yes” response to two or more of the four PC-PTSD questions. <sup>g</sup> A score greater or equal to 40 (range 17-85).

**Table D-9. Screening for PTSD Symptoms, National Guard, 2013-2014<sup>a</sup>**

Screening Tools - n (%)	TP 1 <sup>b</sup> (n=12,474)	TP 3 <sup>c</sup> (n=33,570)	TP 4 <sup>d</sup> (n=33,908)	TP 5 <sup>e</sup> (n=322,356)
<b>COMPLETED</b>	<b>(n=12,457)</b>	<b>(n=33,510)</b>	<b>(n=33,814)</b>	<b>(n=171)</b>
<b>POSITIVE PC-PTSD<sup>f</sup></b>	143 (1)	2,928 (9)	4,830 (14)	33 (19)
<b>COMPLETED</b>	<b>(n=143)</b>		<b>(n=4,779)</b>	<b>(n=30)</b>
<b>POSITIVE PCL-C<sup>g</sup></b>	40 (28)	n/a	2,321 (49)	14 (47)

Legend: PTSD – Post Traumatic Stress Disorder; TP – Touch Point; PC-PTSD – Primary Care Post Traumatic Stress Disorder; PCL-C – PTSD Checklist – Civilian.

Notes: <sup>a</sup> Reported “National Guard” as component on the respective TP. <sup>b</sup> TP1- Pre-Deployment Health Assessment. <sup>c</sup> TP3 – Post-Deployment Health Assessment. <sup>d</sup> TP4 – Post-Deployment Health Reassessment. <sup>e</sup> TP5 – Periodic Health Assessment. <sup>f</sup> A “Yes” response to two or more of the four PC-PTSD questions. <sup>g</sup> A score greater or equal to 40 (range 17-85).

**Table D-10. Screening for Depression Symptoms, Regular Army, 2013-2014<sup>a</sup>**

Screening Tools - n (%)	TP 1 <sup>b</sup> (n=176,030)	TP 3 <sup>c</sup> (n=128,557)	TP 4 <sup>d</sup> (n=131,278)	TP 5 <sup>e</sup> (n=394,196)
<b>COMPLETED</b>	<b>(n=175,883)</b>	<b>(n=128,208)</b>	<b>(n=130,585)</b>	<b>(n=383,283)</b>
<b>POSITIVE PHQ-2<sup>f</sup></b>	5,790 (3)	7,387 (6)	9,043 (7)	43,567 (11)
<b>COMPLETED</b>	<b>(n=5,750)</b>		<b>(n=8,931)</b>	<b>(n=42,920)</b>
<b>POSITIVE PHQ-8<sup>g</sup></b>	1,700 (30)	n/a	3,308 (37)	7,896 (18)

Legend: TP – Touch Point; PHQ-2 – Patient Health Questionnaire-2; PHQ-8 – Patient Health Questionnaire-8.

Notes: <sup>a</sup> Reported “Active Duty” as component on the respective TP. <sup>b</sup> TP1- Pre-Deployment Health Assessment. <sup>c</sup> TP3 – Post-Deployment Health Assessment. <sup>d</sup> TP4 – Post-Deployment Health Reassessment. <sup>f</sup> Responding “More than half the days” or “Nearly every day” for at least one question on the PHQ-2. <sup>g</sup> A score of 15 or greater (range 0-24).

**Table D-11. Screening for Depression Symptoms, Army Reserve, 2013-2014<sup>a</sup>**

Screening Tools - n (%)	TP 1 <sup>b</sup> (n=15,319)	TP 3 <sup>c</sup> (n=22,258)	TP 4 <sup>e</sup> (n=19,561)	TP 5 <sup>e</sup> (n=218,997)
<b>COMPLETED</b>	<b>(n=15,314)</b>	<b>(n=22,217)</b>	<b>(n=19,513)</b>	<b>(n=218,824)</b>
<b>POSITIVE PHQ-2<sup>f</sup></b>	141 (1)	1,193 (5)	1,729 (9)	21,466 (10)
<b>COMPLETED</b>	<b>(n=140)</b>		<b>(n=1,709)</b>	<b>(n=21,402)</b>
<b>POSITIVE PHQ-8<sup>g</sup></b>	47 (34)	n/a	816 (48)	3,733 (17)

Legend: TP – Touch Point; PHQ-2 – Patient Health Questionnaire-2; PHQ-8 – Patient Health Questionnaire-8.

Notes: <sup>a</sup> Reported “Reserves” as component on the respective TP. <sup>b</sup> TP1- Pre-Deployment Health Assessment. <sup>c</sup> TP3 – Post-Deployment Health Assessment. <sup>d</sup> TP4 – Post-Deployment Health Reassessment. <sup>f</sup> Responding “More than half the days” or “Nearly every day” for at least one question on the PHQ-2. <sup>g</sup> A score of 15 or greater (range 0-24).

**Table D-12. Screening for Depression Symptoms, National Guard, 2013-2014<sup>a</sup>**

Screening Tools - n (%)	TP 1 <sup>b</sup> (n=12,474)	TP 3 <sup>c</sup> (n=33,570)	TP 4 <sup>d</sup> (n=33,908)	TP 5 <sup>e</sup> (n=322,356)
<b>COMPLETED</b>	<b>(n=12,463)</b>	<b>(n=33,519)</b>	<b>(n=33,773)</b>	<b>(n=322,033)</b>
<b>POSITIVE PHQ-2<sup>f</sup></b>	88 (1)	1,770 (5)	2,404 (7)	23,080 (7)
<b>COMPLETED</b>	<b>(n=88)</b>		<b>(n=2,361)</b>	<b>(n=22,846)</b>
<b>POSITIVE PHQ-8<sup>g</sup></b>	15 (17)	n/a	977 (41)	3,768 (16)

Legend: TP – Touch Point; PHQ-2 – Patient Health Questionnaire-2; PHQ-8 – Patient Health Questionnaire-8.

Notes: <sup>a</sup> Reported “National Guard” as component on the respective TP. <sup>b</sup> TP1- Pre-Deployment Health Assessment. <sup>c</sup> TP3 – Post-Deployment Health Assessment. <sup>d</sup> TP4 – Post-Deployment Health Reassessment. <sup>f</sup> Responding “More than half the days” or “Nearly every day” for at least one question on the PHQ-2. <sup>g</sup> A score of 15 or greater (range 0-24).

**Table D-13. Screening for Hazardous Drinking Behavior, Regular Army, 2013-2014<sup>a</sup>**

Screening Tool - n (%)	TP 1 <sup>b</sup> (n=176,030)	TP 3 <sup>c</sup> (n=128,557)	TP 4 <sup>d</sup> (n=131,278)	TP 5 <sup>e</sup> (n=394,196)
<b>POSITIVE AUDIT-C<sup>f</sup></b>	19,817(11)	5,844 (5)	21,422 (16)	36,145 (9)

Legend: TP – Touch Point; AUDIT-C – Alcohol Use Disorder Identification Test – Consumption.

Notes: <sup>a</sup> Reported “Active Duty” as component on the respective TP. <sup>b</sup> TP1 (Pre-DHA). <sup>c</sup> TP3 (PDHA). <sup>d</sup> TP4 (PDHRA). <sup>e</sup> TP5 (PHA). <sup>f</sup> A score of 4 or more for women and 5 or more for men on the AUDIT-C indicates hazardous drinking behavior.

**Table D-14. Screening for Hazardous Drinking Behavior, Army Reserve, 2013-2014<sup>a</sup>**

Screening Tool - n (%)	TP 1 <sup>b</sup> (n=15,319)	TP 3 <sup>c</sup> (n=22,258)	TP 4 <sup>d</sup> (n=19,561)	TP 5 <sup>e</sup> (n=218,997)
<b>POSITIVE AUDIT-C<sup>f</sup></b>	993 (6)	759 (3)	2,631 (14)	22,253 (10)

Legend: TP – Touch Point; AUDIT-C – Alcohol Use Disorder Identification Test – Consumption.

Notes: <sup>a</sup> Reported “Reserves” as component on the respective TP. <sup>b</sup> TP1 (Pre-DHA). <sup>c</sup> TP3 (PDHA). <sup>d</sup> TP4 (PDHRA). <sup>e</sup> TP5 (PHA). <sup>f</sup> A score of 4 or more for women and 5 or more for men on the AUDIT-C indicates hazardous drinking behavior.

**Table D-15. Screening for Hazardous Drinking Behavior, National Guard, 2013-2014<sup>a</sup>**

Screening Tool - n (%)	TP 1 <sup>b</sup> (n=12,474)	TP 3 <sup>c</sup> (n=33,570)	TP 4 <sup>d</sup> (n=33,908)	TP 5 <sup>e</sup> (n=322,356)
<b>POSITIVE AUDIT-C<sup>f</sup></b>	880 (7)	836 (2)	4,804 (14)	28,921 (9)

Legend: TP – Touch Point; AUDIT-C – Alcohol Use Disorder Identification Test – Consumption.

Notes: <sup>a</sup> Reported “National Guard” as component on the respective TP. <sup>b</sup> TP1 (Pre-DHA). <sup>c</sup> TP3 (PDHA). <sup>d</sup> TP4 (PDHRA). <sup>e</sup> TP5 (PHA). <sup>f</sup> A score of 4 or more for women and 5 or more for men on the AUDIT-C indicates hazardous drinking behavior.

## Appendix E

### Tables, All Components, By Touch Point

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**Table E-1. Demographic and Military Characteristics at TP1, 2013-2014**

<b>Characteristics* - n (%)</b>	<b>Regular Army (n=176,030)</b>	<b>Army Reserve (n=15,319)</b>	<b>National Guard (n=12,474)</b>
<b>SEX</b>			
Male	158,424 (90)	12,175 (79)	10,868 (87)
Female	17,606 (10)	3,144 (21)	1,606 (13)
<b>AGE (YR)</b>			
17–25	71,720 (41)	4,485 (29)	4,109 (33)
26–30	45,370 (26)	3,200 (21)	2,809 (23)
31–35	27,640 (16)	2,261 (15)	1,840 (15)
36–40	17,233 (10)	1,561 (10)	1,194 (10)
41+	14,067 (8)	3,812 (25)	2,522 (20)
<b>RANK</b>			
E1–E4	86,070 (49)	5,893 (39)	5,090 (41)
E5–E9	61,586 (35)	5,765 (38)	5,272 (42)
W1–W5	5,474 (3)	362 (2)	465 (4)
O1–O4	20,479 (12)	2,310 (15)	1,438 (12)
O5–O10	2,117 (1)	666 (4)	195 (2)

Legend: TP1 – Touch Point 1, Pre-Deployment Health Assessment (Pre-DHA); E – Enlisted; W – Warrant; O – Officer.  
 Notes:\*Variables may have missing data which contributed to 1-3% of the overall population sample. Therefore, individual variable sample sizes vary. Reported proportion for these variables only represents the population where data were available. All variables obtained from the corresponding health assessment.

**Table E-2. Demographic and Military Characteristics at TP3, 2013-2014**

Characteristics* - n (%)	Regular Army (n=128,557)	Army Reserve (n=22,258)	National Guard (n=33,570)
<b>SEX</b>			
Male	116,415 (91)	17,795 (80)	29,625 (88)
Female	12,142 (9)	4,463 (20)	3,945 (12)
<b>AGE (YR)</b>			
17–25	44,177 (34)	5,102 (23)	9,570 (29)
26–30	35,862 (28)	4,431 (20)	7,987 (24)
31–35	22,275 (17)	3,287 (15)	5,250 (16)
36–40	14,075 (11)	2,375 (11)	3,413 (10)
41+	12,168 (9)	7,063 (32)	7,350 (22)
<b>RANK</b>			
E1–E4	52,759 (41)	6,359 (29)	12,332 (37)
E5–E9	51,814 (40)	9,716 (44)	15,810 (47)
W1–W5	4,669 (4)	518 (2)	1,292 (4)
O1–O4	16,984 (13)	3,740 (17)	3,613 (11)
O5–O10	2,013 (2)	1,541 (7)	518 (2)

Legend: TP3 – Touch Point 3, Post-Deployment Health Assessment (PDHA); E – Enlisted; W – Warrant; O – Officer.

Notes: \*Variables may have missing data which contributed to 1-3% of the overall population sample. Therefore, individual variable sample sizes vary. Reported proportion for these variables only represents the population where data were available. All variables obtained from the corresponding health assessment.

**Table E-3. Demographic and Military Characteristics at TP4, 2013-2014**

Characteristics* - n (%)	Regular Army (n=131,278)	Army Reserve (n=19,561)	National Guard (n=33,908)
<b>SEX</b>			
Male	118,885 (91)	16,293 (83)	30,104 (89)
Female	12,393 (9)	3,268 (17)	3,804 (11)
<b>AGE (YR)</b>			
17–25	40,114 (31)	3,837 (20)	8,767 (26)
26–30	38,377 (29)	4,749 (24)	8,538 (25)
31–35	23,892 (18)	3,134 (16)	5,562 (16)
36–40	15,173 (12)	2,107 (11)	3,581 (11)
41+	13,722 (10)	5,734 (29)	7,460 (22)
<b>RANK</b>			
E1–E4	50,786 (39)	6,333 (32)	12,502 (37)
E5–E9	56,756 (43)	8,733 (45)	16,315 (48)
W1–W5	4,599 (4)	442 (2)	1,290 (4)
O1–O4	16,963 (13)	2,931 (15)	3,334 (10)
O5–O10	2,104 (2)	1,120 (6)	463 (1)

Legend: TP4 – Touch Point 4, Post-Deployment Health Re-Assessment (PDHRA); E – Enlisted; W – Warrant; O – Officer.

Notes: \*Variables may have missing data which contributed to 1-3% of the overall population sample. Therefore, individual variable sample sizes vary. Reported proportion for these variables only represents the population where data were available. All variables obtained from the corresponding health assessment.

**Table E-4. Demographic and Military Characteristics at TP5, 2013-2014**

Characteristics* - n (%)	Regular Army (n= 394,196)	Army Reserve (n=218,997)	National Guard (n=322,356)
<b>SEX</b>			
Male	334,873 (85)	170,081 (78)	273,672 (85)
Female	59,323 (15)	48,196 (22)	48,683 (15)
<b>AGE (YR)</b>			
17–25	153,435 (39)	74,487 (34)	121,764 (38)
26–30	84,651 (22)	45,827 (21)	64,257 (20)
31–35	62,761 (16)	30,731 (14)	45,324 (14)
36–40	45,386 (12)	19,706 (9)	30,015 (10)
41+	47,963 (12)	48,246 (22)	60,996 (19)
<b>RANK</b>			
E1–E4	168,651 (43)	120,040 (55)	149,394 (47)
E5–E9	151,341 (38)	63,224 (29)	132,090 (37)
W1–W5	9,086 (2)	2,645 (1)	6,444 (2)
O1–O4	53,022 (13)	25,613 (12)	29,067 (12)
O5–O10	12,028 (3)	7,454 (3)	5,312 (3)

Legend: TP5 – Touch Point 5, Periodic Health Assessment (PHA); E – Enlisted; W – Warrant; O – Officer.

Notes:\*Variables may have missing data which contributed to 1-3% of the overall population sample. Therefore, individual variable sample sizes vary. Reported proportion for these variables only represents the population where data were available. All variables obtained from the corresponding health assessment.



**Table E-5. Screening for PTSD Symptoms at TP1, 2013-2014**

Screening Tools – n (%)	Regular Army (n=176,030)	Army Reserve (n=15,319)	National Guard (n=12,474)
<b>COMPLETED</b>	<b>(n=175,796)</b>	<b>(n=15,309)</b>	<b>(n=12,457)</b>
POSITIVE PC-PTSD <sup>a</sup>	8,093 (5)	302 (2)	143 (1)
<b>COMPLETED</b>	<b>(n=8,041)</b>	<b>(n=298)</b>	<b>(n=143)</b>
POSITIVE PCL-C <sup>b</sup>	3,587 (45)	113 (38)	40 (28)

Legend: PTSD – Post Traumatic Stress Disorder; TP1 – Touch Point 1, Pre-Deployment Health Assessment (Pre-DHA); PC-PTSD – Primary Care Post Traumatic Stress Disorder; Post Traumatic Stress Disorder Checklist – Civilian.  
Notes: <sup>a</sup>A “Yes” response to at least two of the four questions on the PC-PTSD. <sup>b</sup>A score of 40 or greater (range 17-85).

**Table E-6. Screening for PTSD Symptoms at TP3, 2013-2014**

Screening Tools – n (%)	Regular Army (n=128,557)	Army Reserve (n=22,258)	National Guard (n=33,570)
<b>COMPLETED</b>	<b>(n=127,897)</b>	<b>(n=22,168)</b>	<b>(n=33,510)</b>
POSITIVE PC-PTSD <sup>a</sup>	12,138 (9)	2,193 (10)	2,928 (9)
<b>COMPLETED</b>			
POSITIVE PCL-C <sup>b</sup>	---	---	---

Legend: PTSD – Post Traumatic Stress Disorder; TP3 – Touch Point 3, Post-Deployment Health Assessment (PDHA); PC-PTSD – Primary Care Post Traumatic Stress Disorder; PCL-C – Post Traumatic Stress Disorder Checklist – Civilian.  
Notes: <sup>a</sup>A “Yes” response to two or more of the four questions on the PC-PTSD. <sup>b</sup>TP3 does not contain the PCL-C.

**Table E-7. Screening for PTSD Symptoms at TP4, 2013-2014**

Screening Tools – n (%)	Regular Army (n=131,278)	Army Reserve (n=19,561)	National Guard (n=33,908)
<b>COMPLETED</b>	<b>(n=130,494)</b>	<b>(n=19,526)</b>	<b>(n=33,814)</b>
POSITIVE PC-PTSD <sup>a</sup>	16,342 (13)	3,464 (18)	4,830 (14)
<b>COMPLETED</b>	<b>(n=16,104)</b>	<b>(n=3,434)</b>	<b>(n=4,779)</b>
POSITIVE PCL-C <sup>b</sup>	7,372 (46)	1,842 (54)	2,321 (49)

Legend: PTSD – Post Traumatic Stress Disorder; TP4 – Touch Point 4, Post-Deployment Health Re-Assessment (PDHRA); PC-PTSD – Primary Care Post Traumatic Stress Disorder; PCL-C – Post Traumatic Stress Disorder Checklist – Civilian.  
Notes: <sup>a</sup>A “Yes” response to two or more of the four questions on the PC-PTSD. <sup>b</sup>A score of 40 or greater (range 17-85).

**Table E-8. Screening PTSD Symptoms at TP5, 2013-2014**

Screening Tools – n (%)	Regular Army (n=394,196)	Army Reserve (n=218,997)	National Guard (n=322,356)
<b>COMPLETED</b>	<b>(n=92,646)</b>	<b>(n=1,335)</b>	<b>(n=171)</b>
<b>POSITIVE PC-PTSD<sup>a</sup></b>	8,151 (9)	176 (13)	33 (19)
<b>COMPLETED</b>	<b>(n=7,949)</b>	<b>(n=174)</b>	<b>(n=30)</b>
<b>POSITIVE PCL-C<sup>b</sup></b>	4,473 (56)	106 (61)	14 (47)

Legend: PTSD – Post Traumatic Stress Disorder; TP5 – Touch Point 5, Periodic Health Assessment (PHA); PC-PTSD – Primary Care Post Traumatic Stress Disorder; PCL-C – Post Traumatic Stress Disorder Checklist – Civilian.

Notes: <sup>a</sup>A “Yes” response to two or more of the four questions on the PC-PTSD. <sup>b</sup>A score of 40 or greater (range 17-85).

**Table E-9. Screening for Depression Symptoms at TP1, 2013-2014**

Screening Tools – n (%)	Regular Army (n=176,030)	Army Reserve (n=15,319)	National Guard (n=12,474)
<b>COMPLETED</b>	<b>(n=175,883)</b>	<b>(n=15,314)</b>	<b>(n=12,463)</b>
<b>POSITIVE PHQ-2<sup>a</sup></b>	5,790 (3)	141 (1)	88 (1)
<b>COMPLETED</b>	<b>(n=5,750)</b>	<b>(n=140)</b>	<b>(n=88)</b>
<b>POSITIVE PHQ-8<sup>b</sup></b>	1,700 (30)	47 (34)	15 (17)

Legend: TP1 – Touch Point 1, Pre-Deployment Health Assessment (Pre-DHA); PHQ-2 – Patient Health Questionnaire-2; PHQ-8 – Patient Health Questionnaire-8.

Notes: <sup>a</sup> Responding “More than half the days” or “Nearly every day” for at least one question on the PHQ-2. <sup>b</sup> A score of 15 or greater (range 0-24).

**Table E-10. Screening for Depression Symptoms at TP3, 2013-2014**

Screening Tools – n (%)	Regular Army (n=128,557)	Army Reserve (n=22,258)	National Guard (n=33,570)
<b>COMPLETED</b>	<b>(n=128,208)</b>	<b>(n=22,217)</b>	<b>(n=33,519)</b>
<b>POSITIVE PHQ-2<sup>a</sup></b>	7,387 (6)	1,193 (5)	1,770 (5)
<b>COMPLETED</b>			
<b>POSITIVE PHQ-8<sup>b</sup></b>	---	---	---

Legend: TP3 – Touch Point 3, Post-Deployment Health Assessment (PDHA); PHQ-2 - Patient Health Questionnaire-2; PHQ-8 – Patient Health Questionnaire-8.

Notes: <sup>a</sup> Responding “More than half the days” or “Nearly every day” for at least one question on the PHQ-2. <sup>b</sup> No PHQ-8 available at TP3 on the PDHA.

**Table E-11. Screening for Depression Symptoms at TP4, 2013-2014**

Screening Tools – n (%)	Regular Army (n=131,278)	Army Reserve (n=19,561)	National Guard (n=33,908)
<b>COMPLETED</b>	(n=130,585)	(n=19,513)	(n=33,773)
<b>POSITIVE PHQ-2<sup>a</sup></b>	9,043 (7)	1,729 (9)	2,404 (7)
<b>COMPLETED</b>	(n=8,931)	(n=1,709)	(n=2,361)
<b>POSITIVE PHQ-8<sup>b</sup></b>	3,308 (37)	816 (48)	977 (41)

Legend: TP4 – Touch Point 4, Post-Deployment Health Re-Assessment (PDHRA); PHQ-2 - Patient Health Questionnaire-2; PHQ-8 – Patient Health Questionnaire-8.

Notes: <sup>a</sup> Responding “More than half the days” or “Nearly every day” for at least one question on the PHQ-2. <sup>b</sup> A score of 15 or greater (range 0-24).

**Table E-12. Screening for Depression Symptoms at TP5, 2013-2014**

Screening Tools – n (%)	Regular Army (n=394,196)	Army Reserve (n=218,997)	National Guard (n=322,356)
<b>COMPLETED</b>	(n=383,283)	(n=218,824)	(n=322,033)
<b>POSITIVE PHQ-2<sup>a</sup></b>	43,567 (11)	21,466 (10)	23,080 (7)
<b>COMPLETED</b>	(n=42,920)	(n=21,402)	(n=22,846)
<b>POSITIVE PHQ-8<sup>b</sup></b>	7,896 (18)	3,733 (17)	3,768 (16)

Legend: TP5 – Touch Point 5, Periodic Health Assessment (PHA); PHQ-2 - Patient Health Questionnaire-2; PHQ-8 – Patient Health Questionnaire-8.

Notes: <sup>a</sup> Responding “More than half the days” or “Nearly every day” for at least one question on the PHQ-2. <sup>b</sup> A score of 15 or greater (range 0-24).

**Table E-13. Screening for Hazardous Drinking Behavior at TP1, 2013-2014**

Screening Tool – n (%)	Regular Army (n=176,030)	Army Reserve (n=15,319)	National Guard (n=12,474)
<b>POSITIVE AUDIT-C<sup>a</sup></b>	19,817 (11)	993 (6)	880 (7)

Legend: TP1 – Touch Point 1, Pre-Deployment Health Assessment (Pre-DHA); AUDIT-C – Alcohol Use Disorder Identification Test – Consumption.

Note: <sup>a</sup> A score of 4 or more for women and 5 or more for men on the AUDIT-C indicates hazardous drinking behavior.

**Table E-14. Screening for Hazardous Drinking Behavior at TP3, 2013-2014**

Screening Tool – n (%)	Regular Army (n=128,557)	Army Reserve (n=22,258)	National Guard (n=33,570)
<b>POSITIVE AUDIT-C<sup>a</sup></b>	5,844 (5)	759 (3)	836 (2)

Legend: TP3 – Touch Point 3, Post-Deployment Health Assessment (PDHA); AUDIT-C – Alcohol Use Disorder Identification Test – Consumption.

Note: <sup>a</sup> A score of 4 or more for women and 5 or more for men on the AUDIT-C indicates hazardous drinking behavior.

**Table E-15. Screening for Hazardous Drinking Behavior at TP4, 2013-2014**

Screening Tool – n (%)	Regular Army (n=131,278)	Army Reserve (n=19,561)	National Guard (n=33,908)
<b>POSITIVE AUDIT-C<sup>a</sup></b>	21,422 (16)	2,631 (14)	4,804 (14)

Legend: TP4 – Touch Point 4, Post-Deployment Health Re-Assessment (PDHRA); AUDIT-C – Alcohol Use Disorder Identification Test – Consumption.

Note: <sup>a</sup> A score of 4 or more for women and 5 or more for men on the AUDIT-C indicates hazardous drinking behavior.

**Table E-16. Screening for Hazardous Drinking Behavior at TP5, 2013-2014**

Screening Tools – n (%)	Regular Army (n=394,196)	Army Reserve (n=218,997)	National Guard (n=322,356)
<b>POSITIVE AUDIT-C<sup>a</sup></b>	36,145 (9)	22,253 (10)	28,921 (9)

Legend: TP5 – Touch Point 5, Periodic Health Assessment (PHA); AUDIT-C – Alcohol Use Disorder Identification Test – Consumption.

Note: <sup>a</sup> A score of 4 or more for women and 5 or more for men on the AUDIT-C indicates hazardous drinking behavior.

## Appendix F

### Deployed versus Non-Deployed Population Tables

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**Table F-1. Demographic and Military Characteristics at TP5, 2014**

Characteristics* - n (%)	Deployed <sup>a</sup> (n=51,561)		Non-Deployed <sup>b</sup> (n=43,549)	
<b>COMPONENT</b>				
Regular Army	50,575	(98)	43,015	(99)
Army Reserve	868	(2)	480	(1)
National Guard	118	(<1)	54	(<1)
<b>SEX</b>				
Male	44,900	(87)	35,491	(82)
Female	6,661	(13)	8,058	(19)
<b>AGE (YR)</b>				
17–25	8,498	(16)	30,404	(70)
26–30	12,820	(25)	7,333	(17)
31–35	12,073	(23)	3,122	(7)
36–40	9,054	(18)	1,385	(3)
41+	9,116	(18)	1,305	(3)
<b>RANK</b>				
E1–E4	9,669	(19)	33,377	(77)
E5–E9	29,916	(58)	4,395	(10)
W1–W5	1,781	(3)	118	(<1)
O1–O4	7,975	(15)	5,382	(12)
O5–O10	2,220	(4)	277	(1)

Legend: TP5 – Touch Point 5, Periodic Health Assessment (PHA); E – Enlisted; W – Warrant; O – Officer.

Notes: \*Variables may have missing data which contributed to 1-3% of the overall population sample. Therefore, individual variable sample sizes vary. Reported proportion for these variables only represents the population where data were available.

<sup>a</sup> Reported going on at least one deployment in the last five years on the PHA. <sup>b</sup> Reported no deployments in the past five years on the PHA.

**Table F-2. Screening for PTSD Symptoms at TP5, 2013-2014**

Screening Tools – n (%)	Deployed <sup>a</sup> (n=51,561)	Non-Deployed <sup>b</sup> (n=43,549)
<b>COMPLETED</b>	<b>(n=51,058)</b>	<b>(n=43,094)</b>
<b>POSITIVE PC-PTSD<sup>c</sup></b>	6,779 (13)	1,581 (4)
<b>COMPLETED</b>	<b>(n=6,590)</b>	<b>(n=1,563)</b>
<b>POSITIVE PCL-C<sup>d</sup></b>	3,771 (57)	822 (53)

Legend: PTSD – Post Traumatic Stress Disorder; TP5 – Touch Point 5, Periodic Health Assessment (PHA); PC-PTSD – Primary Care Post Traumatic Stress Disorder; PCL-C – Post Traumatic Stress Disorder Checklist – Civilian.

Notes: <sup>a</sup> Reported going on at least one deployment in the last five years on the PHA. <sup>b</sup> Reported no deployments in the past five years on the PHA. <sup>c</sup> A “Yes” response to two or more of four questions on the PC-PTSD. <sup>d</sup> A score of 40 or greater (range 17-85).

**Table F-3. Screening for Depression Symptoms at TP5, 2013-2014**

Screening Tools – n (%)	Deployed <sup>a</sup> (n=51,561)	Non-Deployed <sup>b</sup> (n=43,549)
<b>COMPLETED</b>	<b>(n=46,060)</b>	<b>(n=38,436)</b>
<b>POSITIVE PHQ-2<sup>c</sup></b>	4,750 (10)	1,954 (5)
<b>COMPLETED</b>	<b>(n=4,621)</b>	<b>(n=1,930)</b>
<b>POSITIVE PHQ-8<sup>d</sup></b>	1,752 (36)	579 (30)

Legend: TP5 – Touch Point 5, Periodic Health Assessment (PHA); PHQ-2 – Patient Health Questionnaire-2; PHQ-8 – Patient Health Questionnaire-8. Notes: <sup>a</sup> Reported going on at least one deployment in the last five years on the PHA. <sup>b</sup> Reported no deployments in the past five years on the PHA. <sup>c</sup> Responding “More than half the days” or “Nearly every day” for at least one question on the PHQ-2. <sup>d</sup> A score of 15 or greater (range 0-24).

**Table F-4. Screening for Hazardous Drinking Behavior at TP5, 2013-2014**

Screening Tool– n (%)	Deployed <sup>a</sup> (n=51,561)	Non-Deployed <sup>b</sup> (n=43,549)
<b>POSITIVE AUDIT-C<sup>c</sup></b>	5,000 (10)	3,519 (8)

Legend: TP5 – Touch Point 5, Periodic Health Assessment (PHA); AUDIT-C – Alcohol Use Disorder Identification Test – Consumption.

Notes: <sup>a</sup> Reported at least one deployment in the past five years on the PHA. <sup>b</sup> Did not report any deployments in the past five years on the PHA. <sup>c</sup> A score of 4 or more for women and 5 or more for men on the AUDIT-C indicates hazardous drinking behavior.

**Appendix G**

**Longitudinal Population from TP1, TP3, and TP4 Tables**

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**Table G-1. Demographic and Military Characteristics Reported at TP1 for the Soldiers who Completed TP1, TP3 and TP4 during 2013-2014<sup>a</sup>**

Characteristics* - n (%)	Linked TP1, TP3, & TP4 Population <sup>a</sup> (n=31,029)	
<b>COMPONENT</b>		
Regular Army	25,203	(81)
Army Reserve	2,537	(8)
National Guard	3,289	(11)
<b>SEX</b>		
Male	27,951	(90)
Female	3,078	(10)
<b>AGE (YR)</b>		
17–25	11,739	(38)
26–30	8,042	(26)
31–35	4,865	(16)
36–40	3,102	(10)
41+	3,281	(11)
<b>RANK</b>		
E1–E4	13,661	(44)
E5–E9	11,246	(36)
W1–W5	1,126	(4)
O1–O4	4,547	(15)
O5–O10	447	(1)
No Rank Reported	2	(<1)

Legend: TP1 – Touch Point 1, Pre-Deployment Health Assessment (Pre-DHA); TP3 – Touch Point 3, Post-Deployment Health Assessment (PDHA); TP4 – Touch Point 4, Post-Deployment Health Re-Assessment (PDHRA); E – Enlisted; W – Warrant; O – Officer.

Notes: \*Variables may have missing data which contributed to 1-3% of the overall population sample. Therefore, individual variable sample sizes vary. Reported proportion for these variables only represents the population where data was available.

<sup>a</sup> The health assessments were linked by social security number. All three touch points had to be completed from 01 January 2013 to 31 December, 2014. The dates of the health assessments to occur in an ascending manner meaning the Pre-DHA completion date occurred before the PDHA and PDHRA and the PDHA occurred after the Pre-DHA and before the PDHRA.

**Table G-2. Screening for Depression Symptoms for the Soldiers who Completed TP1, TP3 and TP4 during 2013-2014<sup>a</sup>**

Screening Tools – n (%)	TP1	TP3	TP4
	(n=31,029)		
<b>COMPLETED</b>	(n=31,013)	(n=31,014)	(n=30,995)
<b>POSITIVE PHQ-2<sup>b</sup></b>	462 (1)	1,633 (5)	1,805 (6)
<b>COMPLETED</b>	(n=460)		(n=1,794)
<b>POSITIVE PHQ-8<sup>c</sup></b>	73 (16)	n/a	606 (34)

Legend: TP1 – Touch Point 1, Pre-Deployment Health Assessment (Pre-DHA); TP3 – Touch Point 3, Post-Deployment Health Assessment (PDHA); TP4 – Touch Point 4, Post-Deployment Health Re-Assessment (PDHRA); PHQ-2–Patient Health Questionnaire-2; PHQ-8–Patient Health Questionnaire-8.

Notes: <sup>a</sup>The health assessments were linked by social security number. All three touch points had to be completed from 01 January 2013 to 31 December 2014. The dates of the health assessments to occur in an ascending manner meaning the Pre-DHA completion date occurred before the PDHA and PDHRA and the PDHA occurred after the Pre-DHA and before the PDHRA. <sup>b</sup>Responding “More than half the days” or “Nearly every day” for at least one question on the PHQ-2. <sup>c</sup>A score of 15 or greater (range 0-24).

**Table G-3. Screening for PTSD Symptoms for the Soldiers who Completed TP1, TP3 and TP4 during 2013-2014<sup>a</sup>**

Screening Tools – n (%)	TP1	TP3	TP4
	(n=31,029)		
<b>COMPLETED</b>	(n=31,005)	(n=30,954)	(n=30,991)
<b>POSITIVE PC-PTSD<sup>b</sup></b>	754 (2)	2,506 (8)	3,107 (10)
<b>COMPLETED</b>	(n=750)		(n=3,100)
<b>POSITIVE PCL-C<sup>c</sup></b>	225 (30)	n/a	1,355 (44)

Legend: PTSD – Post Traumatic Stress Disorder; TP1 – Touch Point 1, Pre-Deployment Health Assessment (Pre-DHA); TP3 – Touch Point 3, Post-Deployment Health Assessment (PDHA); TP4 – Touch Point 4, Post-Deployment Health Re-Assessment (PDHRA); PC-PTSD – Primary Care Post Traumatic Stress Disorder; PCL-C – Post Traumatic Stress Disorder Checklist – Civilian.

Notes: <sup>a</sup>The health assessments were linked by social security number. All three touch points had to be completed from 01 January 2013 to 31 December 2014. The dates of the health assessments to occur in an ascending manner meaning the Pre-DHA completion date occurred before the PDHA and PDHRA and the PDHA occurred after the Pre-DHA and before the PDHRA. <sup>b</sup>A “Yes” response to two or more of the four questions on the PC-PTSD. <sup>c</sup>A score of 40 or greater (range 17-85)

**Table G-4. Screening for Hazardous Drinking Behavior for the Soldiers who Completed TP1, TP3 and TP4 during 2013-2014<sup>a</sup>**

Screening Tool – n (%)	TP1	TP3	TP4
	(n=31,029)		
<b>POSITIVE AUDIT-C<sup>b</sup></b>	754 (2)	2,506 (8)	3,107 (10)

Legend: TP1 – Touch Point 1, Pre-Deployment Health Assessment (Pre-DHA); TP3 – Touch Point 3, Post-Deployment Health Assessment (PDHA); TP4 – Touch Point 4, Post-Deployment Health Re-Assessment (PDHRA); AUDIT-C - Alcohol Use Disorders Identification Tool – Consumption.

Notes: <sup>a</sup>The health assessments were linked by social security number. All three touch points had to be completed from 01 January 2013 to 31 December 2014. The dates of the health assessments to occur in an ascending manner meaning the Pre-DHA completion date occurred before the PDHA and PDHRA and the PDHA occurred after the Pre-DHA and before the PDHRA. <sup>b</sup>A score of 4 or more for women and 5 or more for men on the AUDIT-C indicated hazardous drinking behavior.