

# Predictors of Discharge From the VA Caregiver Support Program

Courtney Harold Van Houtven, PhD, MSc; Valerie A. Smith, DrPH; Theodore S. Z. Berkowitz, MS; Katherine E. M. Miller, PhD, MSPH; Megan Shepherd-Banigan, PhD, MPH; Jennifer Henius, LCSW; and Margaret Kabat, LCSW-C, CCM

The Caregivers and Veterans Omnibus Health Services Act of 2010 established the Department of Veterans Affairs (VA) Program of Comprehensive Assistance for Family Caregivers (PCAFC) to support caregivers of post-9/11 veterans who require assistance, supervision, or protection due to service-related injuries.<sup>1</sup> The law stipulated new landmark services for family caregivers of severely injured post-9/11-era veterans, including training, a monthly stipend paid to the caregiver (\$600-\$2300 per month, depending on hours of caregiving needed), and additional caregiver services (eg, self-care classes, peer mentoring classes).<sup>2</sup> The VA expected 4000 applications in the first 5 years of implementation.<sup>3</sup> However, as of 2020, more than 40,000 caregivers had been approved and served, far eclipsing projected numbers of applicants. Mean veteran age in the program is 37 years, and prevalence rates of pain, musculoskeletal problems, traumatic brain injury, and posttraumatic stress are high.<sup>4</sup> Given these conditions, some veterans require long-term assistance and participate in PCAFC for years, whereas others may no longer qualify for the program because, for instance, they demonstrate improvements in function or caregiving ceases for another reason.<sup>1,5</sup> With annual outlays of about \$500 million, PCAFC is the largest public program to directly support family caregivers in the United States.<sup>1,4</sup>

The PCAFC is administered locally through the VA Caregiver Support Program (CSP) of each VA medical center (VAMC) by caregiver support coordinators (CSCs). Individual medical centers receive administrative and clinical guidance from Veterans Integrated Service Network (VISN) program leads, through regular meetings. There are 18 VISNs (also called “networks”) across the country, each representing approximately 5 to 6 individual medical centers. PCAFC operations are decentralized, and supervision occurs at the VAMC level and the network level. The National VA CSP office disperses program policies, provides training and regulatory guidance to staff to standardize eligibility assessments, and funds approximately 400 staff salaries. Application eligibility determinations, amount of the stipend (ie, tier reflecting amount of caregiving hours needed per week), and discharge determinations are most commonly decided by an interprofessional clinical eligibility team rather than an individual CSC.<sup>6</sup>

## ABSTRACT

**OBJECTIVES:** The Department of Veterans Affairs (VA) Program of Comprehensive Assistance for Family Caregivers (PCAFC) is a clinical program providing training, a monthly stipend, and other services to caregivers of qualifying post-9/11 veterans with service-related injuries. Veteran-caregiver discharge from the program occurs when veteran recovery is achieved, participation is no longer in the veteran’s best interest, or caregiving ceases. Public scrutiny about potentially inappropriate discharges resulted in a nationwide freeze on all discharges. PCAFC expanded to pre-9/11 veterans in October 2020; thus, lessons learned can continue to inform the expanded program. We pursued 3 objectives: (1) describe the discharge rate, reasons for discharge, and veteran and caregiver characteristics by discharge status; (2) identify factors associated with discharge from PCAFC nationally; and (3) characterize network variation in discharge predictors.

**STUDY DESIGN:** Retrospective observational study using VA administrative data from fiscal year (FY) 2011 to FY 2017.

**METHODS:** Using multivariable Cox proportional hazards regression, we examined factors associated with PCAFC discharge among veterans and caregivers enrolled in PCAFC during FY 2011 to FY 2016.

**RESULTS:** A total of 40.5% of all participants were discharged. Nonspouse caregivers and those applying in later years had the highest rates of discharge; spouse caregivers and those applying in earlier years had the lowest rates of discharge. In 4 of 18 networks, caregivers of Black veterans faced higher rates of discharge compared with caregivers of White veterans, and in 1 network, they faced lower rates of discharge. Substantial variability in rates of discharge was also observed across Veterans Integrated Service Networks.

**CONCLUSIONS:** Training on clinically appropriate discharge criteria could improve practice and increase equity.

*Am J Manag Care.* 2022;28(8):e289-e295. doi:10.37765/ajmc.2022.89202

## TAKEAWAY POINTS

We describe veteran-caregiver discharge patterns and identify the primary drivers of discharge from the Department of Veterans Affairs (VA) Program of Comprehensive Assistance for Family Caregivers (PCAFC). Approximately 40% of participants from 2011 to 2016 were discharged. Rates of discharges increased for more recent applications. Spousal caregivers and veterans requiring the most hours of care had the lowest rates of discharge. In 4 of 18 networks, caregivers of Black veterans faced higher rates of discharge compared with White veterans, and in 1 network, they faced lower rates of discharge.

- ▶ Potential inequities exist, such as higher discharges for nonspouses nationally. In 22% of networks, Black veterans were discharged at greater rates compared with White veterans.
- ▶ Training on allowable discharge criteria could improve practice and increase equity for the largest public program in the United States to support family caregivers.
- ▶ Lessons learned from the VA's program, rapidly implemented in a large integrated health care system and including specific admission and discharge criteria, can inform expansion of the PCAFC, which expanded in 2020 and will expand again in 2022. Findings can also inform development of caregiver supports in other integrated health systems nationally.

Upon acceptance into PCAFC, ongoing clinical eligibility is reassessed annually to ensure that the veteran and caregiver still meet program eligibility requirements. Clinical eligibility includes the inability to “self-sustain in the community”—that is, the veteran is fully dependent on a caregiver to complete at least 3 activities of daily living and/or requires “supervision, protection, or instruction on a continuous basis.”<sup>7</sup> PCAFC is a clinical intervention, not a VA benefit, and is not considered by VA to be a permanent service for any program participant. As such, discharges from PCAFC may occur at any point, including during home visits (occurring annually at a minimum), when examiners assess veteran need for caregiver assistance, veteran recovery progress, and program compliance. Reasons for discharge include the veteran being assessed as no longer clinically eligible, veteran request, for cause (eg, detection of unsafe caregiving situation), caregiver request, noncompliance with program requirements, institutionalization of the veteran, or death of the veteran or caregiver. These are considered allowable criteria for discharge, whereas factors such as tier or demographic characteristics are considered disallowable criteria. In addition, unrelated caregivers must co-reside with the veteran care recipient to be eligible for the program. Caregivers have the right to file a clinical appeal upon discharge. Additionally, caregivers can reapply for the program if discharged.

PCAFC discharges have come under public scrutiny—for example, in Quil Lawrence's “Some VAs Are Dropping Veteran Caregivers From Their Rolls” and follow-up accounts, reported by National Public Radio beginning on April 5, 2017.<sup>5,8-11</sup> Subsequently, the VA suspended discharges nationally twice (2017, 2018) and reviewed eligibility assessment procedures.<sup>5,12</sup>

We used application tracking data on PCAFC participants from program inception through fiscal year (FY) 2017 to assess predictors of discharge nationally and within networks (VISNs). First, we describe the discharge rate, reasons for discharge, and veteran and caregiver characteristics by discharge status. Second, we identify the veteran and caregiver predictors most strongly associated with discharge

from PCAFC nationally for discharges that are based on clinical judgment of VA providers or provider teams (that is, are not automatic based on rules. Automatic discharges include discharges due to institutionalization of the veteran or death of the veteran or caregiver). Finally, we characterize VISN-level geographic variation in these veteran predictors (eg, age, gender, race, marital status, relationship of caregiver to veteran, number of physical and mental health comorbidities, assigned tier) and caregiver predictors (eg, gender). Understanding predictors of discharge can help characterize veterans and caregivers who are discharged, thereby potentially identifying whether the VA needs to change its discharge practices to optimize the outcomes of participating veterans

and caregivers. Furthermore, the VA Mission Act expanded the program to serve caregivers of veterans from earlier service eras (eg, the Korean and Vietnam conflicts)<sup>13</sup> in October 2020 and will expand again in October 2022 to all service eras (eg, Operation Desert Storm/Gulf War); thus, the results of our research can inform best practices as PCAFC expands.

## METHODS

### Data

Using application tracking data, we identified caregivers approved for PCAFC who applied between May 1, 2011, and September 30, 2016. Each caregiver cares for a unique veteran in the program and each veteran only has 1 caregiver at a time in the program. Although a veteran can have different caregivers sequentially by reapplying upon any change in caregiver, we focused on the first approved veteran-caregiver dyad enrolled in the program. We observed discharges through September 30, 2017. The application tracking data system includes application date, enrollment date, discharge date, reason for discharge, caregiver gender (male, female), relationship to the veteran (spouse, parent, significant other, other), network at time of application (18 VISNs), and assigned tier at time of data extraction. Tiers are demarcated by hours of care needed weekly by the veteran: fewer than 10 (tier 1), 10 to 20 (tier 2), or 20 to 40 (tier 3). Using the veteran's Social Security number, we linked caregiver tracking data to VA electronic enrollment and electronic health record data on the veteran to obtain additional sociodemographic and health characteristics.

### Outcome Measure

The dependent variable was measured as time from approval to discharge from the PCAFC for veteran-caregiver dyads who had been discharged; those not discharged had their time to event outcome censored at September 30, 2017, or death, whichever occurred earlier. For the descriptive statistics presented (objective 1) we included

all discharges. However, because we were interested in potential predictors of discharge, we excluded caregivers discharged due to death of the caregiver or veteran or due to veteran institutionalization when modeling predictors of discharge, because such situations are automatic reasons for discharge by program rules.

### Explanatory Variables

In addition to caregiver characteristics (tier, caregiver gender, relationship to the veteran), models included veteran characteristics that we hypothesized would be associated with discharge from the program. Veteran age was measured in years; veteran gender was measured as female or male. Veteran race was measured as Black/African American, White, or other or unknown. Veteran ethnicity was measured as Hispanic/Latino(a), non-Hispanic/Latino(a), or unknown/missing. Marital status of the veteran included married, previously married, never married, or unknown/missing. VISN of closest VAMC to the veteran's residence was one of 1, 2, 4, 5, 6, 7, 8, 9, 10, 12, 15, 16, 17, 19, 20, 21, 22, or 23. The models all controlled for FY of the application (2011-2016), tier, and relationship to the veteran.

The models also included a count of the number of physical and mental health comorbidities of the veteran. The physical comorbidities included in the count were musculoskeletal disorders/diseases; pain, not including back or joint; joint pain, not including back; hyperlipidemia; hypertension; traumatic brain injury; obesity; headache; hearing: loss, pain, other; diabetes; neoplasm; sleep disorders; spinal cord injury; vision loss; amputation; and chest pain/acute myocardial infarction. The mental health comorbidities were posttraumatic stress disorder; Alzheimer disease and dementia; any psychotic disorder; dependent and nondependent drug abuse; eating disorder; depression; anxiety; tobacco use; alcohol dependence syndrome; other mental health diagnosis; adjustment reaction; and bipolar disorder.

### Statistical Approach

To achieve objective 1, describing the discharge rate, reasons, and characteristics, we calculated descriptive statistics on the full sample. To achieve objective 2, identifying the predictors most strongly associated with discharge from PCAFC nationally, we used the national sample in a Cox proportional hazards regression, estimating HRs to assess the influence on the rate of discharge associated with each of the variables described earlier. Finally, to achieve objective 3, characterizing network variation in these predictors, we used separate within-network Cox proportional hazards regressions. All models included the same caregiver and veteran characteristics as in the national model, but network (VISN) indicators were removed.

Because of the large sample size in the national analysis, we anticipated statistically significant associations with small practical impact on probability of discharge. Thus, we established statistically significant ( $\alpha < 0.05$ ) HRs above 1.25 or below 0.80 as the magnitude thresholds considered the most impactful predictors of discharge a priori. We call these primary predictors throughout. Secondly, we

highlight results that achieve a high level of statistical significance ( $P < .01$ ), despite not meeting magnitude thresholds, to enhance transparency.

A sensitivity analysis removed discharges requested by veterans or caregivers to assess consistency of results because requested discharges could be systematically different from other discharge reasons (eg, clinical ineligibility) and consistent with caregiver and veteran preferences. By contrast, we were interested in identifying discharges determined by VA rather than individual requests to be discharged, because these types of discharges could have been independent of caregiver and veteran preferences (such as to remain in the program). If the primary predictors remained stable with this sensitivity analysis, it would indicate that we are identifying predictors of VA-driven discharges in the main analysis.

## RESULTS

### Describing Discharge Rate, Reasons, and Characteristics (Objective 1)

Of 31,343 participants in the sample, 12,680 (40.5%) were discharged over the 6-year study period. Discharge reasons included veteran no longer clinically eligible (43.5%), veteran request (22.2%), for cause (eg, detection of unsafe caregiving situation, fraud) (11.0%), caregiver request (9.4%), noncompliance with program requirements (8.4%), veteran deceased (3.4%), veteran institutionalized (1.3%), or caregiver deceased (0.7%).

Veterans in the sample had a mean age of 37 years; 69.5% were White, 19.0% were Black, 11.6% had other/unknown race; and 17.0% were Hispanic/Latino. Whereas 91.8% of veterans were male, 92.0% of caregivers were female. Caregivers were most commonly the veteran's spouse (73.9%), but they also included the veteran's parent, veteran's significant other, and "other" (some other relative or nonrelative who lives with the veteran).

Descriptive differences in some veteran characteristics, including race, relationship with caregiver, and tier, appear by discharge status (Table). Veterans who qualify commonly have multiple substantial physical and mental health conditions (Table) and each caregiver's stipend amount is based on assessed amount of caregiving needed per week, with tier 1 requiring the least and tier 3 requiring the most. Among veterans discharged, 20.6% were Black, and among veterans never discharged, 17.8% were Black. Of those discharged, 13.8% were "other" relationships, compared with 6.1% of those never discharged. Tier 3 (highest need) assignment was the least prevalent in both groups, at approximately 29.1% for those discharged compared with 26.9% for those never discharged (Table).

### Identifying Primary Discharge Predictors Nationally (Objective 2)

A total of 11,987 caregivers who applied and were admitted to PCAFC through FY 2016 (39.1% of the overall sample) were discharged for nonautomatic reasons (ie, not due to caregiver/veteran death or veteran institutionalization). Relationship was a predictor of

**TABLE.** Key Characteristics of Participants in the PCAFC Who Were and Were Not Discharged, FY 2011-2017 (N=31,343)<sup>a</sup>

	Veterans of caregivers discharged (n = 12,680)	Veterans of caregivers not discharged (n = 18,663)
<b>Veteran characteristics</b>		
Age in years at application, mean (SD)	35.9 (8.6)	37.6 (9.0)
Sex		
Female	Ref	Ref
Male	90.7%	92.6%
Race		
White	68.7%	70.0%
Black/African American	20.6%	17.8%
Other	10.7%	12.2%
Number of physical health conditions, mean (SD)	2.9 (2.0)	3.1 (2.0)
Number of mental health conditions, mean (SD)	2.7 (1.9)	2.5 (1.7)
<b>Caregiver characteristics</b>		
Relationship to veteran		
Spouse	66.5%	78.9%
Significant other	10.1%	7.2%
Parent	9.6%	7.8%
Other	13.8%	6.1%
Tier level		
Tier 1 (10 hours per week)	35.7%	34.2%
Tier 2 (25 hours per week)	35.2%	38.9%
Tier 3 (40 hours per week)	29.1%	26.9%
<b>Fiscal year of application</b>		
2011	8.3%	5.8%
2012	23.8%	13.4%
2013	26.5%	18.4%
2014	23.4%	22.8%
2015	13.7%	22.8%
2016	4.3%	16.8%

FY, fiscal year; PCAFC, Program of Comprehensive Assistance for Family Caregivers; ref, reference.

<sup>a</sup>Physical health conditions counted were musculoskeletal disorders/diseases, pain, hyperlipidemia, hypertension, traumatic brain injury, sleep disorders, obesity, headache, hearing (loss, pain, other), diabetes, benign or malignant neoplasm, acute myocardial infarction, amputation, vision loss, and spinal cord injury. Mental health conditions counted were posttraumatic stress disorder, depression, anxiety, tobacco use, alcohol dependence syndrome, adjustment reaction, bipolar disorder, any psychotic disorder, Alzheimer/dementia, dependent and nondependent abuse of drugs (except for tobacco use and substance abuse disorder, other), eating disorder, and other mental health. Relationship is the caregiver's relationship to the veteran—that is, caregiver is either the veteran's spouse, parent, significant other, or other (meaning that they are related in some other way than as a spouse, parent, or significant other, or that they are a nonrelative who lives with the veteran).

discharge (Figure 1). "Other" relationships and significant others faced 2.3 and 1.7, respectively, times the hazard of discharge compared with spouses. Additionally, the rate of discharge was significantly lower for caregivers who applied in the first year of the program

(2011). For example, the hazard of discharge for a caregiver who applied in FY 2014 was 1.8 times that of a caregiver who applied in FY 2011. More recent applicants were discharged more quickly than earlier applicants (see eAppendix [available at [ajmc.com](http://ajmc.com)] for additional details).

### Identifying Geographic Variation in Primary Discharge Predictors (objective 3)

In many of the 18 VISNs, the rates of discharge were higher for caregivers in lower tier groups (Figure 2). Differences in rates of discharge existed across networks by relationship (rates higher for significant other vs spouse in 16 networks and higher for "other" vs spouse in all 18 networks). There were also network differences by veteran race (rates of discharge higher for Black vs White veterans in 4 networks [Figure 2]; rates were lower for Black veterans vs White veterans in 1 network). Veteran Hispanic/Latino ethnicity was associated with a lower rate of discharge in 1 network.

Sensitivity analysis indicated that results did not change after removing the 33.4% of all discharges that were due to caregiver or veteran request. That is, the primary predictors of discharge remained the same in this smaller sample as in the original national model.

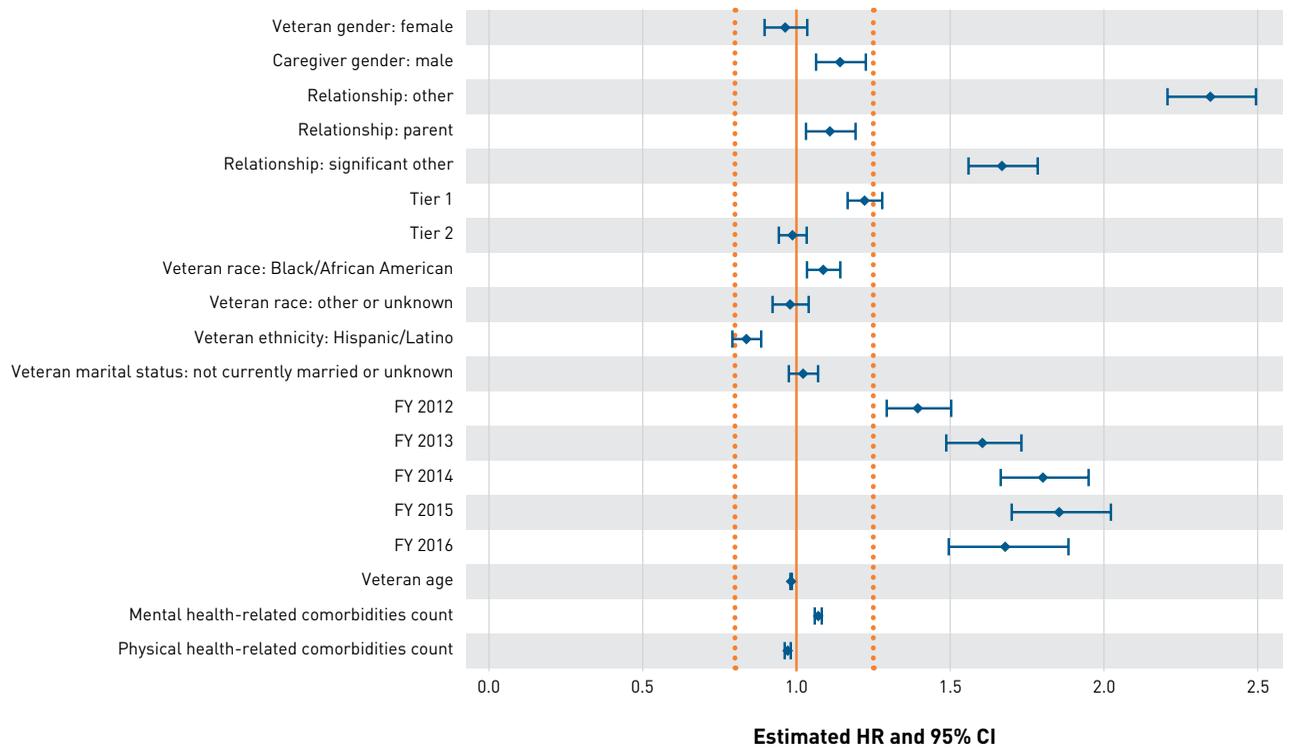
### Highly Statistically Significant Predictors ( $P < .01$ ) Not Meeting A Priori Magnitude Threshold for Primary Predictors

Whereas we aimed to identify the strongest predictors of discharge, several predictors were statistically significant at the 1% level but did not meet our magnitude thresholds. Specifically, caregivers of Black veterans were discharged at greater rates nationally compared with those of White veterans, and caregivers of Hispanic/Latino veterans were discharged at lower rates than those of non-Hispanic/Latino veterans (eAppendix). Additionally, male caregivers and younger veterans were discharged at slightly greater rates compared with female caregivers and older veterans. Caregivers in the lowest tier (tier 1) were discharged at a greater rate compared with those in the highest tier (tier 3), indicating that discharges were more likely for those with lower assessed caregiving needs. Finally, although also not at a priori set magnitudes, caregivers of veterans with a higher number of physical comorbidities were discharged at lower rates whereas caregivers of veterans with a higher number of mental health comorbidities were discharged at greater rates, showing a different response by type of health conditions (eAppendix).

## DISCUSSION

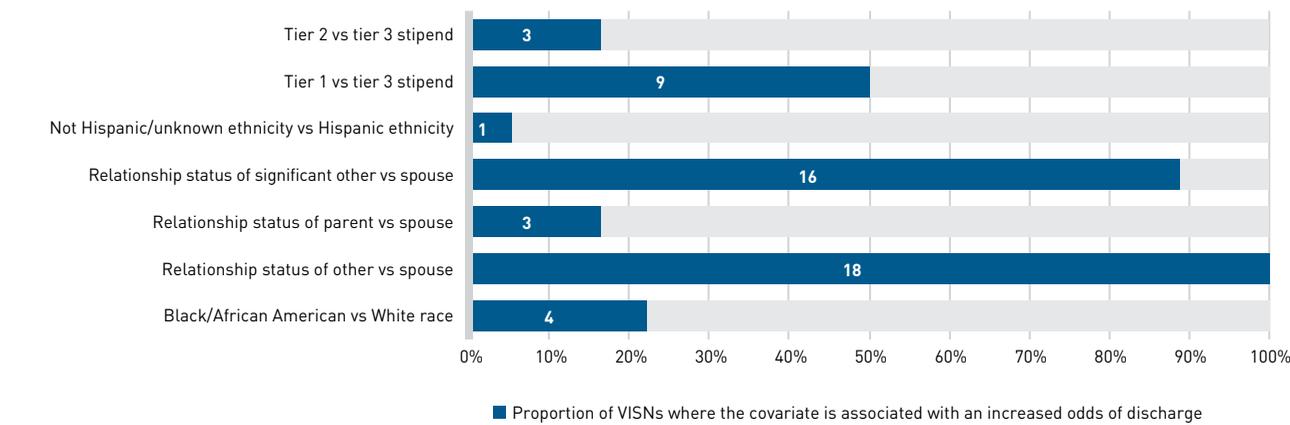
High-profile media stories highlighted cases in which caregivers of veterans with the greatest needs (tier 3) were summarily discharged from PCAFC.<sup>8-10</sup> We found that caregivers applying in later years had significantly higher rates of discharge earlier in their enrollment than caregivers applying in FY 2011. This may be driven by temporal patterns in eligibility determination that may have led to increased scrutiny or discharge rates overall in later years. After

**FIGURE 1. Estimated HRs and 95% CIs of Individual Factors Associated With Discharge From the PCAFC, FY 2011-2017<sup>a</sup>**



FY, fiscal year; PCAFC, Program of Comprehensive Assistance for Family Caregivers; VA, Department of Veterans Affairs.  
<sup>a</sup>Results are based on a logistic model using the national sample. A priori, our statistical analysis plan established an HR of <0.80 or >1.25 with a 95% CI that did not include 1 as meeting criteria of significance, to guard against bias. In addition to the covariates listed in the figure, the model controls for 18 Veterans Integrated Service Networks and fiscal year of application. Reference levels of factors are as follows: for veteran gender, female; for caregiver gender, male; for relationship, spouse; for tier, tier 3; for veteran race, White; for veteran ethnicity, non-Hispanic; for veteran marital status, married; for FY of application, FY 2011.  
 Source: From the authors' analysis using data from the VA Caregiver Support Program application tracker; VA claims and enrollment files from the Corporate Data Warehouse, years 2011-2017.

**FIGURE 2. Proportion of VISNs Where the Covariate Is Associated With a Higher Rate of Discharge (n= 18 VISNs)<sup>a</sup>**



VA, Department of Veterans Affairs; VISN, Veterans Integrated Service Network.  
<sup>a</sup>Results are based on separate logistic models of each of the 18 VISNs; they highlight results that met a priori odds ratio magnitude and significance thresholds.  
 Source: From the authors' analysis using data from the VA Caregiver Support Program application tracker; VA claims and enrollment files from the Corporate Data Warehouse, years 2011-2017.

initial implementation of PCAFC, VA CSP initiated eligibility training nationally and recommended use of clinical eligibility teams to increase compliance with standardized guidelines surrounding eligibility criteria. The increased standardization in eligibility may help explain higher rates of discharges in later years; however, our data cannot assess appropriateness of acceptances or discharges.

Our evaluation also identified patterns that could suggest inequities. First, caregivers who are significant others, nonspouse relatives, or co-residing nonrelatives experienced a higher rate of discharge compared with spouses. However, we have no indication that there is differential recovery (eg, through different quality of caregiving) based on relationship. As PCAFC requires nonrelated caregivers to reside with the veteran, if unrelated caregivers also are more likely to change co-residence, it could explain their higher discharge rates. To guard against implicit bias against unmarried caregiver-veteran dyads, the field should review allowable reasons for discharge, which should not consider relationship type on its own. Past research shows that spousal caregivers provide the most intensive care,<sup>14</sup> and there could be bias toward nonspousal caregivers as less committed.

Second, 4 of 18 networks were more likely to discharge caregivers of Black veterans compared with White veterans, whereas 1 network was less likely to discharge caregivers of Black veterans compared with White veterans. Additionally, 1 network was less likely to discharge caregivers of Hispanic/Latino veterans compared with non-Hispanic/Latino veterans. Although at the national level the magnitude of effect of race did not meet our a priori threshold, Black veterans had a statistically higher likelihood of being discharged, at the  $P < .01$  level, in one-fifth of all networks. Even though the VA has been shown to have fewer disparities by race than other systems of care in the community,<sup>15,16</sup> our evaluation shows mixed evidence about the role of race and ethnicity in discharges. As such, existence of implicit or explicit racial or cultural bias should be further investigated and addressed. Qualitative research could uncover reasons that participants no longer meet qualifications, paying particular attention to structural factors (eg, reasons behind lack of compliance) that may differ by relationship and/or race/ethnicity. Lessons and action from VA could inform other public program reforms serving disabled Americans and increase equitable practices.

Several other predictors of discharge were statistically significant but did not meet our a priori magnitude threshold. For example, potentially encouraging patterns of discharge are that caregivers who provide the most intensive level of care to participating veterans had lower rates of discharge (tier 3 vs tier 1). Results also suggest that number of mental health comorbidities predicted higher rates of discharge, whereas number of physical health comorbidities was protective against discharge. Neither type of comorbidity met the threshold as a primary predictor. Need for caregiving due to physical health may be easier to assess than need for caregiving due to mental health, but in a population with pervasive and high mental health burden, it is essential to identify assessment processes that

accurately capture how mental illness affects caregiver and veteran interactions and caregiving need.<sup>6</sup> For example, certain program application and participation factors may need more attention for veterans with mental health comorbidities, given the potential for increased relationship problems between caregivers and veterans.<sup>17-19</sup> For PCAFC expansion, VA-instituted standardized measures for eligibility that assess physical and mental health with validated instruments could help to achieve this goal.<sup>7,20</sup>

### Limitations

Our evaluation has potential limitations. First, the program data used are intended to track entry and exit into the program but were not intended for research or evaluation purposes. We were able to use data fields such as tier and relationship that have been assessed by our team and the National Program Office of the Caregiver Support Program as being high quality. Yet, other fields, such as reasons for discharge, in the descriptive analysis may vary by assessor practice style. Second, we do not control for individual facility-level characteristics other than network. Third, tier level is based on caregiving hours required by the veteran due to their service-related injuries but may not reflect actual hours of caregiving provided. Fourth, although our statistical models control for assessed intensity of caregiving required (eg, tier), relationship of the caregiver-veteran dyad, demographics, and a rich count of physical and mental health comorbidities, we are unable to determine clinical appropriateness of discharges.

## CONCLUSIONS

We find evidence that some disallowed criteria—relationship and race, specifically—play a role in discharge practices. Although we do not know the reasons that these primary predictors exist, reviewing eligibility criteria considering our findings could help ensure that eligibility criteria are followed in the field. Practice change could be achieved through staff trainings nationally and within networks. Traction to support caregivers more broadly has gained hold in the United States, with proposals to expand evidence-based training programs and establishing a National Caregiver Strategy.<sup>21,22</sup> Lessons learned from the VA's program, rapidly implemented in a large integrated health care system and including specific admission and discharge criteria, can inform future implementation of caregiver supports beyond VA—such as in other integrated health systems and communities nationally. ■

### Acknowledgments

The authors gratefully acknowledge Drs S. Nicole Hastings and Eugene Z. Oddone for their constructive feedback on the manuscript.

**Author Affiliations:** Center of Innovation to Accelerate Discovery and Practice Transformation (ADAPT), Durham Veterans Affairs Health Care System (CHVH, VAS, TSZB, KEMM, MS-B), Durham, NC; Department of Population Health Sciences, Duke University Medical Center (CHVH, VAS, MS-B), Durham, NC; Duke-Margolis Center for Health Policy (CHVH) and Department of General Internal Medicine (VAS), Duke University, Durham, NC; Department of Health Policy and Management, University of North Carolina at Chapel Hill (KEMM), Chapel Hill, NC; Now with

University of Pennsylvania (KEMM), Philadelphia, PA; Caregiver Support Program, VA Central Office (JH, MK), Washington, DC.

**Source of Funding:** The analysis was funded by the VA Caregiver Support Program, Health Services Research and Development (HSR&D) and QUERI (Quality Enhancement Research Initiative) (PEC 14-272) and was supported by the Center of Innovation to Accelerate Discovery and Practice Transformation at the Durham VA Health Care System (Grant No. CIN 13-410). This work is classified as quality improvement from a partnered evaluation initiative and not research. As a partnered evaluation, our ongoing relationship with the VHA Caregiver Support Program may introduce bias or perceived conflicts of interest. Thus, we adhere to a predetermined statistical analysis plan. We have no advocacy position. Our role is to assist with quality improvement work by identifying areas for potential improvement and providing recommendations as to how to improve quality. The views expressed in this article are those of the authors and do not necessarily reflect the position or policy of the Department of Veterans Affairs or the United States government.

**Author Disclosures:** The authors report no relationship or financial interest with any entity that would pose a conflict of interest with the subject matter of this article.

**Authorship Information:** Concept and design (CHVH, VAS, MS-B, JH, MK); acquisition of data (CHVH, TSZB, JH); analysis and interpretation of data (CHVH, VAS, TSZB, KEMM, MS-B, MK); drafting of the manuscript (CHVH, VAS, TSZB, KEMM, MS-B); critical revision of the manuscript for important intellectual content (CHVH, VAS, KEMM, MS-B, MK); statistical analysis (CHVH, VAS, TSZB); obtaining funding (CHVH, VAS, MK); administrative, technical, or logistic support (CHVH, JH); and supervision (VAS).

**Address Correspondence to:** Courtney Harold Van Houtven, PhD, MSc, Durham ADAPT, 411 W Chapel Hill St, Ste 600, Durham, NC 27701. Email: courtney.vanhoutven@va.gov.

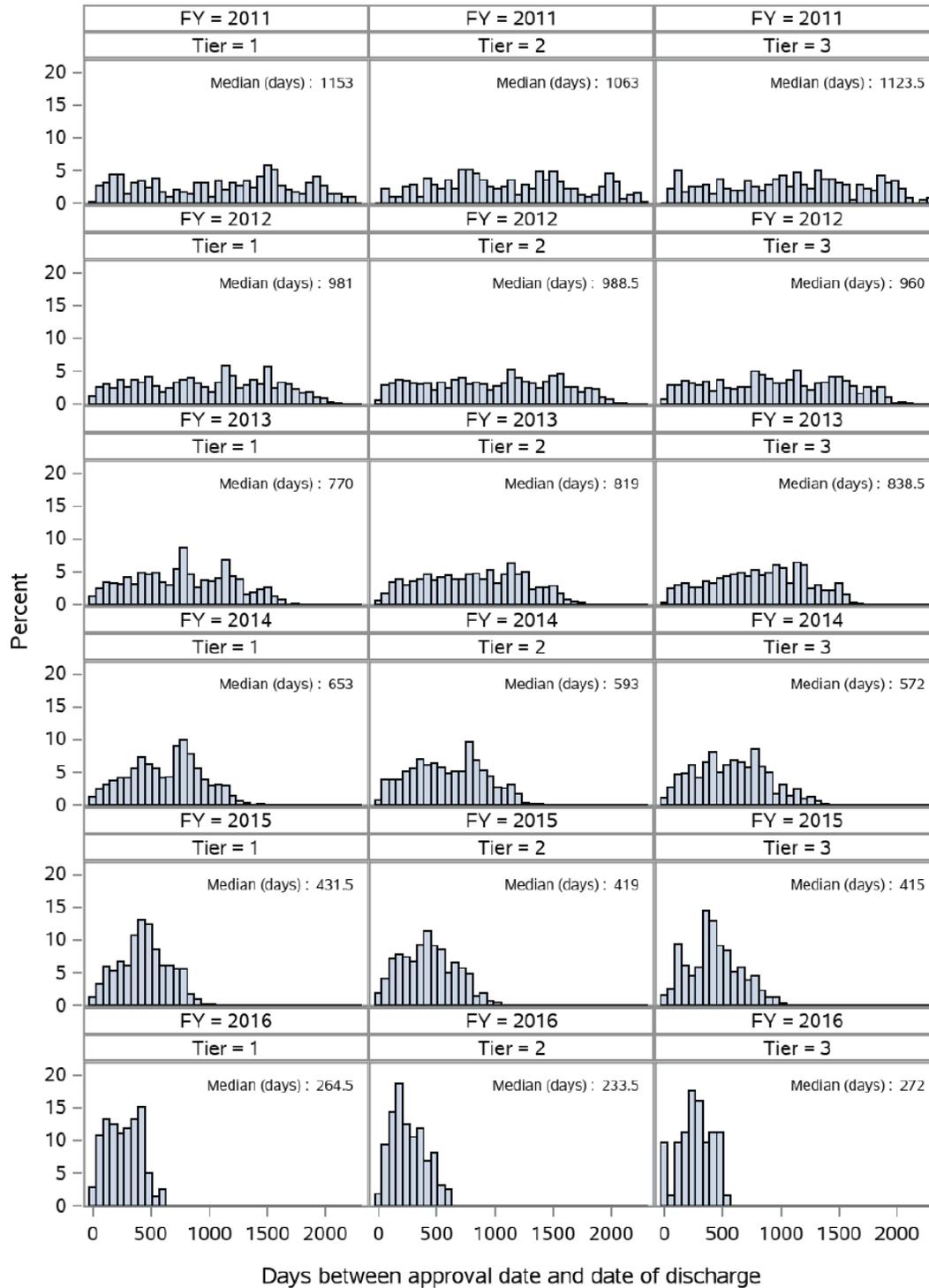
## REFERENCES

- Caregivers and Veterans Omnibus Health Services Act of 2010, Pub L No. 111-163, 124 Stat 1130 [2010].
- Caregiver Support Program – stipend benefit for the primary family caregiver. Department of Veterans Affairs. December 2016. Accessed July 26, 2021. [https://www.va.gov/COMMUNITYCARE/docs/pubfiles/factsheets/FactSheet\\_11-02.pdf](https://www.va.gov/COMMUNITYCARE/docs/pubfiles/factsheets/FactSheet_11-02.pdf)
- VA Health Care: actions needed to address higher-than-expected demand for the Family Caregiver Program. US Government Accountability Office. September 18, 2014. Accessed July 26, 2021. <https://www.gao.gov/products/gao-14-675>
- Van Houtven CH, Smith VA, Stechuchak KM, et al. Comprehensive support for family caregivers: impact on veteran health care utilization and costs. *Med Care Res Rev*. 2019;76(1):89-114. doi:10.1177/1077558717697015
- Veterans Health Administration Program of Comprehensive Assistance for Family Caregivers: management improvements needed. Department of Veterans Affairs Office of Inspector General. August 16, 2018. Accessed July 26, 2021. <https://www.va.gov/oig/pubs/VAOIG-17-04003-222.pdf>
- Sperber NR, Bruening R, Dadolf J, et al. 'The face of the programme': how local clinicians shape decisions about eligibility for a national caregiver support programme in the USA. *J Health Serv Res Policy*. 2021;26(3):180-188. doi:10.1177/1355819620983371
- Veterans Affairs Program of Comprehensive Assistance for Family Caregivers: eligibility criteria fact sheet. Department of Veterans Affairs. 2020. Accessed July 26, 2021. [https://www.caregiver.va.gov/pdfs/MissionAct/CSP\\_Eligibility\\_Criteria\\_Factsheet\\_092720\\_Approved\\_Final.pdf](https://www.caregiver.va.gov/pdfs/MissionAct/CSP_Eligibility_Criteria_Factsheet_092720_Approved_Final.pdf)
- Lawrence Q. VA's caregiver program still dropping veterans with disabilities. National Public Radio. May 21, 2018. Accessed July 26, 2021. <https://www.npr.org/2018/05/21/611733148/vas-caregiver-program-still-dropping-veterans-with-disabilities>
- Lawrence Q. Some VAs are dropping veteran caregivers from their rolls. National Public Radio. April 5, 2017. Accessed July 26, 2021. <https://www.npr.org/2017/04/05/522690583/caregivers-for-veterans-dropped-from-va-plan>
- Lawrence Q. VA still arbitrarily cutting caregivers from program, even as it aims to expand. National Public Radio. December 18, 2018. Accessed July 26, 2021. <https://www.npr.org/2018/12/18/677346997/va-still-arbitrarily-cutting-caregivers-from-program-even-as-it-aims-to-expand>
- Lawrence Q. Veterans urge changes before expansion of VA caregivers program. National Public Radio. August 8, 2019. Accessed July 26, 2021. <https://www.npr.org/2019/08/08/747604472/veterans-urge-changes-before-expansion-of-va-caregivers-program>
- VA announces moratorium on discharges and decreases from comprehensive caregiver program. News release. Department of Veterans Affairs; December 21, 2018. Accessed July 26, 2021. <https://www.va.gov/opa/pressrel/pressrelease.cfm?id=5169>
- VA Mission Act of 2018, Pub L No. 115-182, 132 Stat 1393 [2018].
- Spillman BC, Wolff J, Freedman VA, Kasper JD. Informal caregiving for older Americans: an analysis of the 2011 National Study of Caregiving. HHS Assistant Secretary for Planning and Evaluation. April 2014. Accessed July 26, 2021. [https://aspe.hhs.gov/sites/default/files/migrated\\_legacy\\_files/44496/NHATS-IC.pdf](https://aspe.hhs.gov/sites/default/files/migrated_legacy_files/44496/NHATS-IC.pdf)
- Saha S, Freeman M, Toure J, Tippens KM, Weeks C, Ibrahim S. Racial and ethnic disparities in the VA health care system: a systematic review. *J Gen Intern Med*. 2008;23(5):654-671. doi:10.1007/s11606-008-0521-4
- Trivedi AN, Grebla RC, Wright SM, Washington DL. Despite improved quality of care in the Veterans Affairs health system, racial disparity persists for important clinical outcomes. *Health Aff (Millwood)*. 2011;30(4):707-715. doi:10.1377/hlthaff.2011.0074
- Taft CT, Monson CM, Schumm JA, Watkins LE, Panuzio J, Resick PA. Posttraumatic stress disorder symptoms, relationship adjustment, and relationship aggression in a sample of female flood victims. *J Fam Violence*. 2009;24(6):389-396. doi:10.1007/s10896-009-9241-8
- Hershkovitz M, Dekel R, Fridkin S, Freedman S. Posttraumatic stress disorder, parenting, and marital adjustment among a civilian population. *Front Psychol*. 2017;8:1655. doi:10.3389/fpsyg.2017.01655
- Mojtabai R, Stuart EA, Hwang L, Eaton WW, Sampson N, Kessler RC. Long-term effects of mental disorders on marital outcomes in the National Comorbidity Survey ten-year follow-up. *Soc Psychiatry Psychiatr Epidemiol*. 2017;52(10):1217-1226. doi:10.1007/s00127-017-1373-1
- Veterans Affairs Program of Comprehensive Assistance for Family Caregivers: application process fact sheet. Department of Veterans Affairs. 2020. Accessed July 26, 2021. [https://www.caregiver.va.gov/pdfs/MissionAct/ApplicationProcessFactsheet\\_Chapter2\\_Launch\\_Approved\\_Final\\_100820.pdf](https://www.caregiver.va.gov/pdfs/MissionAct/ApplicationProcessFactsheet_Chapter2_Launch_Approved_Final_100820.pdf)
- National Academies of Sciences, Engineering, and Medicine. *Families Caring for an Aging America*. The National Academies Press; 2016.
- Miller CC, Goldmacher S, Kaplan T. Biden announces \$775 billion plan to help working parents and caregivers. *The New York Times*. Published July 21, 2020. Updated August 26, 2020. Accessed July 26, 2021. <https://www.nytimes.com/2020/07/21/us/politics/biden-workplace-childcare.html>

Visit [ajmc.com/link/89202](https://ajmc.com/link/89202) to download PDF and eAppendix

## eAppendix

**eAppendix Figure.** Median time to discharge among those ever discharged, by fiscal year, by tier level.



SOURCE: From the authors' analysis using data from the VA Caregiver Support Program application tracker; VA claims and enrollment files from the Corporate Data Warehouse, fiscal years 2011-2017.

NOTES: Number of days between approved date and discharge date from PCAFC are presented above in figure by Tier status and by Fiscal Year of application. Number of days is missing for observations not discharged from the program and currently still enrolled.

**eAppendix Table.** Cox proportional hazards regression model output for the national model

	<b>Hazard Ratio (LCL, UCL)</b>	<b>Hazard Ratio Pr &gt; ChiSq</b>
Relationship of caregiver to Veteran		
Spouse	-ref-	
Other	2.35 (2.21, 2.49)	<.0001
Parent	1.11 (1.03, 1.19)	0.0054
Significant other	1.67 (1.56, 1.78)	<.0001
Tier level of Veteran (from CAT)		
Tier 1	1.22 (1.17, 1.28)	<.0001
Tier 2	0.99 (0.94, 1.03)	0.5769
Tier 3	-ref-	
FY of application date		
2011	-ref-	
2012	1.39 (1.29, 1.50)	<.0001
2013	1.60 (1.49, 1.73)	<.0001
2014	1.80 (1.66, 1.95)	<.0001
2015	1.85 (1.70, 2.02)	<.0001
2016	1.68 (1.50, 1.88)	<.0001
Gender of caregiver		
Female	-ref-	
Male	1.14 (1.06, 1.23)	0.0002
Gender of Veteran		
Male	-ref-	
Female	0.96 (0.90, 1.04)	0.3083
Race of Veteran		
White	-ref-	
Black/African-American	1.09 (1.03, 1.14)	0.0010
Other or Unknown	0.98 (0.92, 1.04)	0.4938
Marital status of Veteran at application date		
Married	-ref-	
Previously married or Never married or Unknown/missing	1.02 (0.98, 1.07)	0.3666
Ethnicity of Veteran		
Not Hispanic/Latino	-ref-	
Hispanic/Latino	0.84 (0.79, 0.89)	<.0001
VISN of closest VAMC to Veteran's residence		
1	0.75 (0.67, 0.85)	<.0001
2	0.76 (0.68, 0.83)	<.0001
4	0.92 (0.81, 1.03)	0.1528
5	1.10 (0.99, 1.23)	0.0682
6	1.48 (1.38, 1.59)	<.0001
7	1.47 (1.34, 1.60)	<.0001

8	0.81 (0.75, 0.88)	<.0001
9	0.79 (0.72, 0.87)	<.0001
10	0.90 (0.81, 0.99)	0.0346
12	0.95 (0.85, 1.06)	0.3758
15	1.12 (1.01, 1.25)	0.0371
16	1.16 (1.03, 1.31)	0.0121
17	1.55 (1.43, 1.69)	<.0001
19	1.37 (1.24, 1.51)	<.0001
20	1.43 (1.32, 1.56)	<.0001
21	0.86 (0.79, 0.94)	0.0006
23	0.81 (0.70, 0.93)	0.0028
Number of physical health-related comorbidities at baseline	0.97 (0.96, 0.98)	<.0001
Number of mental health-related comorbidities at baseline	1.07 (1.06, 1.08)	<.0001
Veteran age at application date	0.98 (0.98, 0.99)	<.0001