


# Improvements and Gaps in Financial Risk Protection Among Veterans Following the Affordable Care Act



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**BACKGROUND:** Despite public perception, most of the nearly 20 million US veterans have health coverage outside the Veterans Health Administration (VHA), and VHA eligibility and utilization vary across veterans. Out-of-pocket healthcare spending thus remains a potential source of financial hardship for veterans. The Affordable Care Act (ACA) aimed to expand health insurance access, but its effect on veterans' financial risk protection has not been explored.

**OBJECTIVE:** To evaluate whether ACA implementation was associated with changes in veterans' risk of catastrophic health expenditures, and to characterize drivers of catastrophic health spending among veterans post-ACA.

**DESIGN:** Using multivariable linear probability regression, we examined changes in likelihood of catastrophic health spending after ACA implementation, stratifying by age (18–64 vs 65+), household income tercile, and payer (VHA vs non-VHA). Among veterans with catastrophic spending post-ACA, we evaluated sources of out-of-pocket spending.

**PARTICIPANTS:** Nationally representative sample of 13,030 veterans aged 18+ from the 2010 to 2017 Medical Expenditure Panel Survey.

**INTERVENTION:** ACA implementation, January 1, 2014.

**MAIN MEASURES:** Likelihood of catastrophic health expenditures, defined as household out-of-pocket spending exceeding 10% of household income.

**KEY RESULTS:** Among veterans aged 18–64, ACA implementation was associated with a 26% decrease in likelihood of catastrophic health expenditures (absolute change, –1.4 percentage points [pp]; 95% CI, –2.6 to –0.2;  $p=0.03$ ), which fell from 5.4% pre-ACA to 3.9% post-ACA. This was driven by a 38% decrease in catastrophic spending among veterans with non-VHA coverage (absolute change, –1.8pp; 95% CI, –3.0 to –0.6;  $p=0.003$ ). In contrast, catastrophic expenditure rates among veterans aged 65+ remained high, at 13.0% pre- and 12.5% post-ACA. Major drivers of veterans' spending

post-ACA include dental care, prescription drugs, and home care.

**CONCLUSIONS:** ACA implementation was associated with reduced household catastrophic health expenditures for younger but not older veterans. These findings highlight gaps in veterans' financial protection and areas amenable to policy intervention.

**KEY WORDS:** veterans; out-of-pocket spending; catastrophic health expenditures; Affordable Care Act; insurance expansion; uninsured; underinsured.

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## INTRODUCTION

Per capita out-of-pocket healthcare expenditures have steadily increased in the USA over the last 50 years.<sup>1</sup> An estimated 1 in 4 Americans report difficulty affording medical bills,<sup>2</sup> and healthcare-related expenses are the leading cause of household bankruptcy.<sup>3,4</sup> To address these issues, the Patient Protection and Affordable Care Act (ACA) was enacted in 2010 and aimed to expand health insurance coverage and lower the cost of care.<sup>5</sup> Approximately 20 million Americans gained coverage through the ACA,<sup>6</sup> primarily through Medicaid expansion and the ACA insurance Marketplaces.<sup>7,8</sup> These provisions have been associated with decreases in cost-related care delays and trouble paying medical bills, based on patient report.<sup>9,10</sup> More directly, analyses of patient expenditures have shown an association between ACA implementation and decreased out-of-pocket spending as well as risk of catastrophic health expenditures.<sup>11–15</sup>

Veterans have different options for healthcare financing than the broader US population. For example, through the Veterans Health Administration (VHA), veterans with a service-related condition or meeting income eligibility thresholds may qualify for care with minimal to no cost sharing.<sup>16</sup> However, less than half of all veterans are enrolled in VHA coverage,<sup>17</sup> fewer than a third use VHA healthcare annually,<sup>18</sup> and many remain uninsured or rely on private or other government insurance, which

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often require patients to pay greater out-of-pocket costs.<sup>19</sup> Furthermore, veterans as a group have characteristics that increase their health-related financial risk, including higher rates of posttraumatic stress disorder, depression, and anxiety<sup>20,21</sup>; higher likelihood of residing in rural areas farther from sources of care<sup>22,23</sup>; and higher likelihood of residing in the South census region, where only 12% of the population lives in Medicaid expansion states.<sup>24</sup>

Although studies show that the uninsured rate fell among veterans following ACA implementation,<sup>22,25,26</sup> no studies to date have examined the impact of the law on veterans' exposure to healthcare-related financial risk. We thus sought to assess the association between ACA implementation and changes in veterans' rates of catastrophic out-of-pocket spending, both nationally and across age and income strata, and to characterize the drivers of catastrophic expenditures among veterans in the post-ACA period.

## METHODS

### Data and Study Population

We analyzed data from the Medical Expenditure Panel Survey (MEPS), a nationally representative survey of healthcare use and expenditures for the US civilian non-institutionalized population.<sup>27</sup> MEPS collects data on out-of-pocket spending, premium contributions, income, and demographics from about 15,000 households per year, interviewing each household five times over a 2-year period and enrolling new households annually. Information from respondents is supplemented with data from medical providers and pharmacies to produce highly valid expenditure estimates. Our analysis includes spending data collected from January 1, 2010, to December 31, 2017, for all types of healthcare services captured in MEPS, including inpatient stays, outpatient and emergency department visits, prescription drugs, home healthcare (from agency, non-agency, and informal providers), dental services, vision aids, and durable medical equipment. As MEPS excludes data from any period during which an individual is institutionalized, spending for short- and long-term nursing home care is not included.

Our study population included all US adults aged 18+ who were honorably discharged from the military ("veterans"). We stratified veterans into younger (18 to 64 years) and older (65+) age groups, which have different healthcare needs and were affected differently by ACA reforms, with most coverage expansion under the law targeted to the younger age group. Additionally, we divided the two age groups into household income terciles and determined each veteran's primary payer (see eMethods for details). Because full ACA implementation began on January 1, 2014, we defined the pre- and post-ACA periods as 2010–2013 and 2014–2017, respectively.<sup>5</sup>

### Definition of Catastrophic Health Expenditures

To quantify financial burden, we summed calendar-year out-of-pocket spending for all members of the veteran's family and divided by their combined income, as families share costs and resources. We then defined catastrophic health expenditures as out-of-pocket spending exceeding 10% of family income, a widely used threshold to define unaffordable expenditures and underinsurance.<sup>11,28</sup> We used the Current Population Survey (CPS) definition of a family—individuals living together and related by birth, marriage, or adoption<sup>29</sup>—which the Census Bureau uses to determine poverty thresholds.<sup>30</sup> All expenditures and incomes were converted to 2017 dollars using the Consumer Price Index.<sup>31,32</sup>

### Statistical Analysis

We examined the association between ACA implementation and financial protection by fitting a multivariable linear probability regression model to the binary outcome of catastrophic expenditures, regressing this on a binary indicator for the post-ACA time period and adjusting for age, gender, race/ethnicity, marital status, employment status, self-reported health status, census region, and family size. We used a linear probability model to allow for direct interpretation of regression coefficients and to align our methods with those of existing studies.<sup>9,15</sup> MEPS survey weights, strata, and clusters were used to account for the complex survey design, and cluster-robust standard errors were employed to account for correlation within each sampling unit (group of neighboring counties).

All analyses were conducted using Stata 16.1 (College Station, TX). This study was exempted from review by the University of California, Los Angeles Institutional Review Board.

### Sensitivity Analyses

We conducted several sensitivity analyses: (1) using a logistic regression model rather than a linear probability model to analyze the likelihood of catastrophic expenditures, (2) using the MEPS rather than the CPS definition of family, which includes nonmarried partners, foster children, and in-laws, and (3) using an alternate definition of catastrophic expenditures as out-of-pocket plus premium spending exceeding 19.5% of family income (the sum of the 10% out-of-pocket spending threshold and a 9.5% income threshold for high-burden premiums, based on an ACA provision allowing individuals whose employer-based premiums exceed 9.5% of income to purchase Marketplace insurance).<sup>33</sup>

## RESULTS

### Baseline Characteristics

Our study population included 13,030 veteran survey respondents, representing about 19.5 million veterans per year after

survey weighting. Of these, 6968 (53%) were aged 18 to 64 years and 6062 (47%) were aged ≥65 years, representing 9.7 and 9.8 million veterans per year, respectively. Among adults aged 18–64, veterans were more likely than non-veterans to be male, White or Black, married, from the South, and to have worse self-reported health (Table 1). They were also more likely than non-veterans to be insured pre-ACA. Similar differences existed among adults over 65, except that veterans had better self-reported health than non-veterans and were less likely to be Black.

### Changes in Primary Payer

The uninsured rate among US veterans aged 18–64 declined from 17% in 2010 to 12% in 2017. Over the same period, the share of younger veterans with the VHA as primary payer increased from 10 to 12%, Tricare from 4 to 8%, and Medicare or Medicaid from 6 to 8%, while the share with private insurance decreased from 55 to 51% ( $p<0.001$  for overall change in payer mix; Fig. 1a). Among veterans aged 65 and older, the uninsured rate remained low at 1%. The primary payer mix among older veterans also remained relatively stable, with Medicare or Medicaid remaining the leading primary payer (60% in 2010 vs 64% in 2017), followed by private insurance (19% vs 18%), the VHA (16% vs 14%), and

Tricare (4% vs 2%) ( $p=0.52$  for overall change in payer mix; Fig. 1b).

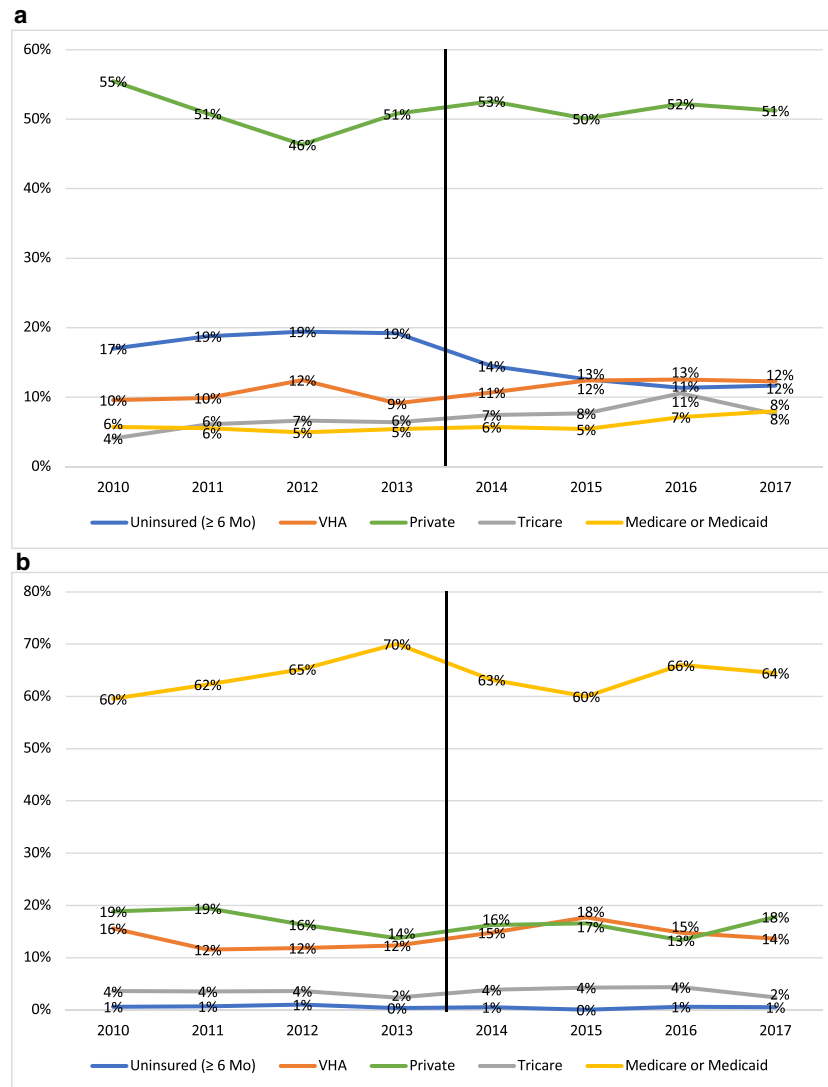
### Changes in Number of Veterans Experiencing Catastrophic Health Expenditures

The annual incidence of catastrophic health expenditures among veterans aged 18–64 declined from 545 per 10,000 pre-ACA to 391 per 10,000 post-ACA (Fig. 2). This primarily reflected a decrease in the number of veterans experiencing catastrophic family spending who were uninsured (162 per 10,000 pre-ACA vs 103 per 10,000 post-ACA) or privately insured (199 vs 98). The number of younger veterans with VHA, Medicare, or Medicaid coverage who experienced catastrophic expenditures was largely stable pre- vs post-ACA (57 vs 60 for VHA; 64 vs 65 for Medicare/Medicaid).

In contrast, the annual incidence of catastrophic family spending among veterans over age 65 was higher than among younger veterans and remained largely unchanged, at 1301 per 10,000 pre-ACA and 1250 per 10,000 post-ACA (Fig. 2). Among older veterans experiencing catastrophic expenditures, the most common primary payer was Medicare or Medicaid (924 per 10,000 pre-ACA vs 979 per 10,000 post-ACA), followed by private insurance (189 vs 143), VHA (167 vs 101), and Tricare (12 vs 21). Notably, Medicare or Medicaid

**Table 1 Baseline Characteristics of Adult Veterans and Non-Veterans in the United States Prior to Implementation of the Affordable Care Act, 2010–2013. (Values in table represent weighted mean (standard deviation) or weighted %)**

Characteristic	Ages 18–64			Ages 65+		
	Veterans (n=3823)	Non-veterans (n=82,953)	p-value	Veterans (n=2977)	Non-veterans (n=13,043)	p-value
US weighted population (per year)	10,438,407	182,423,137		9,698,518	32,970,219	
Age (years)	49.8 (9.9)	40.2 (13.3)	<0.001	74.9 (5.7)	73.9 (6.2)	<0.001
Female (%)	10.4	53.2	<0.001	2.8	71.3	<0.001
Race/ethnicity (%)						
Non-Hispanic White	75.0	63.0	<0.001	89.6	75.4	<0.001
Non-Hispanic Black	14.2	12.1		5.7	9.5	
Hispanic	6.3	17.0		2.4	8.9	
Other/multiple	4.5	7.9		2.3	6.3	
Marital status (%)						
Married	62.3	51.5	<0.001	67.3	51.4	<0.001
Divorced/separ./wid.	24.7	14.8		29.3	44.2	
Never married	13.0	33.6		3.3	4.4	
Census region (%)						
Northeast	13.6	18.4	<0.001	17.4	19.6	0.04
Midwest	21.2	21.3		22.8	22.0	
South	42.7	36.7		39.7	36.4	
West	22.6	23.7		20.2	22.0	
Employed (%)	77.8	78.2	0.73	23.3	20.8	0.07
Family income (2017 dollars)	80,175 (54,531)	78,230 (65,278)	0.22	69,724 (49,993)	60,440 (55,785)	<0.001
Family size	2.6 (1.3)	3.0 (1.6)	<0.001	1.9 (0.6)	2.0 (1.0)	0.001
Self-reported health (%)						
Excellent/v. good/good	84.6	88.8	<0.001	80.5	78.3	<0.001
Fair/poor	15.2	11.1		17.6	20.6	
Unknown	0.2	0.2		2.0	1.1	
Primary payer (%)						
Medicare	3.2	2.8	<0.001	63.8	76.5	<0.001
Medicaid	2.2	6.8		0.5	2.4	
Private	51.1	56.7		17.1	16.4	
VHA	10.2	0.1		12.8	0.4	
Tricare	5.7	0.6		3.3	1.1	
Other/unknown	2.6	2.9		1.1	1.3	
Trans. unins. (1–5 mo)	6.5	6.6		0.7	0.9	
Uninsured (≥ 6 mo)	18.5	23.4		0.7	1.2	



**Figure 1** Primary payer type by year, US veterans (a) aged 18–64, (b) aged 65+. Vertical line = ACA implementation. VHA = Veterans Health Administration. For clarity, only selected payer groups are shown.

was even more likely to be the primary payer for older veterans with catastrophic expenditures (75% over the full study period) than for older veterans overall (64%). On average, no more than 5 per 10,000 older veterans each year were uninsured or transiently uninsured and experienced catastrophic expenditures, both pre- and post-ACA.

### Association of ACA Implementation with Changes in Likelihood of Catastrophic Health Expenditures

In our multivariable analysis of veterans aged 18–64 (Table 2), ACA implementation was associated with a 26% decrease in the likelihood of catastrophic expenditures (absolute change,  $-1.4$  percentage points [pp]; 95% CI,  $-2.6$  to  $-0.2$ ;  $p=0.03$ ). This was driven primarily by a 27% decrease in catastrophic family spending among low-income veterans (absolute change,  $-3.7$ pp; 95% CI,  $-6.6$  to  $-0.7$ ;  $p=0.02$ ) and a 38% decrease among veterans with non-VHA coverage (absolute

change,  $-1.8$ pp; 95% CI,  $-3.0$  to  $-0.6$ ;  $p=0.003$ ). In contrast, middle- and high-income veterans, as well as those with VHA as primary payer or who were uninsured, experienced no significant change in catastrophic family spending rates. Notably, low-income younger veterans with VHA as primary payer had substantially lower pre-ACA catastrophic family spending rates than those with non-VHA coverage (10.0% vs 16.3%). After ACA implementation, low-income veterans with non-VHA coverage experienced a 40% decrease in catastrophic family spending (absolute change,  $-6.5$ pp; 95% CI,  $-10.5$  to  $-2.5$ ;  $p=0.002$ ), bringing their catastrophic expenditure rates on par to those among veterans with VHA coverage (9.6% VHA vs 9.3% non-VHA).

Among veterans over age 65 (Table 2), ACA implementation was not associated with a change in likelihood of catastrophic expenditures overall or in any income tercile. However, older veterans with VHA as primary payer saw a 46% decrease in catastrophic family spending (absolute change,

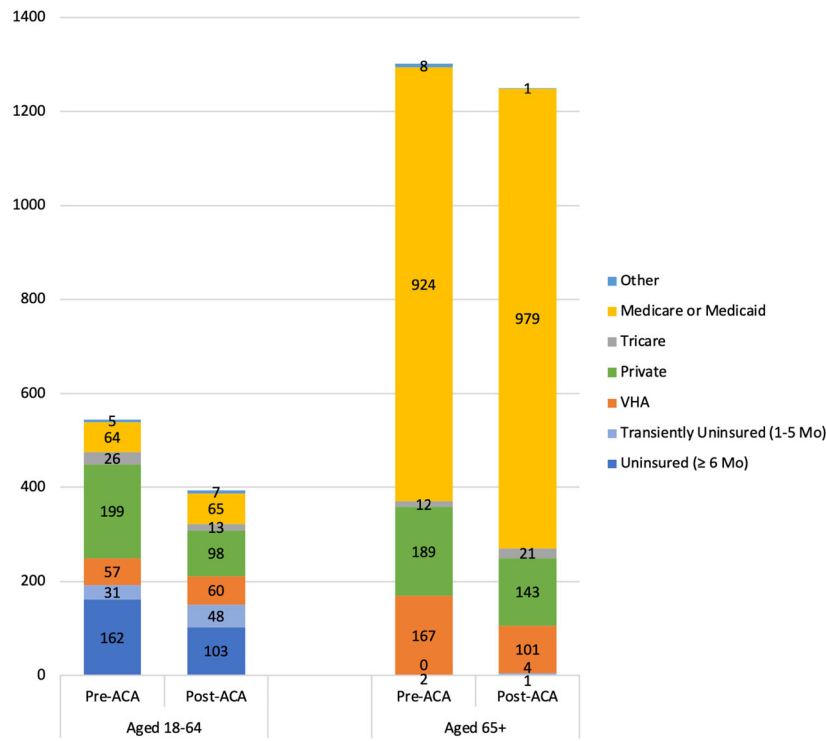


Figure 2 Number of veterans per 10,000 experiencing catastrophic health expenditures annually pre- vs post-ACA, by age group and primary payer. VHA = Veterans Health Administration.

Table 2 Association Between ACA Implementation and Changes in Likelihood of Catastrophic Health Expenditures Among US Veterans, by Age, Income, and Primary Payer

	Median family income pre-ACA	Likelihood of CHE pre-ACA	Likelihood of CHE post-ACA	Adjusted change in likelihood, pp	95% CI
Veterans aged 18-64	\$66,406	5.4%	3.9%	-1.4*	-2.6, -0.2
By income tercile					
Low	\$28,246	13.5%	10.1%	-3.7*	-6.6, -0.7
Middle	\$64,293	1.8%	1.4%	-0.4	-1.4, +0.7
High	\$120,959	1.1%	0.3%	-0.7	-1.4, +0.0
By primary payer					
VHA	\$52,314	5.6%	5.0%	-0.3	-3.3, +2.8
Non-VHA	\$82,522	4.7%	2.7%	-1.8**	-3.0, -0.6
Uninsured	\$37,535	8.7%	8.2%	-0.2	-4.2, +3.9
By primary payer in low-income tercile					
VHA	\$23,974	10.0%	9.6%	-1.2	-6.6, +4.1
Non-VHA	\$32,299	16.3%	9.3%	-6.5**	-10.5, -2.5
Uninsured	\$22,899	13.4%	11.0%	-2.3	-7.8, +3.2
Veterans aged 65+	\$52,323	13.0%	12.5%	-0.3	-2.5, +1.8
By income tercile					
Low	\$22,336	28.3%	26.0%	-1.0	-6.1, +4.0
Middle	\$51,492	8.3%	8.6%	+0.3	-2.8, +3.5
High	\$110,476	2.7%	3.0%	+0.2	-1.6, +2.0
By primary payer					
VHA	\$38,818	13.1%	6.6%	-6.0*	-10.7, -1.2
Non-VHA	\$56,015	13.3%	13.7%	+0.5	-1.9, +3.0
By primary payer in low-income tercile					
VHA	\$22,096	22.7%	12.2%	-9.5*	-18.2, -0.9
Non-VHA	\$22,482	30.1%	29.7%	+0.7	-5.0, +6.4

\*p<0.05, \*\*p<0.01. pp = percentage points, CHE = catastrophic health expenditures, VHA = Veterans Health Administration. Non-VHA includes Medicare, Medicaid, private insurance, and Tricare. Both VHA and non-VHA refer to individuals with year-round insurance coverage. Uninsured not shown for veterans aged 65+ due to small cell sizes

-6.0pp; 95% CI, -10.7 to -1.2;  $p=0.01$ ), bringing their post-ACA level down to less than half of that seen among veterans with non-VHA coverage (6.6% VHA vs 13.7% non-VHA). Similarly, low-income older veterans with VHA as primary payer saw catastrophic family spending decrease by 42% (absolute change, -9.5pp; 95% CI, -18.2 to -0.9;  $p=0.03$ ), further lowering their post-ACA catastrophic spending levels beyond those conferred by non-VHA coverage (12.2% VHA vs 29.7% non-VHA).

### Sources of Health Spending Among Veterans with Catastrophic Expenditures Post-ACA Implementation

Focusing on the veteran's expenditures only, sources of out-of-pocket spending differed substantially by primary payer among veterans who experienced catastrophic family spending post-ACA (Fig. 3, Supplement eTable 3). Among veterans aged 18-64 with VHA as primary payer, out-of-pocket spending was driven primarily by outpatient visits (73%), followed by prescription drugs (11%) and dental care (11%). In contrast, younger veterans with non-VHA primary payers had spending driven primarily by prescription drugs (38%) and dental care (29%), with a smaller contribution from outpatient visits (22%). Finally, uninsured younger veterans' spending was more evenly divided between inpatient stays (26%), outpatient visits (26%), prescription drugs (19%), and vision aids (14%).

Among veterans over age 65 who experienced catastrophic family spending and had VHA as primary payer, the largest sources of spending were home healthcare (26%), dental care (21%), and prescription drugs (17%). Older veterans with catastrophic family spending and non-VHA primary payers similarly saw their spending driven by dental (23%) and home healthcare (22%), although they also spent substantially on outpatient visits (18%).

### Sensitivity Analyses

Using a logistic regression model in place of a linear probability model and using the MEPS definition of family did not qualitatively affect our results (Supplement eTables 1-2). When we used an alternate definition of catastrophic expenditures that included premiums, we still observed a trend toward lower catastrophic spending post-ACA among younger veterans in the income and payer strata described above, but these decreases fell short of statistical significance.

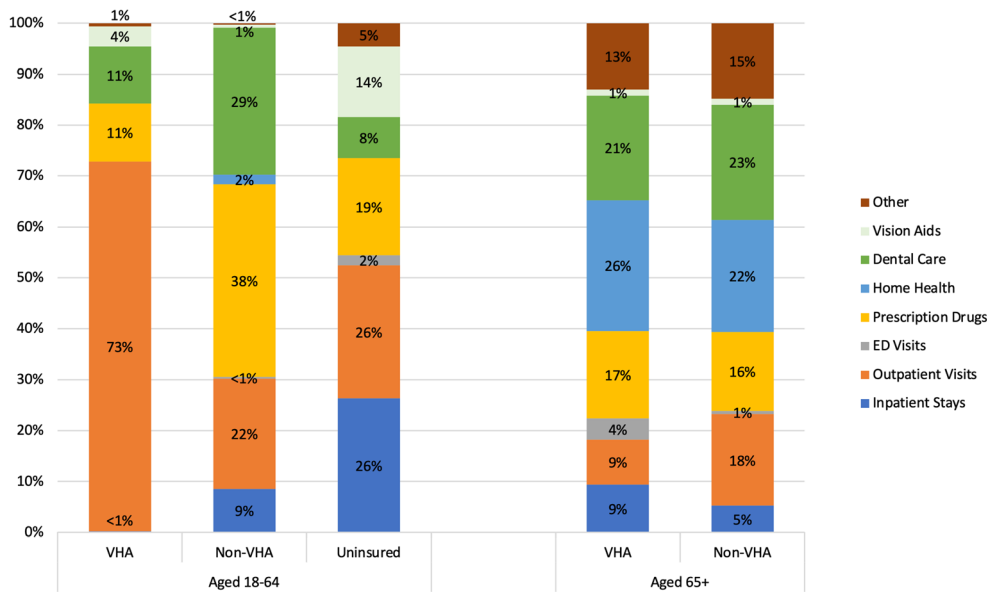
## DISCUSSION

Using a nationally representative sample of US veterans, we found that implementation of the ACA in 2014 was associated with 26% lower likelihood of catastrophic family health expenditures among veterans aged 18-64, but no significant change in catastrophic spending among veterans over age

65. Our findings build on prior work showing that ACA implementation was associated with a 21% decrease in catastrophic health spending among all adults aged 18-64, suggesting that veterans experienced greater improvements in financial protection than the general public.<sup>11</sup> Despite some gains, financial burdens faced by veterans remain substantial, with 1 in 25 younger veterans and 1 in 10 who are low-income experiencing catastrophic family spending each year after ACA implementation. Financial risk is more than twice as high among veterans over 65, with 1 in 8 older veterans and 1 in 4 who are low-income experiencing catastrophic family spending annually post-ACA. These findings suggest that while the ACA was associated with substantially improved insurance coverage for younger veterans, much work remains in achieving one of the key aims of coverage: providing financial risk protection.

Several possible reasons exist for the observed decline in household catastrophic spending among veterans aged 18-64. First, the uninsured rate among younger veterans fell by nearly a third over the study period, with concomitant increases in Medicaid, VHA, and Tricare coverage. One facilitator of this was likely Medicaid expansion, with about 256,000 uninsured veterans living in the Medicaid expansion states of California, Ohio, Illinois, Pennsylvania, and Michigan alone in 2012.<sup>18</sup> Future research comparing financial outcomes of veterans living in Medicaid expansion vs non-expansion states would shed further light on this possibility. Additionally, the ACA's individual mandate to purchase health insurance prompted already eligible veterans to enroll in VHA, Medicaid, and Tricare health benefits.<sup>8</sup> Since VHA and Medicaid coverage have little to no cost sharing,<sup>16,34</sup> these enrollments likely contributed to decreases in catastrophic expenditures. Third, the Veterans Choice Act of 2014, which expanded opportunities for veterans of all ages to use VHA benefits at non-VHA facilities, may have increased utilization of VHA coverage, although further research is needed to evaluate this multifaceted legislation. Between late 2014 and early 2017, about 17% of all users of VHA healthcare did so at community sites through the Veterans Choice Program.<sup>35</sup> Finally, the sizable decrease in catastrophic expenditures among younger veterans with non-VHA coverage may be attributable to the ACA's reforms to the private insurance market, including the creation of insurance Marketplaces offering subsidized plans,<sup>36</sup> guaranteed issue and community rating rules that prohibited denying or overcharging veterans with pre-existing conditions,<sup>37</sup> and stricter out-of-pocket spending limits.<sup>5,38</sup>

In contrast to most prior studies, we also examined veterans aged 65 and older, who are traditionally thought to have universal coverage through Medicare, Medicaid, and VHA benefits. Despite very low uninsured rates, the incidence of household catastrophic spending among older veterans far exceeded that among younger veterans, with more than 1.2 million veterans over age 65 paying catastrophic bills annually both pre- and post-ACA. Notably, the majority of these relied on Medicare or Medicaid as their primary payer, highlighting



**Figure 3 Sources of out-of-pocket spending among veterans with catastrophic spending in post-ACA period, by age group and primary payer. VHA = Veterans Health Administration. Non-VHA includes Medicare, Medicaid, private insurance, and Tricare. ED = emergency department. Other includes durable medical equipment. Uninsured not shown for veterans aged 65+ due to small cell sizes.**

gaps in financial protection provided to older adults by even these popular insurance programs. Additionally, the ACA contained few reforms targeting Medicare enrollees, and concordantly we did not observe an improvement in financial protection among older veterans with non-VHA primary coverage. In comparison, older veterans with VHA as primary payer had better financial protection pre-ACA, and this advantage increased post-ACA. The reasons for this improvement are unclear from our data, but one possibility is that dual-insured older veterans are increasingly using their VHA coverage (whose cost sharing is lower and adjusted to income) preferentially over their Medicare benefits. For example, a recent study using VHA and Medicare claims found that from 2003 to 2014, Medicare-enrolled veterans increasingly relied on the VHA for their primary care (25 to 35%), specialty care (14 to 22%), and surgical care (15 to 22%).<sup>39</sup> Additionally, the VHA’s decision to make expensive hepatitis C antivirals available to veterans at low cost in 2014 may have further protected some older veterans from catastrophic expenditures.<sup>40</sup>

Lastly, several areas stand out as drivers of inadequate financial protection for veterans in the post-ACA period. Dental care was a leading source of out-of-pocket spending for insured veterans of all ages with catastrophic expenditures, likely because not all veterans with VHA coverage are eligible for VHA dental benefits,<sup>41</sup> less than half of state Medicaid programs cover comprehensive dental care for adults,<sup>42</sup> and traditional Medicare lacks a dental benefit entirely.<sup>43</sup> Prescription drugs were another leading driver of spending, consistent with the known high patient cost of medications<sup>44</sup> and the fact that Medicare Part D requires enrollees to pay medication deductibles and coinsurance without an out-of-pocket cap.<sup>45</sup> Younger veterans with VHA coverage appeared relatively

protected from prescription drug spending, consistent with prior research linking VHA coverage with lower cost-related medication nonadherence.<sup>40</sup> Home healthcare costs were significant among older veterans, which may be attributable to limited VHA coverage for home care,<sup>46</sup> lack of Medicare coverage for most non-skilled home-based services (which are captured in MEPS),<sup>47</sup> and the heightened financial vulnerability faced by homebound seniors.<sup>48,49</sup> Finally, outpatient visits were the largest driver of out-of-pocket spending among younger veterans with VHA coverage. Since outpatient copays within the VHA are limited to \$15–50 per visit,<sup>16</sup> this likely reflects dual-insured (VHA and non-VHA) veterans seeking services from community providers, resulting in higher patient cost sharing.<sup>50,51</sup>

### Limitations

Our study has several limitations. First, we are unable to identify veterans with forms of military discharge other than honorable, who may experience greater financial risk due to ineligibility for veterans’ benefits. Second, MEPS follows respondents for at most 2 years, preventing longitudinal analysis of individual veterans whose insurance coverage changed. Third, although we adjust for unemployment in our multivariable models, broader economic trends in the US, including gains in employment and income, may explain some of the decrease in catastrophic expenditures among veterans over the study period. Fourth, while our models adjust for available socio-demographic characteristics, self-reported health, and census region, some residual confounding is possible, for example, due to redistribution of veterans to lower-cost areas within census regions during the study period. Fifth, because our definition of catastrophic health expenditures includes

spending from all family members (as established by prior studies<sup>11,15</sup>), our findings may include some spillover effects of the ACA on non-veteran family members. Finally, since MEPS spending estimates do not include medical debt, post-acute skilled nursing facility stays, or long-term nursing home care, our analysis likely underestimates some veterans' true financial hardship.

## CONCLUSIONS

While coverage and financial protection have improved for younger veterans after ACA implementation, over 1.5 million veterans per year continue to experience catastrophic household spending due to healthcare costs, of whom over 1.2 million are aged 65 or older. Policy initiatives that could contribute to addressing this issue include adoption of Medicaid expansion in the 12 states that have not yet done so, outreach to encourage eligible veterans to enroll in VHA health benefits, and efforts to assist uninsured and underinsured veterans who are ineligible for VHA benefits to enroll in Medicaid or subsidized Marketplace insurance. Additionally, Congress could consider legislation expanding Medicare and Medicaid to include a dental benefit, which enjoys broad public support,<sup>43,52</sup> or relieving the burdensome costs of home care for older veterans both with and without VHA benefits.

Both the future of the ACA and strategies to improve veterans' access to healthcare remain hotly debated, with the ACA's individual mandate eliminated beginning January 2019 and the VA MISSION Act passed in June 2018, which aimed to further expand veterans' ability to use their VHA benefits at non-VHA facilities. In this context, our findings provide new evidence that policymakers should consider strategies to further improve financial risk protection for veterans.

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