

# Soldiering on: Improving policies to benefit America's veterans

By David Chan, Mark Duggan, and Audrey Guo

## KEY TAKEAWAYS

- The share of American men who are veterans has plummeted during the last few decades — from 48 percent in 1980 to 9 percent today for those aged 25-64.
- The fraction of veterans receiving Disability Compensation benefits from the VA has almost tripled over the last 20 years after remaining steady since the 1950s.
- VA spending on health care has also soared so that total VA spending has increased from about \$3,000 per veteran in 2000 to \$13,000 this year.
- Evidence-based reforms to VA programs which have gone largely unchanged for more than a century would enable us to much more effectively serve our veterans.

George Shultz, who served for many years as the honorary chair of SIEPR's advisory board, passed away earlier this month at the age of 100. Before serving in three presidential administrations and becoming a renowned scholar at Stanford, he was a U.S. Marine — rising to the rank of captain during World War II. We dedicate this policy brief about America's veterans and the U.S. Department of Veterans Affairs to this incredible man who served Stanford and the world so selflessly and effectively throughout his years.

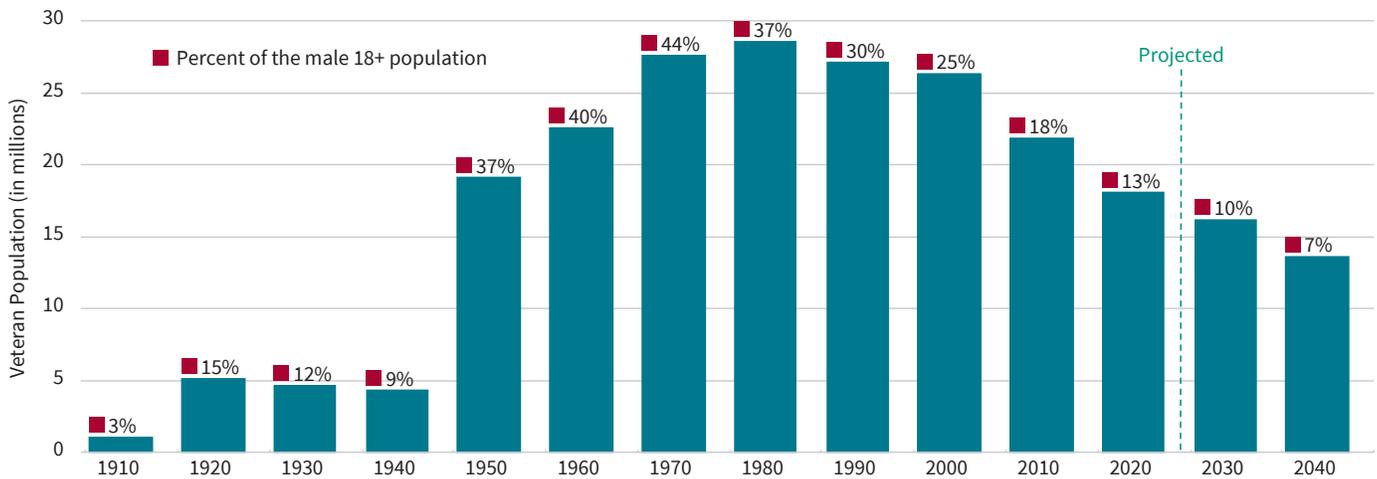
George Shultz was born in 1920, one of the 70 percent of men born that year who served in the military. Fast-forward 50 years, when the oldest of the three authors of this policy brief was born. Like most of those born into Generation X, Mark Duggan did not join the armed services. In fact, only 11 percent of men born in 1970 did. And of those born in 1980, only 6 percent have served.

This policy brief summarizes trends in military service and examines the role and health benefit policies of the U.S. Department of Veterans Affairs. We also propose how the VA and its [400,000 employees](#) can best deliver the maximum possible benefit to our 18 million veterans and their families.

## The changing face of America's veterans

Before considering how VA policy has changed in recent years, it is important to first understand how trends in military service have changed the characteristics of veterans over time. The following figure, which uses data from the decennial U.S. census, shows that the number of veterans has fluctuated significantly over the last century, with substantial increases resulting from both world wars and the wars in Korea and Vietnam.

**Figure 1.** # of U.S. Veterans (in millions) and % of Men Who were Veterans Since 1910



Source: Department of Veterans Affairs, American Community Survey Report

The number of veterans peaked at about 28 million in 1980, declined gradually to 26 million by 2000, and has since fallen rapidly during the past 20 years to just 18 million in 2018.

Despite the decline in veterans over the past two decades, the VA’s budget has grown from \$71 billion in 2000 to more than \$200 billion in 2019.<sup>1</sup>

*Current projections from the VA* suggest that the veteran population will continue to decline to just 13 million by 2040. The figure further demonstrates that there were dramatic increases in the share of all men in the U.S. who were veterans after World War I (3 percent to 15 percent) and World War II (9 percent to 37 percent) and much smaller increases resulting from the Korean (37 percent to 40 percent) and Vietnam (40 percent to 44 percent) wars.

There have also been astonishing changes in the age distribution of veterans in recent decades. As a result of the trends outlined above and as shown in the following table, America’s veteran population has aged considerably in recent decades. For example, in 1964 and 1980, the share of America’s veterans who were age 65 and up stood at just 8 percent and 10 percent,

respectively. However, this share has soared during the past 40 years, reaching 37 percent in 2000 and 53 percent by 2020.

**Table 1.** Age Distribution of All U.S. Veterans (Men and Women)

Age Group	1964	1980	2000	2020
18-24	5%	3%	1%	1%
25-44	60%	37%	21%	16%
45-64	27%	50%	42%	30%
65+	8%	10%	37%	53%

Source: Bureau of Labor Statistics, March CPS Surveys 1964, 1980, 2000, 2020.<sup>2</sup>

While a portion of this change is attributable to rising life expectancies and the aging of the baby boom generation, which has increased the share of adults in the U.S. who are age 65 and up (from 11.3 percent to 16.3 percent from 1980 to 2020), the vast majority has been driven by the decline in military service.

1 All figures cited here and elsewhere in the policy brief are inflation-adjusted to 2020 dollars.

2 1964 was the first year the March Current Population Survey was conducted.

The following table displays, for four different years (1964, 1980, 2000, and 2020) and age groups, the share of men who have previously served in the Army, Navy, Air Force, Marines, or Coast Guard (these figures exclude current military personnel).<sup>3</sup>

**Table 2.** Percentage of U.S. Men who are Veterans

Age Group	1964	1980	2000	2020
18-24	14%	5%	2%	1%
25-44	63%	35%	11%	5%
45-64	34%	67%	34%	12%
65+	25%	28%	62%	37%

Source: Bureau of Labor Statistics, March CPS Surveys 1964, 1980, 2000, 2020.

The fraction of men ages 25-44 in the U.S. who are veterans has fallen steadily from 63 percent in 1964 (during the early part of the Vietnam War) to 35 percent in 1980, 11 percent in 2000, and now stands at just 5 percent. Veteran status became more common among men ages 45-64 from 1964 to 1980 as World War II veterans aged but has fallen steadily in the years since, to just 12 percent today.

If we also look at educational attainment among men ages 25-64, in 1964 veterans were almost 50 percent more likely than non-veterans to have obtained a college degree. That is no longer the case today, as the share of males in the same age group with a college degree is only 31 percent among veterans versus 37 percent among non-veterans.

The implications of this massive decline in service are — to the best of our knowledge — poorly understood, leaving us with more questions than answers.

<sup>3</sup> While military service has become more common among women in recent years (with women now accounting for 9 percent of all veterans), the corresponding shares of women who are veterans are much lower. For example, in 2020 the four shares for women were 0 percent, 1 percent, 2 percent, and 1 percent.

Could this change have contributed to stagnating wages and rising inequality during the past few decades, as many men no longer receive the potentially valuable education and training that military service provided? Could it also have contributed to rising polarization, as fewer men have the chance to serve with and learn from others from different backgrounds? Might it also mean that Americans have less devotion to their country and less of a sense of serving something greater than themselves?<sup>4</sup> All of this remains an important area for future research given the massive declines in military service and the corresponding increases in inequality, polarization, and deaths of despair (*Coile and Duggan, 2019*).

## Understanding VA benefits

For those who do serve in the military, the government promises benefits in return. The VA administers many of those programs for veterans and their families through the Veterans Benefits Administration (VBA). These programs include vocational rehabilitation, education, home loans, and life insurance along with pensions for the families of deceased veterans.<sup>5</sup>

But the VA spends the most on its Disability Compensation (DC) program, which pays benefits to veterans with disabilities that were caused by or aggravated during their military service. The federal government has paid benefits to disabled veterans since the Revolutionary War nearly 250 years ago. And since the end of World War I, the benefit structure has stayed the same — even as the U.S. military and those who serve in it have changed.

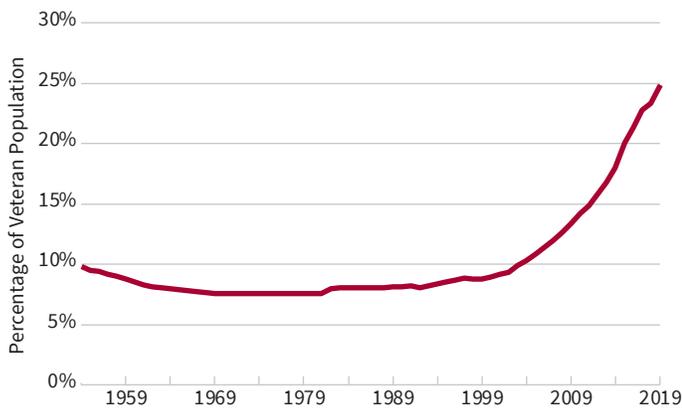
<sup>4</sup> Previous research by many scholars (e.g., *Angrist, 1990*) that has compared the effect of military service *within a cohort* is not well-suited to answer this question since it does not capture the effect of a changing share of one's peers having served in the military. In other words, serving in the military may have a very different effect on an individual if 70 percent of a veteran's cohort also served instead of just 5 percent.

<sup>5</sup> Burial benefits for America's veterans are provided through the VA by the National Cemetery Administration.

Veterans receiving DC benefits get a monthly benefit that increases with a combined disability rating (CDR). This creates a range *from \$144 for those with a 10 percent rating to \$3,146 for those with a 100 percent rating*. Monthly benefits are increased for those DC recipients with a spouse and/or dependent children. These amounts are not subject to federal income taxes and are adjusted up each year to account for inflation. DC recipients also receive prioritized access to health care benefits through the Veterans Health Administration, which we discuss in more detail below.

As shown in the following figure, the fraction of America's veterans receiving DC benefits remained roughly constant at approximately 9 percent from the early 1950s through 2000.

**Figure 2.** % of Veterans Receiving DC Benefits, 1954-2019



Source: Statistical Abstracts of the U.S. (1957-2012), VetPop Models 2014-2018, and VBA Annual Benefits Reports (1999-2019)

This stability is striking given the considerable changes in the composition of America's veterans during that period, as those who served in peacetime and those who fought in Korea, Vietnam, and the Persian Gulf entered the veteran ranks, while veterans from both world war eras passed away.

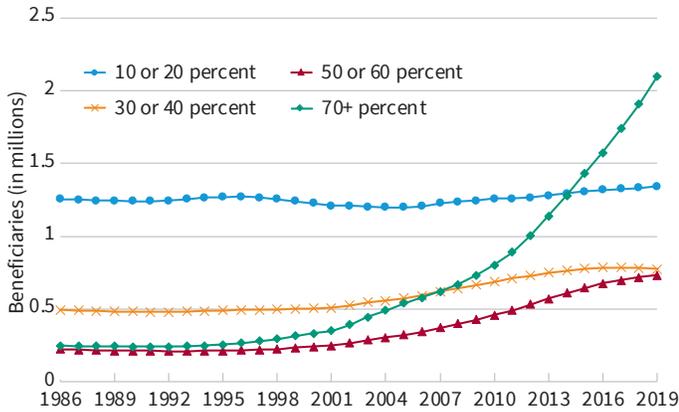
However, during the past 20 years, there has been a very significant increase in the share of veterans receiving DC benefits. This change was to a large extent driven by an expansion of the medical eligibility criteria for those who served in Vietnam, Cambodia, Laos, or the surrounding waters during the approximately 11-year conflict there (*Coile, Duggan, and Guo, 2020*).

This expansion was initially prompted by evidence that exposure to Agent Orange and other herbicides used by the U.S. military was associated with an increased risk of diabetes. Anyone who served “in-theater” and was diagnosed with diabetes was presumed eligible for DC benefits. In the years following this expansion, the number of Vietnam veterans who qualified for DC benefits with a diabetes diagnosis soared, and many existing DC recipients experienced benefit increases due to a rise in their CDRs (*Autor, Duggan, Greenberg, and Lyle, 2016*). Similar medical eligibility expansions for Vietnam veterans were subsequently made for other medical conditions, and together these changes dramatically increased the share of Vietnam-era veterans receiving DC benefits.

An arguably even more important contributor to the growth shown in the preceding figure has been a similar expansion in the DC program's medical eligibility criteria for veterans of the first and second Gulf War eras (*Coile, Duggan, and Guo, 2015*). As a result of these changes, approximately one-third of veterans who served in Afghanistan and/or Iraq are now receiving DC benefits. Enrollment among these more recent veterans is much higher than among veterans of the World War II and Korean War eras and now also significantly exceeds the share for Vietnam-era veterans.

Along with the increase in the share of veterans receiving DC benefits, there has been a dramatic shift in the distribution of CDRs (and thus in the average monthly benefit) among DC recipients. As the following figure shows, during the past 20 years, the number of DC recipients with just a 10 percent or 20 percent CDR has remained roughly constant while the number with a CDR of 70 percent or more has increased by more than 600 percent.

**Figure 3.** Growth in # of DC Beneficiaries by CDR, 1986-2019



Source: COIN CP-127 Reports (1986-1998); VBA Annual Benefits Reports (1999-2019)

As a result of these changes, the average annual DC benefit has increased by 75 percent during the past 20 years, *from \$9,700 in 2000 to \$17,200 in 2019* (Duggan and Guo, 2021).

When you combine the number of those receiving benefits with the increased monthly payments, VA expenditures on the DC program per veteran have risen more than fivefold since 2000 and total program expenditures reached *\$85 billion in the 2019 fiscal year*.

These increased payments have led to some unintended consequences.

Our recent research (Coile, Duggan, Guo, 2020) demonstrates that the expansion in DC benefits has significantly reduced employment among affected veterans. This no doubt partially explains why economic well-being among America’s veterans has not improved despite the enormous expansion of DC benefits since 2000. As Table 3 shows, the share of male veterans with family incomes below 200 percent of the federal poverty line (FPL) was virtually unchanged from 1999 to 2019 at 18 percent.

**Table 3.** % of Veteran and Non-Veteran Males with Incomes below 200% of Federal Poverty Line

Age Group	Veteran Males			Non-Veteran Males		
	1979	1999	2019	1979	1999	2019
18-24	34%	33%	38%	27%	33%	28%
25-44	17%	19%	15%	22%	22%	21%
45-64	15%	14%	17%	26%	19%	19%
65+	36%	23%	19%	44%	38%	24%
All 18+	18%	18%	18%	27%	25%	22%

Source: Bureau of Labor Statistics, March CPS Surveys 1980, 2000, 2020.

The table does suggest that economic well-being improved somewhat for elderly veterans from 1999 to 2019, with a decline from 23 percent to 19 percent in the fraction below 200 percent of FPL. This group consists primarily of Vietnam-era veterans, who experienced an especially large increase in DC enrollment as described above. However, as this same table shows, the improvement in economic well-being for non-veteran males in this same age group during the 1999 to 2019 period was substantially greater, with a reduction in this share from 38 percent to 24 percent.

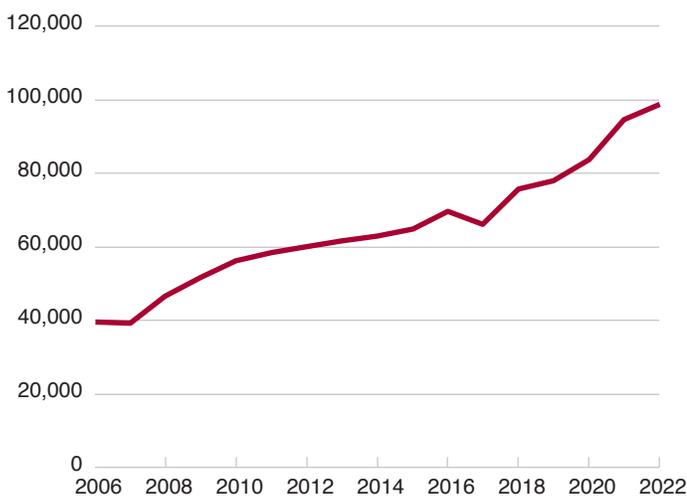
The results in this table suggest that — if anything — America’s veterans fared worse economically than their non-veteran male counterparts despite the unprecedented increase in DC benefit enrollment and in average DC benefits per recipient during the past twenty years.

### VA health care

Along with DC benefits, the VA also pays for and provides health care for veterans through the Veterans Health Administration (VHA). The vast majority of health care that is financed by the VHA is also delivered by it, and the VHA is America’s largest integrated health care delivery system. It provides care at 1,255 facilities, including 170 medical centers and 1,074 outpatient sites of care.

As displayed in Figure 4, spending on VA health care has also increased significantly in recent years. In 2006 (the first year with consistent data available to the present), the VHA spent \$39.5 billion (in 2020 dollars), while the VHA spent \$83.7 billion in 2020 and is projected to spend \$98.9 billion by 2022.<sup>6</sup>

**Figure 4. VHA Expenditures (in millions of 2020 dollars), 2006-2022**



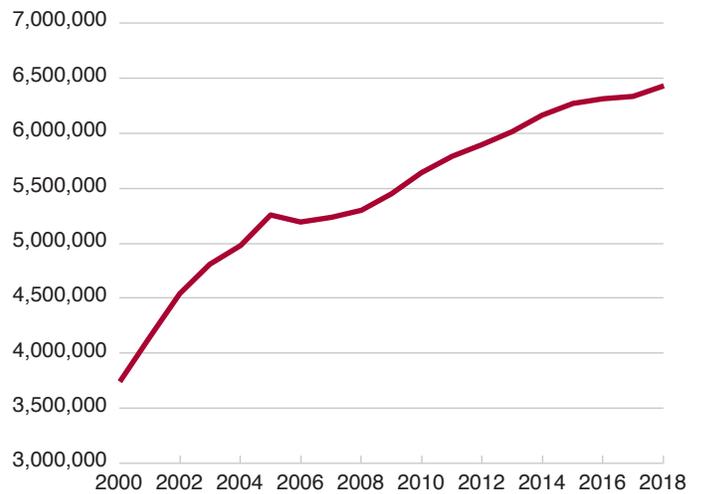
Source: Veterans Administration, Office of Budget Annual Budget Submission 2006-2022

There are several reasons for this increased spending.

First, despite a declining veteran population, the number of veterans who receive health care in the VHA increased by 73 percent between 2000 and 2018, from 3.7 million patients to 6.4 million patients (Figure 5). Most of this increase came from veterans who are receiving DC benefits, whose numbers have surged as explained above. As Appendix Figure 1 shows, the share of all veterans who receive medical care from the VHA has more than doubled from 2000 to 2019 (from 15 percent to 33 percent).

<sup>6</sup> VA Office of Budget Annual Budget Submission <https://www.va.gov/budget/products.asp>.

**Figure 5. Total VHA Patients, 2000-2018**



Source: Department of Veterans Affairs, Veterans Health Administration Office of Policy and Planning

Second, veterans who have a CDR of 50 percent or more or who are unemployable due to their service-connected disability represent a very large share of new patients in the VHA. In 2000, these veterans comprised 441,491 patients, or 11 percent of the total number of patients. In 2018, the share of patients in this group tripled, to 33 percent of the total number of patients.<sup>7</sup> This increase is not surprising given the rising number of DC recipients with high CDRs displayed in Figure 3 above.

Third, spending per patient has increased over time. The average spending per patient increased by almost 50 percent between 2000 and 2018, from \$6,629 per patient to \$9,868 per patient.<sup>8</sup> This increase in spending per patient also holds for those with high and low CDRs and after adjusting for inflation.

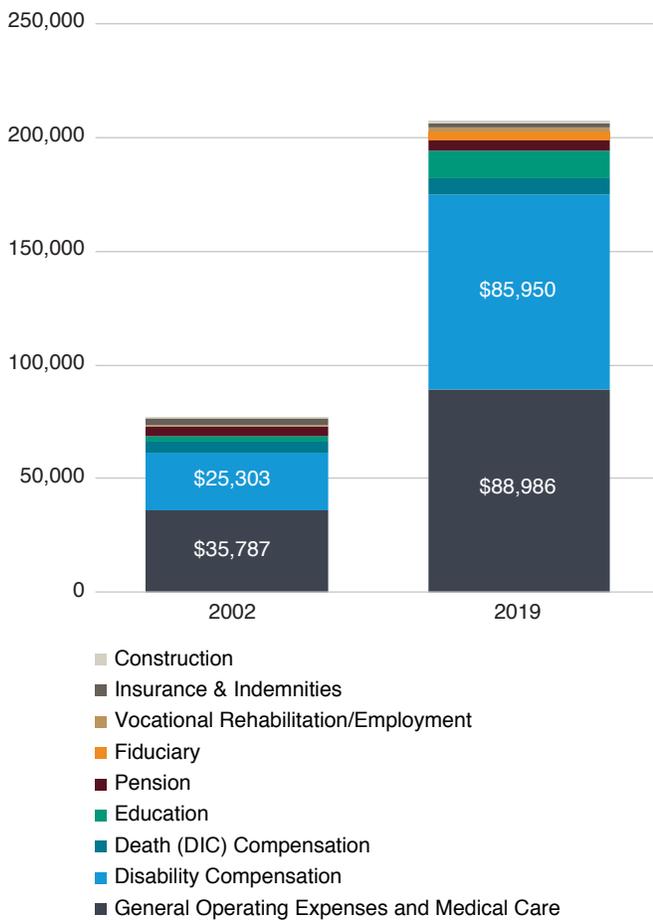
<sup>7</sup> Department of Veterans Affairs, Office of Enterprise Integration at <https://www.data.va.gov/dataset/Number-of-Veteran-Patients-by-Healthcare-Priority-/f2az-8wb5>.

<sup>8</sup> U.S. Department of Veterans Affairs, Office of Enterprise Integration – see the following links: <https://www.data.va.gov/dataset/Average-Expenditures-Per-Patient-by-Healthcare-Pri/4rcf-gbi9> <https://www.data.va.gov/dataset/Number-of-Veteran-Patients-by-Healthcare-Priority-/f2az-8wb5>.

Finally, the age distribution of veterans has been shifting significantly over time. For example, and as shown in Table 1 above, the share of veterans who are age 65 and up increased from 37 percent to 53 percent from 2000 to 2020.

These changes have caused a very large increase in VA health care spending. As the following figure comparing the total VA budget in 2002 and in 2019 shows, along with the growth in DC spending described above, this has been a primary driver of the significant increase in VA spending during the last two decades.

**Figure 6. VA Total Expenditures**  
(in millions of 2020 dollars), 2002 vs. 2019



Source: Veterans Administration, Office of Budget Annual Budget and National Center for Veterans Analysis and Statistics

Following a scandal involving long wait times for veterans in need of VA health care, Congress and both the Obama and Trump administrations expanded access to care by contracting with private providers. The Office of Community Care was established in 2018 and has funded \$9.8 billion in private health care. This number is expected to rise to \$20.1 billion in 2022.<sup>9</sup>

Understanding the effect of health care provided directly by the VHA is an issue of policy importance as the VA decides whether to expand infrastructure within the VHA or to fund private care. A large literature demonstrates higher-quality care at the VHA, along numerous process measures, such as whether diabetic patients undergo recommended screening (O’Hanlon et al., 2017). When it comes to studying health outcomes, however, the observational literature is mixed, in part due to the fact that veterans appear to be in worse health than non-veterans (Agha et al., 2000).

In recent research by our co-author David Chan, the VA appears to reduce mortality among emergency department patients by a striking 45 percent (Chan, Card, and Taylor, 2020). Care provided to veterans who are as good as randomly assigned to the VHA in this quasi-experiment also results in 20 percent lower spending. And the veterans who benefit most from care at the VHA are more disadvantaged, with lower incomes, higher rates of minority status, and higher rates of mental health problems and substance abuse.

More generally, understanding the underlying trends in the veteran population and the place of veterans in our society will be crucial for improving their welfare through health care delivery and other programs more broadly. In recent years, problems of homelessness, suicide, mental illness, and substance abuse have dramatically increased among veterans, both in raw terms and relative to the overall population.

9 VA Office of Budget Annual Budget Submission <https://www.va.gov/budget/products.asp>.

## Policy considerations

While military service was the norm among young American men born a century ago, this is no longer true today. While much of this change is no doubt driven by our having fewer wars, it has likely also been driven by a growing impact of technology. The use of drones and other innovative technologies developed by America's defense contractors has enabled the U.S. military to reduce its personnel.

Meanwhile, there has been unprecedented growth in the VA budget during the past 20 years — from \$71 billion in 2000 to more than \$200 billion in 2019 (the last year with complete data available) — as shown in Figure 7. And preliminary data indicate that total VA expenditures will be 17 percent higher in 2021 (\$243 billion) than in 2019 (\$207 billion).

**Figure 7. VA Total Expenditures**  
(in millions of 2020 dollars), 1940-2019



Source: Veterans Affairs, Office of the Budget, General Administration & Coordination Service, Center for Veterans Analysis & Statistics

Taken together, the growth in VA expenditures and the 30 percent decline in the veteran population since 2000 imply that VA spending per veteran has increased from about \$3,000 annually in 2000 to \$13,000 this year. Part of this increase has clearly been driven by the aging of America's veterans and the associated greater health care needs. But policy changes described above that expanded the medical eligibility criteria for the DC program have been very important contributors as well.

When Denis McDonough was confirmed as the secretary of the VA on February 9, he said that “every decision I make (as VA secretary) will be determined by a simple principle: that it increases veterans’ access to care and benefits and improves outcomes for them.”

That’s an honorable and difficult goal. But it is not impossible.

There are steps that McDonough and other policymakers can take, starting with a drive for evidence-based innovation. This sort of innovation has made America’s private sector the envy of the industrialized world, and it could be applied to evaluate recent changes and potential improvements in federal policy for America’s veterans.

The basic structure of the DC program has been on autopilot since the end of World War I. Surely, we have learned lessons in the past century about how better to design programs that protect the most vulnerable while strengthening work incentives for others. It’s time that our veterans benefit from those lessons.

As two of us have explained in a recent op-ed<sup>10</sup> (*Duggan and Guo, 2021*), one potentially promising reform (of the DC program) would grant all veterans a modest unconditional cash benefit based on their years of service — with higher amounts for those who served in combat and/or with the most severe disabilities.

<sup>10</sup> See <https://thehill.com/opinion/national-security/536127-rethinking-federal-policy-for-americas-veterans>.

This could motivate more of our younger veterans to continue working, alleviate the administrative burden of processing so many DC applications, and lead to faster and more efficient delivery of benefits to those who need them most. Additionally, a substantial wage subsidy modeled after the earned income tax credit for service-disabled veterans could incentivize their return to work, as the EITC has done for workers more generally.

Linking data from the VA with data from other agencies including each branch of the armed forces, the IRS, the Centers for Medicaid and Medicare Services, and the Social Security Administration — and making this data more available to the research community — could enable researchers within and outside of the VA to more systematically estimate the effects of VA programs such as Disability Compensation along with previous VA reforms (and other government policy changes) on the health and economic well-being of our veterans and their families. This effort — which would likely require less than one-tenth of a percent of the current VA budget — would also position the research community to quickly and rigorously explore the effects of potential future reforms.<sup>11</sup>

The resulting research would enable the VA and other government policymakers to improve programs and health care services for America's 18 million veterans and their families along with all future veterans.

Unlike George Shultz, we did not serve in the U.S. military. But we did follow him into the ranks of PhD economists. Like so many in our profession and throughout our nation, we will miss Secretary Shultz. And we wish that he could be here to witness and benefit from the policy improvements that more evidence-based research on VA policies could undoubtedly unleash for his fellow American veterans.

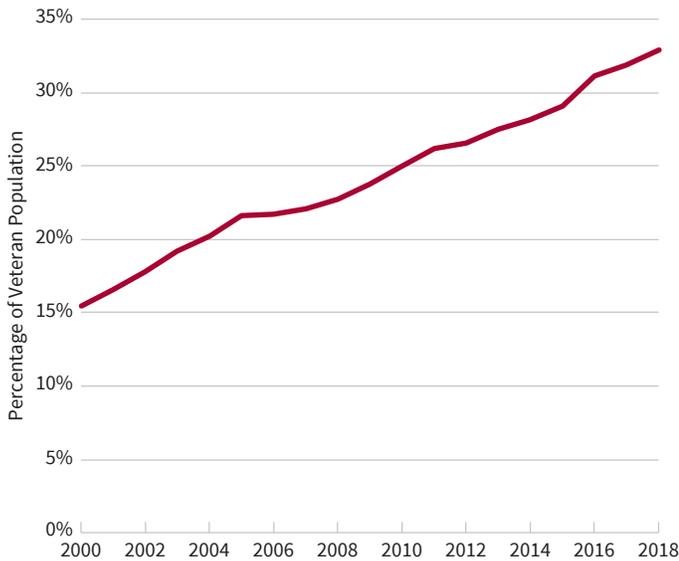
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<sup>11</sup> See Autor et al. (2016) for one example of research that linked data from the U.S. Army with VA data along with data from the Social Security Administration and the National Center for Health Statistics.

## Appendix

**Figure 1.** % of Veterans who are VHA Patients, 2000-2018



Source: Department of Veterans Affairs, VHA Office of Policy and Planning, National Center for Veterans Analysis and Statistics Population Tables



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