

Analysis of an Alternative Military Health Benefit Design¹

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Congress established the Military Compensation and Retirement Modernization Commission in 2013 to systematically review military compensation and recommend ways to address rising costs and other trends. The commission's recommendation for reforming the TRICARE program was sweeping, and differed greatly from earlier proposals that focused on increasing beneficiary cost shares. Specifically, the commission proposed overhauling the current benefit delivery model and replacing it with a premium-based insurance model offering a menu of private health plans the Department of Defense (DoD) sponsored. An estimate of the budgetary impact of its proposed reforms indicate that movement towards the premium-based model would produce an annual budgetary cost savings in the \$2 billion to \$4 billion range, with a best savings estimate of \$3.2 billion.



¹ Based on "Analysis of an Alternative Military Healthcare Benefit Design," *Defence and Peace Economics*, July 2017, <https://doi.org/10.1080/10242694.2017.1349302>.

Introduction

Military health care reform is a topic that has received much attention over the last decade, with particular attention to the subject of fiscal sustainability. The costs of the Military Health System (MHS) have grown rapidly during this period, peaking at \$53 billion, or roughly 10 percent of the DoD's total outlays, in fiscal year (FY) 2012.² Fiscal sustainability is not the only topic driving calls for reform, however.

Another topic that has been gaining attention in the reform debate is that of beneficiary satisfaction and access. More specifically, military beneficiaries have consistently reported frustration over their inability to access care in a timely and convenient matter and their limited choice in providers due to the narrow TRICARE network (Military Compensation and Retirement Modernization Commission 2015).

To address these concerns, the Military Compensation and Retirement Modernization Commission proposed a comprehensive reform plan that would have overhauled the current system and replaced it with a premium-based insurance model consistent with an employer-sponsored benefit program that offers a menu of private health plans. Under the commission's proposed policy change, care provisions for active duty service members and Medicare-eligible military retirees covered by TRICARE for Life would remain unchanged. The populations affected by the change would primarily include active duty family members

and retirees not yet eligible for Medicare and TRICARE for Life. These beneficiary groups would now select a private health plan and assume financial responsibility for a portion of the premium cost. A Basic Allowance for Health Care would be introduced for all active duty family members to help cover premium shares, co-pays, deductibles, and other out-of-pocket expenses.

Our analysis developed the estimated cost and potential savings from providing a DoD health benefit under such a model. The cost to DoD of purchasing care under such a system would depend on the premium costs of the health plans available within the new program and the enrollment behavior of the eligible population. A cost estimate that would reflect these considerations requires data on a population currently covered under such a system. To meet this requirement, we worked with the Office of Personnel Management to obtain data on the civilian population enrolled in the Federal Employees Health Benefits Program (FEHBP).³ FEHBP is the largest employer-sponsored health benefit program in the United States, and its enrollees constitute an analytically desirable comparison group for the DoD beneficiary population given the program's size and extensive geographic span.

Movement toward a premium-based model would constitute a fundamental shift in DoD health care.

² The FY 2012 Unified Medical Budget was \$53 billion. See Defense Health Agency, Support Division (2016).

³ The Office of Personnel Management provided support for the commission's analysis without endorsing it.

Methodology and Results

Using data on the FEHBP population’s demographics, plan choices, and plan costs combined with data on the DoD population, we modeled which FEHBP plans military beneficiaries would select and what premium rates would be set for each plan.

Plan Choice

To develop our cost estimate, we applied federal civilian plan choices to the military beneficiary population, using data on current FEHBP enrollees. A simple approach would be to obtain the distribution of plan enrollment for this population and allocate the DoD population across each plan accordingly (e.g., if 44 percent of FEHBP contract holders are enrolled in the BlueCross BlueShield Standard plan, we would assume 44 percent of DoD beneficiaries will select this plan). However, this would fail to account for important differences in the demographic, socioeconomic, and geographic composition of the FEHBP and DoD populations. The age distributions for the two beneficiary populations illustrates this point. A glance at Table 1 reveals that the DoD population is significantly younger than the FEHBP population. Nearly 50 percent of the DoD population is under age 35, while less than 10 percent of FEHBP population falls into this category. Conversely, for the categories that would be eligible for the proposed policy change, less than 1 percent of the DoD population are over age 65, compared to nearly 36 percent of the FEHBP population.

Table 1. Enrollee population age comparison, FY 2013

Age	FEHBP Contract Holders			DoD Sponsors		
	Count	Percentage	Cumulative Percentage	Count	Percentage	Cumulative Percentage
<23	3,938	0%	0%	413,703	14%	14%
23–34	358,678	9%	9%	894,572	31%	46%
35–44	475,730	12%	21%	431,988	15%	61%
45–54	750,288	19%	39%	518,715	18%	79%
55–64	1,003,588	25%	64%	595,488	21%	100%
65–74	694,849	17%	81%	4,819	0%	100%
75+	753,857	19%	100%	3,734	0%	100%
Total	4,040,928			2,863,019		

Note: The FEHBP age distribution is based on the age of all contract holders enrolled in the system (active employees and annuitants). The DoD age distribution is based on all active duty and non-Medicare-eligible retiree sponsors.

To properly account for such differences in the composition of the two populations, a cohort-based approach was implemented. This allowed the DoD population to be allocated across plans based on within-group enrollment

distributions. The cohort grouping was based on observable demographic and socioeconomic factors known to influence health plan choice. While many demographics are thought to have some bearing on plan choice, age (which can be viewed as a proxy for health and expected expenditures) and income are widely recognized as the most important (Scanlon et al. 1997). Geographic considerations are also important, given that many plans are available only in select market areas. The cohort grouping for this analysis was therefore based on age, income, and state of residence.

Premium Adjustments Choice

The cohort methodology allows us to control for some of the compositional differences between the FEHBP and DoD beneficiary populations when modeling the predicted enrollment behavior of DoD beneficiaries. However, plan choice is not the only parameter affected by the demographic composition of beneficiary populations. Premium amounts must also be considered.

Under a premium-based model, participating health plans assume the financial risk for the beneficiary population they cover. Insurance underwriters therefore determine plan premiums based upon a careful assessment of each population’s specific risk pool. For instance, even when controlling for age, a significant difference in health may still exist between the average 17- to 24-year-old male in the FEHBP population compared to the average 17- to 24-year-old male in the DoD population. To account for these factors fully, insurers calculate risk scores based on claims data for subsets of beneficiaries (such as 17- to 24-year-old males) within a population. These risk scores, together with the populations’ composition, determine the premium amounts. Our analysis developed a methodology to adjust each plan’s premium to reflect the characteristics of the DoD population projected to enroll in the plan. It involved adjustments for population risk score, population composition factor, and retirees’ use of the Department of Veterans Affairs (VA) and other (civilian) health insurance.

Results

The importance of these adjustments was found to be significant—especially the PCF adjustment. This is illustrated by Table 2, which shows the total estimated premium costs as each adjustment is applied.

Table 2. Unadjusted and adjusted premium cost estimates (millions)

Estimate	Population risk score	Population composition factor	VA & other health care	Total cost to DoD
Unadjusted	—	—	—	\$22,152
Partially adjusted	x	—	—	\$21,770
	x	x	—	\$18,907
Final	x	x	x	\$18,046

The combination of adjustments combined reduced our estimated cost of delivering care under the commission’s proposed reform by just over \$4.1 billion, resulting in a final estimate of \$18 billion.⁴

Discussion of Results

Determining whether our final baseline estimate represents a cost decrease or increase requires an estimate of what DoD currently spends providing a health benefit to this population. The DoD premium equivalent cost, or the cost of covering the same population under the current program, was estimated to be \$21.2 billion, suggesting a baseline annual savings of \$3.2 billion.⁵ Sensitivity analyses showed variations in those savings ranged generally from between \$2 billion and \$4 billion, although some sensitivity analyses found wider ranges. For instance, if we assume that the Medicare-eligible population in FEHBP costs less than we predicted, the resulting premium reduction factor would be low and our savings estimate would fall to \$822 million. In another excursion, we estimated savings would be just under \$7.5 billion if all beneficiaries were placed in a lower cost plan, using Government Employees Health Association (GEHA) as an example.⁶

The GEHA example provided an interesting illustration of the magnitude of savings that could be gained from switching from the current TRICARE model to a private insurance model. Under the commission’s proposal, where beneficiaries were free to select their health plan, we estimated DoD would see a budgetary savings of roughly \$3.2 billion dollars. The quality of the benefit was not held constant under this reform proposal; however, beneficiary choice and access were greatly increased. If DoD were to attempt a quality-neutral type reform—replace the TRICARE plan with a private plan like GEHA that approximately equals TRICARE in non-price quality attributes—savings could more than double. To test whether the GEHA plan was similar to TRICARE in terms of non-price quality attributes, we explored several comparison metrics, including network size, patient satisfaction, access standards, and covered services. Our analysis concluded that the GEHA plan generally had more providers than the TRICARE network, slightly higher beneficiary satisfaction, and similar access standards and covered services.⁷

⁴ The weighted premiums used to construct these cost estimates are contained in Appendix A of Burns et al. (2015).

⁵ The DoD premium equivalent cost was a concept created to ensure a fair comparison. We attempted to identify all costs associated with delivering care to the population of interest that would have been covered by premiums under a premium-based model. We included certain budgeted costs associated with overhead, management, and capital but excluded costs associated with readiness (for example readiness and training). See Burns et al. (2015) for an explanation of the development of the DoD premium equivalent cost.

⁶ GEHA Standard seemed a natural candidate for the comparison analysis, given it was the plan with the third-highest predicted DoD enrollment (after BlueCross BlueShield Basic and Standard) but had a relatively low premium cost.

⁷ The full network comparison analysis can be found in Burns et al. (2015).

References

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