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Health Care Analysis for the MCRMC Insurance Cost Model (Presentation)

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14. ABSTRACT

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About this Publication

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Health Care Analysis for the MCRMC Insurance Cost Model

WEAI 2015

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22 May 2015

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Agenda

- Overview
- Background
- Data
- Insurance Cost Estimate Methodology
- Savings and Sensitivity
- Future Work

Overview

- IDA was asked to support the Military Compensation and Retirement Modernization Commission (MCRMC) by researching potential modifications of health-related services
- Past research has explored savings from premium and co-pay changes within the current program
  - The Quadrennial Review of Military Compensation (QRMC)
    - High deductible health plan – creates incentive to reduce utilization
    - Subsidy to leave TRICARE and use other private health insurance
    - Increases in TRICARE premiums and co-pays
- This analysis develops the estimated cost of providing health care through a premium-based insurance model consistent with an employer-sponsored benefit program – “TRICARE Choice”

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- Overview
- Background
  - Introduction
  - TRICARE Choice
  - FEHB
  - Previous FEHB Cost Estimates
- Data
- Insurance Cost Estimate Methodology
- Savings and Sensitivity
- Future Work

Introduction

- Cost of purchasing care depends on:
  - Premium costs of available health plans
  - Enrollment behavior
- How do we construct valid cost estimate?
  - **Best Approach**: Risk Scoring
    - Determine cost of insuring population using health experience
    - Beyond Commission's time and resource constraints
  - **Our Approach**: Model cost estimate based on cost of covering a different beneficiary population under an existing program
    - Requires enrollment and premium data
  - To meet this data requirement, IDA worked with Office of Personnel Management (OPM)
    - OPM is body responsible for administration of Federal Employees Health Benefits (FEHB) Program
  - Note! Reform would offer FEHB-like benefit, not FEHB

Key Policy Parameters for Cost Estimate

- Premium Cost Shares:
  - For ADFM: DoD pays 100% of plan premiums (28/72 split, 28% through BAHC)
  - For retirees: DoD pays 80% of plan premiums
- Take Rates:
  - For ADFM: 96% (current active user rate is 86%) – still get BAHC, but no DoD health plan
  - For retirees: 80% (current active user rate is 79%)
- Basic Allowance for Health Care (BAHC):
  - BAHC is provided to every Active Duty status beneficiary that has at least one dependent
  - BAHC is computed by state
  - BAHC equals 28% of the premium of the plan selected by the median beneficiary in the state plus a co-pay amount set to the average co-pay amount for demographically matched beneficiaries in civilian health care plans today in a PPO style plan

- Largest employer-sponsored health benefit program in US
- Analytically desirable comparison group in terms of:
  - Beneficiary population size
    - Over 4,000,000 federal civilians and annuitants
    - Over 8,000,000 covered lives
  - Geographic span
- Over 200 health plans
  - Fee-for-Service (FFS): Nationally available
  - Health Maintenance Organizations (HMOs): Regional

Bi-Weekly Premium Illustration

Plan Name	Total Premium	Government	Employee	Contribution
BCBS-Standard	$642.60	$437.62	$284.50	72%*
GEHA	$437.37	$328.03	$109.34	75%

*72% refers to cap set to 72% of the weighted mean.

Previous FEHB Cost Estimates

- We have identified three studies costing DoD beneficiaries in FEHB:
  - Congressional Budget Office (CBO) 2008, estimate of H.R. 1222 "Keep our Promise to America's Military Retirees Act"
    - Optional plan for retirees (including >65) to directly enter FEHBP; did not include ADFMs
    - Used average FEHBP premium cost, assumed no change in DoD/TRICARE program management or overhead
    - Estimated cost increase of ~$300M per year
  - TRICARE Management Authority (TMA) 2012
    - Two options: transition retirees (<65) only or all ADFMs and retirees to FEHBP
    - Base case: DoD pays 100% of plan premiums and most beneficiaries select Blue Cross/Blue Shield (BCBS) Standard
    - Base case increases costs $1.5B per year; some excursions with cost shares and specific regions save money – calls for further study of the option
  - Health Affairs (HA) 2013
    - Compared 2013 DoD cost to BCBS Standard plan premium and concluded BCBS would be slightly more costly
- OPM's review of these studies concluded:
  - Did not conduct apples-to-apples comparison
  - Did not allow for full range of management tools
  - Important demographic differences ignored

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Data

MHS Data

- Defense Enrollment Eligibility Reporting System (DEERS)
- Medical Expense and Performance Reporting System (MEPRS)
- Health Services Data
  - CAPER
  - SIDER
  - TED-I
  - TED-N
- DoD comptroller data

FEHB

- Enrollment counts (FY13)
  - Age
  - State
  - Income
- Plan premium data
- Contract cost data

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- Insurance Cost Estimate Methodology
  - Determining DoD Plan Choice
  - Premium Adjustments
  - PCF Adjustment
  - DoD Premium Equivalent TRICARE Cost
- Savings and Sensitivity
- Future Work

Determining DoD Plan Choice

- A simple approach: obtain distribution of plan enrollment for FEHB and allocate DoD population across plans accordingly
- NOTE! This fails to account for important differences in the demographic, socioeconomic, and geographic composition of the FEHB and DoD populations

	FEHB Contract Holders			DoD Sponsors		
Age	Count	Percent	Cumul. Percent	Count	Percent	Cumul. Percent
<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 FEHB 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.

Determining DoD Plan Choice (cont.)

- We develop cohort-based methodology to allocate DoD population based on within-group enrollment distributions
- Cohort variables:
  - Level of coverage
  - Age
  - Income*
  - State

Coverage Level* (2)	Age Group (7)	Income Group (8)	States (52)
Self Only or Family	0–24	Less than 34,999	50 states, the District of Columbia, and a catch-all category for OCONUS
	24–34	35,000 to 49,999	
	35–44	50,000 to 64,999	
	45–54	65,000 to 79,999	
	55–64	80,000 to 94,999	
	65–74	95,000 to 109,999	
	75 & up	110,000 to 150,000	
		Greater than 150,000	

Example: 24–34 year olds with dependents, earning $35–50K, living in KY

* Income is earnings of contract holder/sponsor (does not include spouse's earnings or income from other sources such as interest and dividends). We expect this to bias plan choice upwards and thus cost estimate upwards.

Premium Adjustments

- Population Risk Scoring (PRS) Adjustment
- Population Composition Factor (PCF) Adjustment
- VA Utilization (VAU) Adjustment
- Other Health Insurance (OHI) adjustment

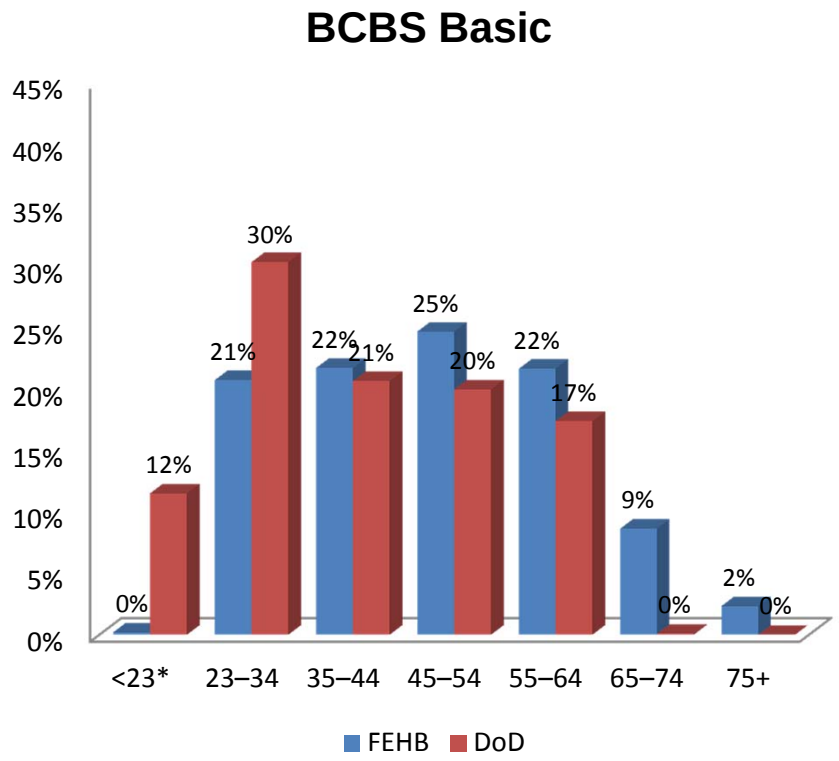
Estimate is:	PRS	PCF	VAU	OHI	Total Cost to DoD
Unadjusted					$22,152
Partially adjusted	x				$21,770
	x	x			$18,907
	x	x	x		$18,400
Final Baseline	x	x	x	x	$18,046

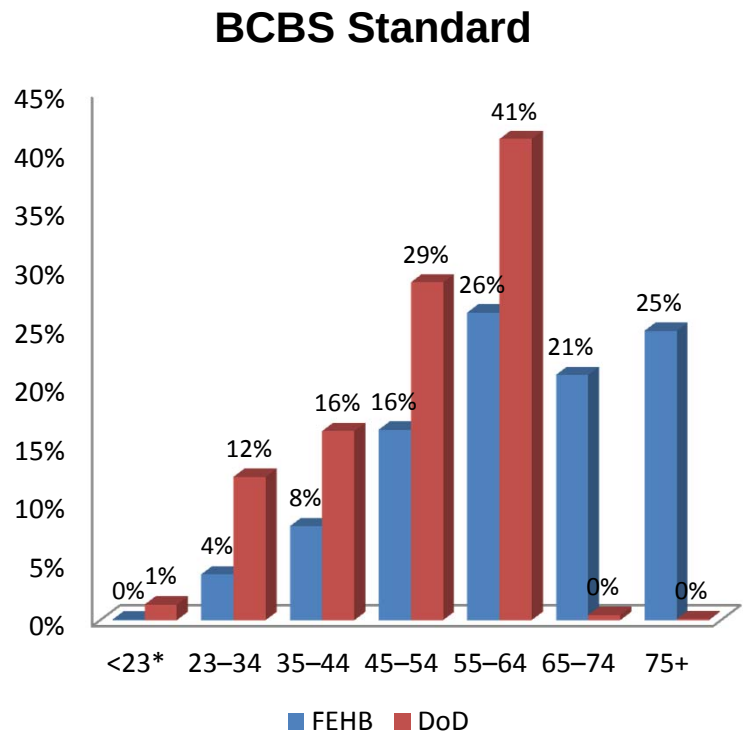
The PCF is by far the most important adjustment

All percentage premium reductions are applied to premium dollars for medical care – 90% for FEHB

PCF Adjustment

- Plan premiums are a function of the overall composition of the population enrolled within each plan
- Distribution of individuals enrolled in a given plan will be significantly different





PCF Adjustment (cont.)

- Determine relative cost of different age groups
- Calculate FEHB and predicted DoD age distribution for each plan

Age Range	Average Health Care Spending
17--23	$3,068
24--34	$4,054
35--44	$5,696
45--54	$7,323
55--64	$9,379
65+	$18,424

This was adjusted downward to $9,568 to account for Medicare as first payer

Variable	Plan	FEHB	DoD	PCF
Average Weighted Spending	BCBS Basic	$6,975	$5,900	-15%
	BCBS Standard	$8,626	$7,462	-13%

Estimating Equivalent TRICARE Cost

- Capture beneficiary care costs for the same population – based on M2 data. Add in other relevant costs: US Family Health Plan (USFHP), pharmacy refunds
- Add in overhead costs from budget data – allocated by fraction of beneficiaries in TRICARE Choice
  - Purchased care overhead
  - Management Activities
  - Other O&M
  - Military Construction
  - Procurement

DoD Premium Equivalent Cost	
Healthcare Services	$18,249
Dental	$328
USFHP	$439
PC Overhead	$1,152
O&M	$908
Management Activities	$173
MILCON	$444
Procurement	$164
Retail Pharm. Refunds	$(610)
Total	**$21,247**

- Omit readiness-related costs: Consolidated health support, education and training, RDT&E
- Omit OSD and IG oversight

Roughly $3 billion in budgetary savings found

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  - Budgetary Savings vs. Savings from Private Insurance
  - Network Analysis
  - Savings Summary
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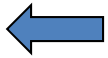
Savings and Sensitivity

	Estimated Cost Under Reform	Current Cost	Estimated Savings
Final Baseline Estimate	**$18,046**	**$21,247**	**$3,201**
Sensitivity to Take Rates:			
Upper Bound	$18,981	$21,247	$2,266
Lower Bound	$17,111	$21,247	$4,136
Sensitivity to Population Adjustment Factor:			
Upper Bound	$20,425	$21,247	$822
Lower Bound	$16,629	$21,247	$4,618
Sensitivity to Plan Choice:			
Upper Bound	$19,271	$21,247	$1,976
Lower Bound (GEHA)	$13,768	$21,247	$7,479
Including Savings from:			
Alternative Cost-Sharing	$17,032	$21,247	$1,976
Pharmacy Excursion	$17,343	$21,247	$7,479



Budgetary Savings vs. Savings from Private Insurance

- We estimated a potential budgetary savings of $3.2 billion under the current TRICARE Choice specifications
  - This savings estimate does not hold quality constant across health care regimes
- How do we identify full potential savings from switching to private insurance?
  - Identify nationally available plan that appears approximately equal to TRICARE in non-price quality attributes
  - Evaluation Metrics:
    - Network providers
    - Patient satisfaction
    - Access standards
    - Covered services

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Network Analysis

Area	Specialty	TRICARE	GEHA	BCBS	TRICARE Providers in GEHA	TRICARE Providers in BCBS	Radius (miles)
Fayettville, NC 28310 (Fort Bragg)	Family Practice	64	123	148	38 of 64	48 of 64	26
					59%	75%	
	OB/GYN	28	86	111	26 of 28	27 of 28	40
					93%	96%	
	Orthopedic Surgery	19	43	163	15 of 19	19 of 19	40
					79%	100%	
Pheonix, AZ 85004	Family Practice	94	158	124	56 of 94	57 of 94	4
					60%	61%	
	OB/GYN	114	126	138	65 of 114	72 of 114	5
					57%	63%	
	Orthopedic Surgery	84	111	108	63 of 84	54 of 84	9
					75%	64%	
San Diego, CA 92136	Family Practice	111	149	149	53 of 111	67 of 111	7
					48%	60%	
	OB/GYN	53	93	78	31 of 53	40 of 53	7
					58%	75%	
	Orthopedic Surgery	90	142	130	63 of 90	68 of 90	10
					70%	76%	

Savings Summary

- Budgetary savings: $3.2 billion
- Savings from switching to private insurance: $7.5 billion
- Source of savings
  - Savings from increasing beneficiary cost shares: $2.2 billion ≈ 30% of total savings
    - All from retirees
    - ADFMs compensated by BAHC
  - Savings from improved management: $5.3 billion
    - Care utilization management
    - Efficiencies in overall program management
- Under TRICARE Choice proposal, DoD would not realize full potential savings
  - Invest $4.3 billion of the savings into improving the quality of the benefit

Future Work

- Transition Costs
- Premium Support
- Behavior of Inactive Guard and Reserves
- Interaction between higher plan quality and use of VA and OHI
- Cost of treating Active Duty personnel
- Implications of family earnings for plan choice
- Availability of regional PPOs
- Treatment of pharmacy costs
- Implications of varying government contribution to encourage economical plan selection
- Other potential modifications to plan design

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Backup

Determining ADFM Premium Rate

- For ADFM and ADGRFMs, the family premium amount must be adjusted (no coverage required for sponsor)
  - We use FEHB program-wide cost per contract data
    - Cost per self-only contract 40% (42%) of family FFS (HMO)
  - Family size adjustment also made
    - Rescale child portion of contract to account for larger family size
  - Resulting ADFM rate about 67% of family premium amount

Plan	Self Only	Family	FM Rate
BCBS Basic (FFS)	$243.89	$571.07	$380.90
BCBS Standard (FFS)	$284.50	$642.60	$428.61
Kaiser Health Plan of Southern California Standard (HMO)	$166.50	$384.83	$256.68

Other Premium Adjustments

PRS Adjustment

- T4 study contained risk score comparison of DoD and FEHB
  - Retirees and their family members
- Results indicate TRICARE beneficiaries risk score was 2% lower than FEHB
  - Holds observables constant
- We therefore apply PRS factor of 2%

VAU and OHI Adjustment

- FEHB premiums cover all care but some DoD users have access to other care, which reduces their TRICARE utilization
  - VA
  - OHI
- These adjustments are designed to avoid double-counting care for these users

Beneficiary Population

Beneficiary Category	Self Only	Family	Total	Covered Lives
AD	698,084	946,308	1,644,392	3,927,278
IGR	19,362	24,447	43,809	100,005
RET	199,465	849,185	1,048,650	2,560,031
OTH	122,854	28,467	151,321	200,671
Total	1,039,765	1,848,407	2,888,172	6,787,985

Beneficiary Category	Self Only	Family	Total	Covered Lives
Employee	785,497	1,359,829	2,145,326	Unknown
Annuitants	1,118,160	777,442	1,895,602	Unknown
Total	1,903,657	2,137,271	4,040,928	8,210,527

Note: The average family size for this population is 2.95.

Sensitivity to Take Rates

Sensitivity to Active Duty Family Member (ADFM) Take-Rates

Estimated DoD Cost (Millions)	Baseline (96.6%)	Lower (92.8%)	Higher (100%)
	$18,046	$17,880	$18,212

Sensitivity to Guard Family Member Take-Rates

Estimated DoD Cost (Millions)	Baseline	30% Increase in Non-takers	30% Decrease in Non-takers
	$18,046	$17,946	$18,145

Sensitivity to Retiree Take Rates

Estimated DoD Cost (Millions)	Baseline (83%)	50% Increase in Non-takers	50% Decrease in non-takers
	$18,046	$17,111	$18,981

Note: The baseline average take-rate for ADGRFMs is 68.6 percent. The baseline take-rate for IGRs is 25 percent.

Sensitivity to Average Cost of Health Care for 65+

Average Health Care Cost-based PCF			
Average Cost used for 65+ cohort	Baseline ($9,567)	30% Higher ($9,379)	30 % Lower ($3,068)
Estimated DoD Cost (millions)	$18,046	$16,629	$19,881
Risk Score-based PCF			
Risk Score used for 65+ cohort	Baseline (1.972)	30% Higher (2.564)	30% Lower (1.380)
Estimated DoD Cost (millions)	$18,557	$17,112	$20,425

Sensitivity to Plan Choice

	Estimated Cost	Baseline Estimate	Cost Difference
BCBS Standard (High)	$19,264	$18,046	$1,218
BCBS Basic (Mid)	$19,271	$18,046	$1,225
GEHA (Low)	$13,768	$18,046	($4,278)

Note: These estimates include the full set of adjustments (PRS, PCF, VA, and OHI). PCF factors used in this estimate are different from those used in the baseline cost estimate. They are based on the age distribution of the full DoD beneficiary population (rather than the age distribution of the plan's predicted enrollees).

Costs Included in/Excluded from DoD Premium Equivalent Cost

	Included (Yes or No): Explanation	Apportion Factor
A. Healthcare Service Costs		
In-House Care	Yes: Premiums cover cost of care	Full cost of care for relevant beneficiary groups as reported in M2
Private Sector Care		
B. Overhead/Management Costs		
Management Activities (Management of Direct and Purchased Care)	Yes: Premiums cover management and overhead expenses	53%
Purchased Care Overhead		89%
C. Other O&M Budget Activities:		
In-House Care (O&M dollars in excess of MEPRS)	Yes: Premiums cover indirect costs associated with care delivery	47%
Consolidated Health Support	No: Primarily readiness	0%
Information Management/ Information Technology (IM/IT)	Yes (partial): Premiums cover central IT infrastructure	47% of selected Practice Expenses (PEs)
Education and Training	No: Primarily readiness	0%
Base Operations and Communications	Yes: Premiums cover facility restoration, modernization, operations, etc.	47%
D. Other:		
US Family Health Plan (USFHP)	Yes: This is the government's share of premiums paid for non-TFL beneficiaries for healthcare delivered in USFHP	100%
Procurement	Yes: Premiums cover equipment	47%
RDT&E	No: Primarily readiness	0%
MILCON	Yes: Premiums cover rental cost of capital and construction	47%
Full Cost of Manpower (FCOM)	No: Covered by premiums but excluded at request of Commission to provide an additional protection of readiness funding for military personnel.	0%
Judgment Fund	No: Covered by premiums but not paid by DoD	0%
Program Oversight (e.g., OASD(HA), CAPE, Comptroller, and IG staff)	No: Covered by premiums but no estimate readily available.	0%

TRICARE/FEHB Satisfaction Survey Comparison

HCBDS Survey Question	TRICARE (All MHS Users)	FEHB Survey Question	GEHA	FEHB Average
Overall healthcare rating (% rating 8 to 10)	64%	Overall healthcare rating (% rating 8 to 10)	79%	78%
Getting needed care	84%	Getting needed care	91%	87%
Getting appointment with specialist	82%	Seeing a specialist	87%	84%
Getting care quickly	78%	Getting care quickly	90%	86%
Claims processed properly	89%	Claims processing	93%	88%

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