

Massachusetts Health Reform and Veterans Affairs Health System Enrollment

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The Veterans Health Administration (VA) is the largest integrated health system in the United States. In fiscal year 2012, 8.8 million of the nation's 21.2 million veterans were enrolled in VA.¹ The minimum requirement for VA enrollment is veteran status, defined as discharge from active military, naval, or air service for any reason other than dishonorable. Veterans must actively apply for VA health benefits and are enrolled based on service-related disability, financial means, or special circumstances, such as prisoner of war status.² Once enrolled, veterans have full access to all VA health services. Veterans who are sufficiently disabled due to their military service or have income below a means-tested threshold may qualify for VA care exempt from co-payments. All other veterans are required to make co-payments when obtaining VA services, including \$15 and \$50 co-payments for primary and specialty care visits, respectively.

Veterans who enroll in VA can concurrently enroll in and obtain care through other health insurance programs including Medicare, Medicaid, and private insurance. Survey data indicate that 77% of VA enrollees have at least 1 other source of health coverage.³ Dual enrollment is particularly common among VA enrollees who are eligible for Medicare.^{4,5} According to studies in Medicare-eligible veterans' preference for care prior to Part D and the Affordable Care Act (ACA), veterans' choice of VA care was driven, in part, by other available provider options.⁶

To date, no studies have examined the potential impact of the ACA on veterans' enrollment in VA and use of VA health services. Veterans eligible for VA health benefits may continue to use VA as they did before ACA, but specific aspects of healthcare reform may change the way veterans interact with VA. Taken together, these elements of healthcare reform may cause total VA enrollment and enrollees' use of VA services to increase or decrease markedly. VA enrollment may decrease for at least 2 reasons, since ACA increases the number of health plan options available through health in-

ABSTRACT

Objectives

Veterans Health Administration (VA) operates the largest integrated health system in the nation. The Affordable Care Act (ACA) does not require any changes to VA, but the individual mandate and expanded health insurance options may change veterans' preferences for coverage. We examined the impact of healthcare reform in Massachusetts, which also included these policy changes, on veterans' enrollment in VA, private insurance, and Medicaid.

Study Design

Massachusetts' healthcare reform in June 2006 served as a natural experiment. Using data from the 2004-2013 Current Population Surveys, we examined enrollment in VA, private insurance, and Medicaid, comparing veterans residing in Massachusetts with veterans residing in neighboring New England states that did not undergo health reform.

Methods

We estimated the probability of being enrolled in VA, private insurance, and Medicaid before and after healthcare reform, using multivariate probit models while adjusting for individual characteristics. Using a difference-in-difference approach, we compared pre-post changes in enrollment probability among Massachusetts and non-Massachusetts veterans, respectively.

Results

Compared with other New England veterans, Massachusetts veterans decreased their enrollment in VA and private insurance by 0.2 ($P = .857$) and 0.9 ($P = .666$) percentage points, respectively, following health reform. In contrast, Medicaid enrollment increased by 2.5 percentage points ($P = .038$).

Conclusions

Healthcare reform in Massachusetts was associated with greater Medicaid enrollment, but was not significantly associated with VA and private insurance enrollment. Our results are significant for informing VA fiscal planning in the post ACA era.

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Take-Away Points

Prior studies examining healthcare reform in Massachusetts have not measured the impact on enrollment in the Veterans Health Administration (VA), the largest integrated health system in the United States.

- Overall, healthcare reform was not significantly associated with VA enrollment; this relationship, however, was contingent on the state of the economy.
- Veterans who might otherwise have enrolled in VA or private insurance opted for Medicaid instead.
- Understanding the impact of healthcare reform in Massachusetts is important to inform policy makers about veterans' likely VA enrollment in the post Affordable Care Act era.

insurance exchanges and the expansion of Medicaid. First, uninsured veterans who might otherwise rely on VA may take advantage of these new options. Second, these new non-VA options may also be appealing to low-income veterans already enrolled in VA if they are eligible for health insurance subsidies or are able to take advantage of expanded Medicaid coverage.

At least 2 aspects of healthcare reform may result in greater VA enrollment. First, veterans with commercial insurance may seek VA care if small businesses decide to stop offering coverage as a result of the employer mandate. A prior study found employees of small firms faced higher insurance premiums and greater out-of-pocket costs after healthcare reform in Massachusetts.⁷ Second, if the options in health insurance exchanges or the Medicaid expansion are not appealing, uninsured veterans who did not previously use VA may seek health coverage through VA in order to satisfy the requirements of the individual mandate under ACA.⁸

In this study, we sought to examine the potential impact of ACA on veterans' enrollment in VA, private insurance, and Medicaid. We used the Massachusetts Health Care Reform Act (MHCRA), implemented in June 2006, as a proxy for ACA. MHCRA includes many of the components currently in ACA, so examining the impact of MHCRA on veterans' enrollment in VA, private insurance, and Medicaid may inform policy makers about veterans' likely VA enrollment from other status in the post ACA era.

METHODS

Data

Data for this study were drawn from the Current Population Survey (CPS) over the period 2004-2013.⁹ CPS is a publicly available database jointly sponsored by the US Census Bureau and the Bureau of Labor Statistics. CPS is traditionally known for labor market statistics; however,

individual-level sociodemographic, behavioral, and health measures such as health insurance coverage are also included. Sample households in CPS responded to a core set of questions on a monthly basis for 4 months, then were not interviewed for 8 months, and finally were re-interviewed for 4 additional months. Supplemental questions, including those related to health plan coverage, were asked annually in the CPS March Supplement.

Study Sample

Implementation of the MHCRA began in June 2006, which served as a natural experiment because the MHCRA introduced an individual mandate as well as greater health insurance options and an expansion of Medicaid. Since MHCRA was a natural experiment, any enrollment changes among Massachusetts veterans after 2006 are likely to be attributable to MHCRA and not confounded by other factors. To consider the effect of healthcare reform in Massachusetts, we examined enrollment in VA, private insurance, and Medicaid, comparing veterans residing in Massachusetts with veterans residing in neighboring states in New England that did not undergo health reform. Using CPS data, we identified 131,330 individuals self-identified as veterans who completed the March Supplement during the period 2004-2013. We defined the treatment group as the set of veterans residing in Massachusetts. Correspondingly, the control group consisted of all other New England veterans residing in Connecticut, Maine, New Hampshire, Rhode Island, or Vermont. We defined the pre-MHCRA period as the interval from March 2004 to March 2006 and the post MHCRA period as March 2007 to March 2013. Of the sample of New England veterans, 4581 were from the pre-MHCRA period (630 Massachusetts and 3951 non-Massachusetts) and 9535 were from the post MHCRA period (1053 Massachusetts and 8482 non-Massachusetts). The unit of analysis was individual-level observations.

Enrollment in VA, Medicaid, and Private Health Insurance

The CPS March Supplement contains a series of yes/no questions to ascertain individuals' sources of health coverage. Our primary outcome, VA enrollment, was a dichotomous variable equal to 1 if an individual reported being covered by VA at any time during the prior calendar year. We defined analogous measures for private

insurance and Medicaid as secondary outcomes. We considered individuals to have private health insurance if coverage was obtained through an employer, purchased on the private market, or obtained through another individual's plan. Enrollment outcomes (VA, private insurance, and Medicaid) are not mutually exclusive since veterans are able to concurrently enroll in VA and other health plans.

Statistical Analysis

The impact of MHCRA on veterans' enrollment in VA, private insurance, and Medicaid was examined using a difference-in-difference approach (DID).¹⁰ Specifically, we calculated the change in the adjusted probability of being enrolled in VA from the pre-period prior to MHCRA to the postperiod after MHCRA for veterans in Massachusetts and outside of Massachusetts, respectively. We then subtracted the pre-post change among Massachusetts veterans by the pre-post change among the non-Massachusetts veterans to produce the change in VA enrollment probability attributable to MHCRA. This DID estimate accounts for trends in VA enrollment that were common to all veterans and would otherwise confound estimated treatment effects. Analogous DID estimates were calculated for private insurance and Medicaid enrollment. Because outcome variables measure enrollment over a calendar year, DID estimates reflect the change in average annual enrollment.

We calculated the adjusted probability of being enrolled in VA, private insurance, and Medicaid jointly using multivariate probit models. We estimated a 3-equation model allowing for correlation in the error terms across equations. The multivariate probit model allows for veterans to be enrolled in 1 or more sources. All models include 3 explanatory variables to generate probabilities for the DID approach: indicator for Massachusetts veteran, indicator for post MHCRA observation, and the interaction between these 2 variables. Regression models also adjusted for demographics (age, gender, marital status, race, education, income, residence in urban area, household size), employment status, self-reported health, and disability.

All analyses were weighted to the average annual veteran population in New England over the 10-year sample period. Standard errors for regression coefficients were calculated using a bootstrap procedure.¹¹ The delta method was then used to estimate DID standard errors. A nominal P value of .10 was used to test statistical significance. Statistical models were fit using the STATA Software (Version 12.0, College Station, Texas).

RESULTS

Veterans Before and After Healthcare Reform

Table 1 presents descriptive statistics for veterans in the pre- and post MHCRA periods, stratified by state of residence (Massachusetts or non-Massachusetts) and weighted to the average annual population of New England veterans. Prior to MHCRA, veterans in Massachusetts were older ($P = .009$), less likely to be married ($P = .001$), and more likely to have postbaccalaureate education ($P < .001$), have a disability preventing work ($P = .032$), and reside in an urban area ($P < .001$), compared with non-Massachusetts veterans. After implementation of MHCRA, veterans in Massachusetts remained older ($P < .001$), more likely to have postbaccalaureate education ($P < .001$), and more likely to reside in urban areas ($P < .001$) compared with non-Massachusetts veterans. Massachusetts veterans were also less likely to be employed full-time ($P = .005$) or part-time ($P = .007$) following MHCRA.

Unadjusted Enrollment in VA, Private Insurance, and Medicaid

Table 2 presents unadjusted rates of enrollment in VA, private insurance, and Medicaid in Massachusetts and other neighboring New England states before and after MHCRA. VA enrollment increased 2.1 percentage points from the pre-MHCRA period to the post MHCRA period for Massachusetts veterans (pre-MHCRA = 5.3%, post MHCRA = 7.4%) and 3.2 percentage points for non-Massachusetts veterans (pre-MHCRA = 6.2%, post MHCRA = 9.4%). Private insurance enrollment decreased 0.5 percentage points for Massachusetts veterans, from 72.2% pre-MHCRA to 71.7% post MHCRA, but decreased 2.3 percentage points from pre-MHCRA to post MHCRA (72.9% to 70.6%) for non-Massachusetts veterans. Medicaid enrollment increased 2.2 percentage points from the pre-MHCRA period to the post MHCRA period for Massachusetts veterans (pre-MHCRA = 5.9%, post MHCRA = 8.1%) and 1.0 percentage point for non-Massachusetts veterans (pre-MHCRA = 5.8%, post MHCRA = 6.8%).

The **Figure** presents unadjusted trends in VA enrollment for Massachusetts and non-Massachusetts veterans, respectively. Trends in VA enrollment were similar across groups in the pre-MHCRA (2004-2006) period. In the 2 years following MHCRA (2007-2008), VA enrollment decreased for both groups; however, the decline was more substantial among Massachusetts veterans. In 2009, VA enrollment increased sharply in the Massachusetts group compared with a more modest increase in the non-Massachusetts group. Between 2011 and 2013, VA enrollment

■ **Table 1.** Summary Statistics of Study Sample Stratified by MHCRA Period and State of Residence

	Pre-MHCRA					Post MHCRA				
	Massachusetts		Non-MA (NE)		<i>P</i> ^a	Massachusetts		Non-MA (NE)		<i>P</i> ^a
	Mean	SD	Mean	SD		Mean	SD	Mean	SD	
Age (years)	61.80	14.93	60.03	15.10	.009	64.63	15.20	62.16	15.05	<.001
Male	96.1%	0.19	95.2%	0.21	.260	93.5%	0.25	94.3%	0.23	.348
Married (%)	63.9%	0.48	71.4%	0.45	.001	65.9%	0.47	68.3%	0.47	.133
Race										
White	94.9%	0.22	93.8%	0.24	.250	93.9%	0.24	93.4%	0.25	.426
Black	2.4%	0.15	2.5%	0.16	.903	3.4%	0.18	3.1%	0.17	.519
Other	2.7%	0.16	3.7%	0.19	.109	2.7%	0.16	3.6%	0.19	.046
Education										
<High school	11.5%	0.32	10.7%	0.31	.583	7.3%	0.26	8.7%	0.28	.146
High school graduate	29.6%	0.46	36.7%	0.48	.001	30.6%	0.46	35.1%	0.48	.005
Some college	16.7%	0.37	19.4%	0.40	.122	15.0%	0.36	18.6%	0.39	.004
2-year college degree	8.8%	0.28	8.4%	0.28	.746	11.4%	0.32	10.0%	0.30	.204
4-year college degree	17.6%	0.38	15.1%	0.36	.137	18.6%	0.39	16.5%	0.37	.119
Post baccalaureate	15.7%	0.36	9.8%	0.30	<.001	17.1%	0.38	11.1%	0.31	<.001
Income (quintile)										
1st	23.2%	0.42	20.2%	0.40	.133	20.0%	0.40	20.0%	0.40	.989
2nd	17.9%	0.38	19.4%	0.40	.407	21.8%	0.41	21.0%	0.41	.558
3rd	20.0%	0.40	22.7%	0.42	.138	18.8%	0.39	21.5%	0.41	.048
4th	24.2%	0.43	25.8%	0.44	.392	24.4%	0.43	24.9%	0.43	.722
5th	14.7%	0.35	11.9%	0.32	.069	15.0%	0.36	12.6%	0.33	.047
Employment Status										
Full-time employed	40.0%	0.49	47.3%	0.50	.001	36.2%	0.48	40.8%	0.49	.005
Part-time employed	7.5%	0.26	6.6%	0.25	.470	5.2%	0.22	7.3%	0.26	.007
Retired	39.0%	0.49	36.9%	0.48	.333	45.9%	0.50	39.8%	0.49	<.001
Disabled	7.1%	0.26	4.7%	0.21	.032	6.2%	0.24	6.1%	0.24	.894
Unemployed	4.1%	0.20	2.0%	0.14	.022	3.7%	0.19	3.3%	0.18	.555
Other	2.2%	0.15	2.6%	0.16	.569	2.8%	0.17	2.7%	0.16	.850
Household size	2.39	1.19	2.46	1.17	.193	2.37	1.21	2.40	1.23	.344
Urban	96.6%	0.18	70.5%	0.46	<.001	97.4%	0.16	70.9%	0.45	<.001
Self-Reported Health										
Excellent	22.6%	0.42	21.1%	0.41	.442	21.5%	0.41	19.9%	0.40	.235
Very Good	28.5%	0.45	30.8%	0.46	.255	30.5%	0.46	30.4%	0.46	.916
Good	27.0%	0.44	29.6%	0.46	.199	28.6%	0.45	29.4%	0.46	.642
Fair	15.3%	0.36	13.5%	0.34	.287	14.3%	0.35	14.2%	0.35	.957
Poor	6.7%	0.25	4.9%	0.22	.127	5.0%	0.22	6.2%	0.24	.133
N	630		3951			1053		8482		
Weighted N	1,343,207		1,943,833			2,749,878		4,180,952		

MHCRA indicates Massachusetts Health Care Reform Act.

^a*P* value from the test of equality across the respective groups of Massachusetts and non-Massachusetts veterans.

decreased modestly among Massachusetts veterans, but increased among non-Massachusetts veterans.

Private insurance enrollment was higher among non-Massachusetts veterans over the period 2004-2010; however, trends were parallel over this period. In 2011, enrollment increased sharply among Massachusetts veter-

ans, then decreased sharply over the period 2012-2013. In contrast, enrollment among non-Massachusetts veterans decreased in 2011 and remained stable through 2013.

Trends in Medicaid enrollment were parallel over the period 2004-2007, diverged in 2008, and returned to similar levels in 2009. Among Massachusetts vet-

Table 2. Unadjusted Results for Enrollment in VA, Private Insurance, and Medicaid

VA Enrollment	Pre-MHCRA (A)	Post MHCRA (B)	Diff (B-A)	SE
Massachusetts	5.3%	7.4%	2.1% ^a	0.012
Non-MA (NE)	6.2%	9.4%	3.2% ^c	0.006
		DID	-1.1%	0.014
Private Insurance	Pre-MHCRA (A)	Post MHCRA (B)	Diff (B-A)	SE
Massachusetts	72.2%	71.7%	-0.5%	0.024
Non-MA (NE)	72.9%	70.6%	-2.3% ^b	0.010
		DID	1.8%	0.026
Medicaid	Pre-MHCRA (A)	Post MHCRA (B)	Diff (B-A)	SE
Massachusetts	5.9%	8.1%	2.2% ^a	0.013
Non-MA (NE)	5.8%	6.8%	1.0% ^a	0.006
		DID	1.2%	0.014

DID indicates difference-in-differences.; MHCRA indicates Massachusetts Health Care Reform Act; VA, Veterans Health Administration. Significant at ^a10%, ^b5% and ^c1%.

erans, Medicaid enrollment was sharply higher in 2010 and 2011, but decreased substantially in 2012. In contrast, Medicaid enrollment remained constant between 2009 and 2011, but increased markedly in 2012 among non-Massachusetts veterans.

Impact of Healthcare Reform on VA, Private Insurance, and Medicaid Enrollment

Among Massachusetts veterans (Table 3), the adjusted probability of being enrolled in VA increased 2.4 percentage points between the pre- and post MHCRA periods (from 5.3% to 7.7%). For veterans in neighboring New England states, the probability of VA enrollment increased even more (2.6 percentage points), from 6.3% in the pre-MHCRA period to 8.9% in the post MHCRA period. Subtracting the change for the Massachusetts group from the change for the non-Massachusetts group produced a nonsignificant 0.2 percentage point decrease ($P = .857$) in VA enrollment attributable to MHCRA.

The adjusted probability of being enrolled in private insurance decreased 1.8 percentage points among Massachusetts veterans, from 72.9% in the pre-MHCRA period to 71.1% in the post MHCRA period. For non-Massachusetts veterans, the probability of being enrolled in private insurance decreased by 0.9 percentage points (72.0% pre-MHCRA vs 71.1% post MHCRA) across periods. Combining first differences across groups yielded a nonsignificant 0.9 percentage point decrease ($P = .666$) in private insurance enrollment attributable to MHCRA. The probability of being enrolled in Medicaid increased from 5.3% to 8.3% between the pre- and post MHCRA periods among Massachusetts veterans, translating into

a 3.0 percentage point increase. Medicaid enrollment increased by 0.5 percentage points (6.2% pre-MHCRA, 6.7% post MHCRA) among non-Massachusetts veterans. Combining first differences yielded a significant 2.5 percentage point increase ($P = .038$) in Medicaid enrollment attributable to MHCRA.

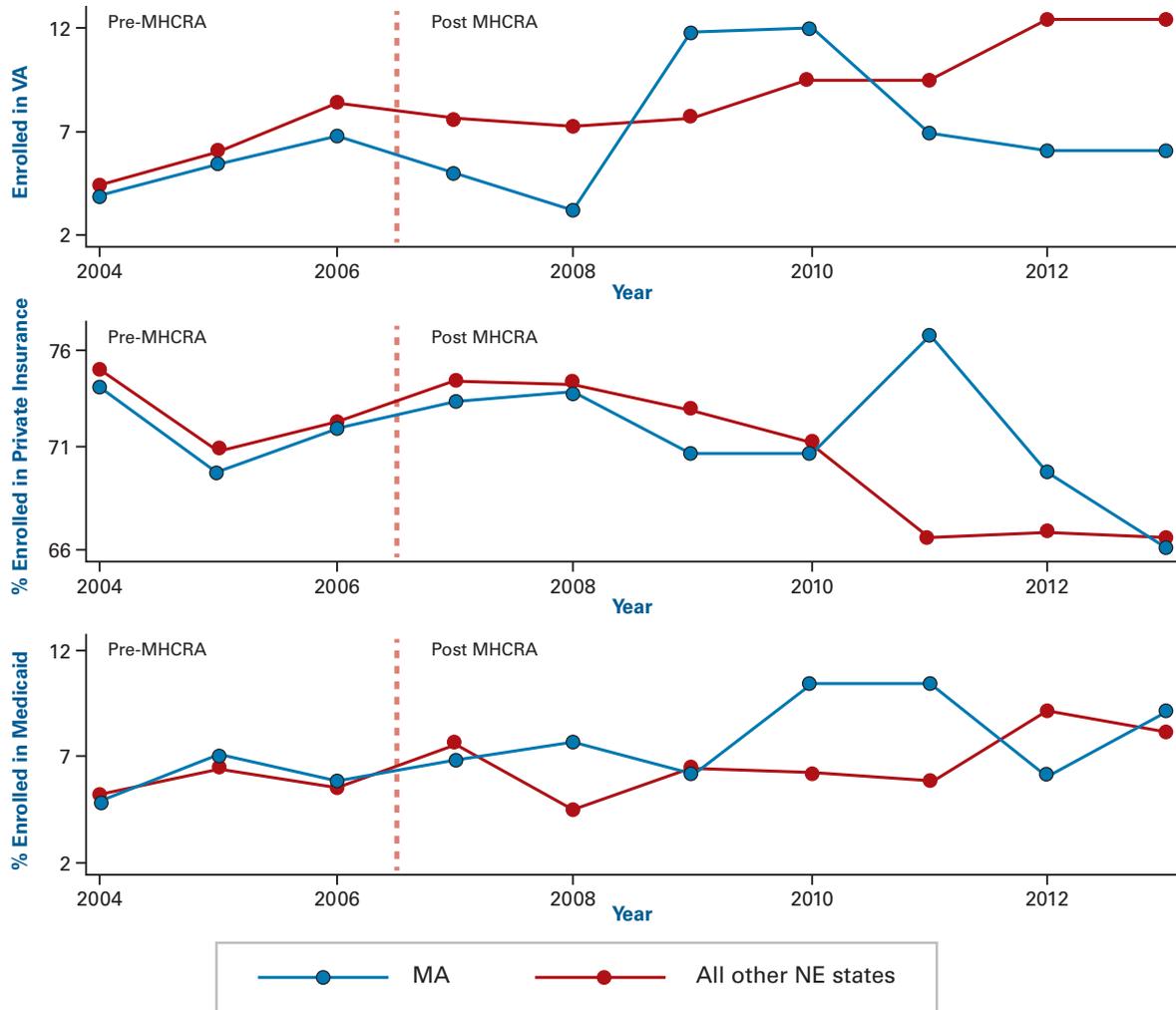
After excluding observations from 2009 and 2010, we identified a significant 2.4 percentage point decrease ($P = .081$) in VA enrollment attributable to MHCRA. MHCRA was also associated with a significant 2.4 percentage point increase ($P = .060$) in Medicaid enrollment, but was not significantly associated with private insurance enrollment.

DISCUSSION

These analyses compared changes in VA, private insurance, and Medicaid enrollment after healthcare reform among Massachusetts and non-Massachusetts veterans, which parallels prior work examining the impact of MHCRA on nonveterans.¹²⁻¹⁷ In the pre-MHCRA period, trends in VA enrollment among Massachusetts and non-Massachusetts veterans were largely similar. In the post MHCRA period, VA enrollment was substantially lower among Massachusetts veterans than among veterans in the other 5 New England states in all post MHCRA years except 2009 and 2010. In DID analyses, we identified a small and nonsignificant decrease in VA enrollment attributable to MHCRA.

Overall, our results suggest that the impact of MHCRA was contingent on the state of the economy. VA enrollment rates were sharply higher for Massachusetts veter-

■ **Figure.** Trends in VA, Private Insurance and Medicaid Enrollment Over the Period 2004-2013



MHCRA indicates Massachusetts Health Care Reform Act; VA, Veterans Affairs.

ans in 2009 and 2010, years coincident with the Great Recession. This sharp increase in 2009-2010 VA enrollment is consistent with prior studies finding greater use of VA care during periods of higher unemployment.^{18,19} After MHCRA, the individual mandate prevented Massachusetts veterans from completely forgoing health coverage. It appears that these veterans were responding to the loss of employment and associated health coverage during the Great Recession by enrolling in VA, in part, to satisfy the individual mandate. The decline in VA annual enrollment attributable to MHCRA was even greater (2.4 percentage points) when the years of the Great Recession (2009-2010) were excluded. Both DID estimates for VA enrollment contrast recent Congressional testimony in which VA forecast a modest 66,000 net increase in enrollment following ACA.²⁰

We also found a nonsignificant decrease in private insurance enrollment that was attributable to MHCRA. Our findings differ from previous studies of non-VA populations that found an uptake in private insurance coverage among Massachusetts residents after MHCRA.^{16,21} For example, Long and colleagues found a 3.1 percentage point increase in the rate of employer-sponsored insurance coverage, which was primarily concentrated among lower-income adults. Our results may differ from prior studies because unlike the general population, veterans also have the option of enrolling in VA to meet the individual mandate.

Finally, we found Medicaid annual enrollment increased by up to 2.5 percentage points following MHCRA. Our estimates are in contrast to the 10 percentage point increase in Medicaid enrollment among eligible

Table 3. Difference-in-Difference (DID) Results Measuring Impact of MHCRA on VA, Private Insurance, and Medicaid Enrollment

VA Enrollment	Pre-MHCRA (A)	Post MHCRA (B)	Difference (B-A)	SE
Massachusetts	5.3%	7.7%	2.4% ^b	0.012
Non-MA (NE)	6.3%	8.9%	2.6% ^c	0.006
		DID	-0.2%	0.013
Private Insurance	Pre-MHCRA (A)	Post MHCRA (B)	Diff (B-A)	SE
Massachusetts	72.9%	71.1%	-1.8%	0.021
Non-MA (NE)	72.0%	71.1%	-0.9%	0.010
		DID	-0.9%	0.023
Medicaid	Pre-MHCRA (A)	Post MHCRA (B)	Diff (B-A)	SE
Massachusetts	5.3%	8.3%	3.0% ^c	0.011
Non-MA (NE)	6.2%	6.7%	0.5%	0.006
		DID	2.5% ^b	0.012

MHCRA indicates Massachusetts Health Care Reform Act; VA, Veterans Health Administration. Significant at ^a10%, ^b5% and ^c1%.

Massachusetts nonveterans without private coverage that was identified by Sommers and colleagues.¹⁴ A recent study by Sonier and colleagues found a 19.4 percentage point increase in Medicaid participation attributable to MHCRA among low-income parents.¹⁵ The change in Medicaid enrollment identified in this study was smaller in part because we did not limit our sample to uninsured veterans or low-income veterans. It appears that veterans increasingly took advantage of the expanded Medicaid options that were part of the MHCRA. Our results also suggest that veterans who might otherwise have enrolled in VA or private insurance opted for Medicaid instead.

Understanding veterans' choice of enrollment into VA and other health plans following health reform is significant for a number of reasons. First, predicting changes in VA enrollment in the post ACA era is important because enrollment projections inform annual budget appropriations from Congress.²² Veterans' choice of enrolling in VA may also indirectly affect coverage projections for non-VA health plans. Under ACA, VA enrollment precludes eligibility for subsidies to purchase health insurance through the open marketplace, which may affect veterans' preferences for health coverage.²³ Finally, changes in health coverage following reform may undermine continuity of care and result in poorer health outcomes.

Future studies should measure the magnitude of changes in VA healthcare use and costs as well as examine the role of healthcare reform on specific categories of VA utilization. Understanding changes in veterans' intensity of VA use is relevant because the majority of VA enrolled veterans dually use non-VA sources of care.³ VA

also serves a number of special populations, including a disproportionately large number of veterans with mental illness or who are homeless. Overall estimates measuring the impact of healthcare reform may mask heterogeneous effects among these vulnerable populations served by VA, and future research should examine these potential differences. Finally, ACA seeks to improve access to care, so future studies should examine whether healthcare reform improves access to care for veterans.

This study has a number of limitations. Veterans can remain continuously enrolled in VA regardless of the level of future utilization, so it is likely that veterans responding to CPS equate VA coverage to recent use of VA services. Study findings should be interpreted accordingly. As highlighted in previous studies, VA serves a population that has higher health risk and a greater burden of chronic illness relative to the general population.²⁴⁻²⁶ Although we adjusted for self-reported health, no objective measures of health risk are available in CPS data. Changes in unobserved health status may confound estimated MHCRA effects, but only if the changes disproportionately affected Massachusetts veterans in the MHCRA period. Third, our analyses did not consider the extent to which veterans utilized VA care. Prior studies have indicated that veterans enrolled in VA who are dually covered by a non-VA source selectively choose where they obtain health services. MHCRA may have differentially impacted the utilization of healthcare sources for veterans with access to multiple health plans. Fourth, the impact of MHCRA identified in this study may not fully generalize to the ACA because of state differences in implementing ACA measures such as Medicaid expansion.

Finally, all CPS data were obtained through survey and may be subject to recall bias.

CONCLUSION

In summary, we found that healthcare reform in Massachusetts was associated with greater Medicaid enrollment, but was not significantly associated with VA and private insurance enrollment. For VA enrollment, the impact of healthcare reform differed based on the state of economy. Because a number of MHCRA components are comparable to ACA provisions, our results provide important insights about the potential impact of ACA on veterans in the US and VA. Results from this study are applicable for fiscal planning in VA and other public and private health insurance programs.

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