

# Medicaid Expansion Increased Appointment Wait Times in Maine and Virginia



J Gen Intern Med 37(10):2594–6  
DOI: 10.1007/s11606-021-07086-9  
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## BACKGROUND

The Affordable Care Act was passed more than a decade ago and 39 states have since expanded Medicaid to low-income adults. Medicaid expansion (ME) has been associated with increased access to care and health services utilization,<sup>1</sup> and simulated patient (“secret shopper”) studies have documented modest changes in appointment wait times in ME states. However, the findings for wait times have yet to be validated in large administrative datasets.<sup>2</sup> In addition to providing care to millions of veterans through a network of medical centers and outpatient clinics, the VHA contracts with community-based medical professionals to care for hundreds of thousands of veterans each year.<sup>5</sup> ME has been associated with increased dual enrollment and decreased VHA share of inpatient admissions and emergency department visits,<sup>3</sup> which may decrease wait times for VHA care. Given that physician supply is constrained in the short term,<sup>6</sup> a sudden influx of Medicaid enrollees may increase wait times for community care (CC). This study examined the impact of ME on wait times for primary and specialty care in CC and the VHA in two states (Maine and Virginia) that recently expanded Medicaid and thus had several years of baseline data.

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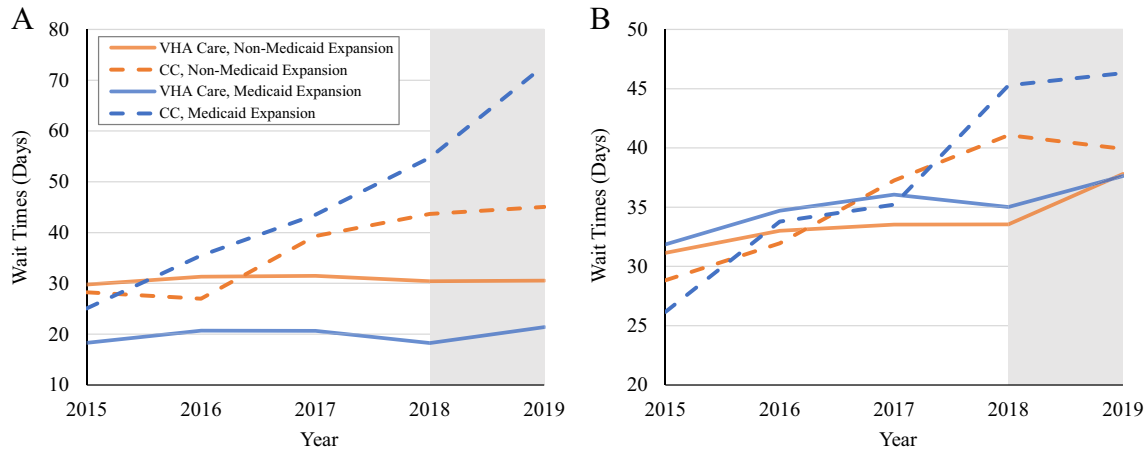
Received June 28, 2021  
Accepted July 27, 2021  
Published online August 12, 2021

## METHODS

The characteristics of the VHA patient population have been described previously.<sup>4</sup> We queried recently released data on wait times for new patients seeking specialty and primary care from VHA and community providers during 2015–2019.<sup>5</sup> We limited our analysis to veterans and VHA facilities located in either Maine, Virginia, or states that had not expanded Medicaid by the end of 2019 ( $N=15,526,559$  appointments across 18 states). We first estimated interrupted time series models to assess changes in appointment wait times in 2019, stratified by care type and expansion status. Next, we estimated differences-in-differences (DID) regression models to identify differential changes in wait times by care type associated with ME for VHA and CC appointments. All models were adjusted for sex, age, specialty, month, and veteran’s 3-digit ZIP code of residence. Standard errors were clustered by both ZIP code and state.

## RESULTS

Unadjusted trends in wait times are represented in Figure 1. There were no statistically significant differences in pre-trends in wait times in the years prior to Medicaid expansion in Maine and Virginia for VHA and CC appointments. After Medicaid expansion in 2019, Maine and Virginia experienced adjusted increases in CC wait times for both primary (9.5 days, 95% CI 2.3, 16.7) and specialty (10.0 days, 95% CI 9.2, 10.8) (Table 1). Non-expansion states experienced lesser increases in CC wait times for primary (4.5 days, 95%



**Figure 1** Unadjusted mean wait time for primary and specialty care appointments in the VHA and CC in late Medicaid expansion (i.e., Maine and Virginia) and non-Medicaid expansion states. The shaded area indicates the post period after Maine (effective 1/10/2019) and Virginia (effective 1/1/2019) implemented Medicaid expansion

2.9, 6.0) and specialty (3.7 days, 95% CI 3.5, 3.9). Conversely, adjusted VHA wait times for primary (−3.1 days, 95% CI −4.2, −2.0) and specialty (−1.1 days, 95% CI −1.5, −0.7) care decreased in Maine and Virginia, but did not change significantly in non-expansion states.

In our DID models, Medicaid expansion was associated with significantly increased wait times for specialty CC of 6.3 days (95% CI 0.2, 12.4). Additionally, Medicaid expansion was associated with significantly decreased wait time for VHA primary care (−2.5 days, 95% CI −4.9, −0.1) and specialty care (−1.0 days, 95% CI −1.6, −0.4).

**DISCUSSION**

In this cross-sectional study, Medicaid expansion in Maine and Virginia was associated with increased private-sector wait times for specialty care and decreased VHA wait times for both specialty and primary care, which comports with prior simulation analyses.<sup>6</sup> These results suggest that improved access to care without concomitant changes in the supply of medical professionals may lead to increased wait times, at least in the short term. Increased access to private-sector care following Medicaid expansions may reduce veterans’ reliance on the VHA for services, thus reducing VHA wait times.

**Table 1** Changes in Mean Appointment Wait Times 2018–2019

Appointment category	Maine and Virginia		Non-expansion states		Difference <sup>2</sup>
	Mean wait time 2015–2018	Change 2018–2019 <sup>1</sup>	Mean wait time 2015–2018	Change 2018–2019 <sup>1</sup>	
Community care					
Primary care	38.3 (40.9)	9.5** (2.3, 16.7)	32.8 (18.8)	4.5*** (2.9, 6.0)	5.0 (−4.2, 14.3)
Specialty care	33.8 (21.5)	10.0*** (9.2, 10.8)	36.2 (22.3)	3.7*** (3.5, 3.9)	6.3* (0.2, 12.4)
Veterans’ Health Administration					
Primary care	19.6 (10.4)	−3.1*** (−4.2, −2.0)	30.2 (17.1)	−0.6 (−1.3, 0.2)	−2.5* (−4.9, −0.1)
Specialty care	34.7 (21.5)	−1.1*** (−1.5, −0.7)	34.2 (19.3)	−0.1 (−0.2, 0.0)	−1.0** (−1.6, −0.4)

Notes: The table displays regression-adjusted changes in mean appointment wait times (in days) associated with the Medicaid expansion in Maine and Virginia (effective 1/1/2019). Numbers in parentheses represent standard deviations for means and 95% confidence intervals for changes/differences. “Non-expansion states” are those that did not expand eligibility for Medicaid by the end of 2019. Standard errors are adjusted for clustering at the state and ZIP3 levels

\**p* < 0.05, \*\**p* < 0.01, \*\*\**p* < 0.001

<sup>1</sup>Interrupted time series estimate, adjusted for covariates

<sup>2</sup>Difference-in-differences estimate, adjusted for covariates

Given that veterans are older and more medically complex on average than the general population, increased CC wait times may negatively impact the health of veterans especially in rural areas where health system capacity is limited. States should consider strategies, such as expanded telehealth and mobile health care teams, to ensure an adequate supply of providers to meet the needs of Medicaid-enrolled veterans.

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