

Consumer and Economic Report: Blue Cross & Blue Shield of Rhode Island

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Thank you for the opportunity to provide comments in this proceeding. My name is Christopher Whaley. I am trained as a health economist and am an Associate Professor of Health Services and Policy Analysis at the Brown University School of Public Health. I received my PhD in Health Services and Policy analysis from the University of California, Berkeley. My comments are delivered in my personal capacity as an expert on US health care markets and financing. My research focuses on US health care markets and the impacts of health care spending on patient access to care and finances. I have published over 125 peer-reviewed publications and testified before state and Congressional bodies on these topics.

I have been asked by the Rhode Island Attorney General's Office to provide comments on Blue Cross & Blue Shield of Rhode Island's ("BCBSRI") proposed premium increases as a part of the Rhode Island Office of the Health Insurance Commissioner's ("OHIC") Rate Review process. BCBSRI has requested a weighted average premium increase of 9.8%. This requested premium increase is higher than historical premium growth and medical inflation trends. It follows a 22% increase in BCBSRI premiums in 2026. Thus, if the requested rate is granted, BCBSRI individual rates will have increased by 34% in just two years.

If such rates were approved, the stability of the health insurance market in Rhode Island will be harmed. The magnitude of the proposed rate increase will cause harm to Rhode Island consumers and their ability to purchase affordable health insurance coverage.

I. Health Expenses Have a Growing Economic Impact on Consumers

In Rhode Island, the average annual cost of an average benchmark plan on the Marketplace Exchange is over \$6,000, while the requested BCBSRI rate exceeds \$12,000 for a typical Rhode Island

enrollee.¹ The median income for Rhode Islander's is \$54,038. These costs equate to over 20 percent of median income among Rhode Island workers, assuming full labor force participation.² These costs are acute for both households above 400% of Federal Poverty Line limits, due to a lack of premium or cost-sharing subsidies, and for lower-income families, who have fewer resources to afford coverage (even after taking account of subsidies). These costs also do not account for household expenses for deductible or out-of-pocket cost-sharing payments. Approximately 16,000 individual Rhode Islanders and 10,700 subscribers (i.e., households) will be impacted by these increases.

Critically for Rhode Island families, the requested premium increase is not just a single-year increase in household expenses. Rather, it is compounded by the 22% increase in BCBSRI premiums last year. For a Rhode Islander with continuous enrollment in a BCBSRI insurance product, the cumulative impact of these rate increases is approximately 34%. These costs further strain household expenses and create an acute health care affordability crisis in Rhode Island. While there does not exist a standard benchmark on health care affordability, other states provide examples of using medical inflation and spending as affordability benchmarks.

BCBSRI's requested rate increases far exceed medical inflation. Medical inflation data is collected and reported by the Bureau of Labor Statistics ("BLS") to measure the costs of health care, including insurance premiums, prescription drugs, medical care services, and professional services.³ Medical inflation provides an insight into the overall changes in health care goods and services, and is specific to the health care sector, unlike general inflation measures. Medical inflation measures both costs of

¹ Source: <https://www.kff.org/affordable-care-act/state-indicator/average-marketplace-premiums-by-metal-tier/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D> and BCBS-RI Actuarial Memorandum – Individual Market.

² Source: <https://www2.census.gov/library/publications/2024/demo/p60-282.pdf>, Assuming 2,080 annual work hours. Median income is estimated to be \$54,038.

³ Source and more details: <https://www.bls.gov/cpi/factsheets/medical-care.htm>

health care goods and services to patients, as well as costs to purchasers and insurers. Because medical inflation measures the overall underlying costs of health care goods and services, it is often used as a benchmark for monitoring health care affordability. It is a benchmark that should be utilized in the Rhode Island rate review process.

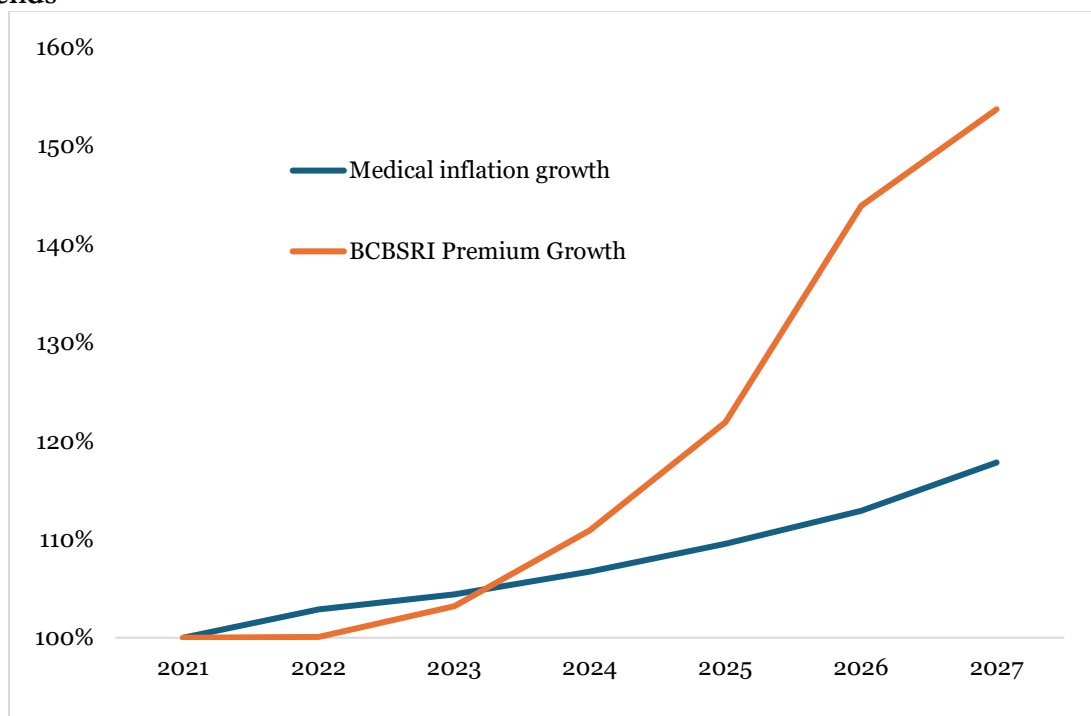
The BLS estimates that recent, 2025, medical inflation was 3.2%.⁴ Over the 2021-2026 period, medical inflation has increased by 13%.⁵ Yet, BCBSRI premiums have increased by 44% over this period (**Figure 1**). Particularly since 2024, BCBSRI rates have sharply diverged from medical inflation. With the requested rate, BCBSRI's premiums will have increased by nearly 45% over the last three years. BCBSRI rates are increasingly disconnected from changes in the underlying costs of providing and covering the costs of care. Thus, when determining rates for the Rhode Island insurance market, it is critical to examine *why* BCBSRI premiums exceed underlying costs of providing care.

If BCBSRI premiums kept pace with medical inflation over this period, they would be 31% lower in 2026. Using a projected medical inflation rate of 2.9% in 2027, the requested 2027 premium would be 36% lower than the current requested rate.

⁴ Source: Bureau of Labor Statistics. <https://www.bls.gov/opub/ted/2026/consumer-price-index-2025-in-review.htm>

⁵ Medical inflation data pulled from Federal Reserve Bank of St. Louis FRED data, Consumer Price Index for All Urban Consumers: Medical Care in U.S. City Average: <https://fred.stlouisfed.org/series/CPIMEDSL>.

Figure 1: Growth in BCBSRI Health Insurance Premiums Compared to Medical Inflation Trends



Source: Medical inflation data from the BLS and Rhode Island OHIC Approved Rates.

This substantial increase in insurance premium costs in just two years is economically harmful for Rhode Islanders, who are legally required to have insurance coverage. Rhode Islanders without insurance are required to pay a tax penalty of the maximum of approximately \$700 or 2.5% of net income above the Rhode Island tax threshold.⁶ This large increase in costs will force many Rhode Island families to make tradeoffs between purchasing insurance coverage and affording household expenses. Given the order-of-magnitude difference between the tax penalty and premiums, it is likely that many Rhode Island families will elect to forgo insurance coverage.

This dynamic further threatens the stability of health insurance markets in Rhode Island. The Rhode Islanders who elect to forgo insurance coverage are likely those with lower expected health spending. Those who maintain coverage will likely have higher expected health spending needs. These

⁶ Source: <https://healthsourceri.com/mandate/#>

enrollee selection challenges risk a “death spiral” that threatens the sustainability of the Rhode Island insurance market.⁷ Rather than further financially burden Rhode Islanders and potentially undermine the viability of the individual market in Rhode Island, it is critical for the Rhode Island policy and insurance systems to address structural issues that threaten health care affordability.

While the newly-approved Rhode Island state subsidies are designed to offset the affordability impacts of the loss of the expiration of the federal premium subsidies, less than 10% of subsidies are projected to apply to the BCBSRI population, based on their higher incomes compared to Neighborhood Health Plan of Rhode Island.⁸ Thus, the ability of state subsidies to slow instability in the BCBSRI population may be limited.

II. Contributors to Requested Rate

BCBSRI’s filing notes several sources that drive the requested rate increase. Several of the stated reasons for the requested rate are assessed below. I have made several recommendations regarding these premium drivers for the Commissioner’s consideration when assessing the affordability of the rates.

Inapplicability of Claimed Tariff Expenses

While not listed as a source directly related to medical expenses, BCBSRI’s filing notes “administrative cost pressures related to ongoing tariff uncertainty.”⁹ In subsequent responses, tariffs are expected to impact “certain areas of expenses...These may include equipment (such as servers,

⁷ Cutler, David M., and Sarah J. Reber. 1998. “Paying for Health Insurance: The Trade-Off between Competition and Adverse Selection.” *The Quarterly Journal of Economics* 113 (2): 433–66. <https://doi.org/10.1162/0033553985555649>. Cutler, David M., and Richard J. Zeckhauser. 2000. “Chapter 11 The Anatomy of Health Insurance.” In *Handbook of Health Economics*, edited by Anthony J. Culyer and Joseph P. Newhouse, 1, Part A:563–643. Elsevier. <http://www.sciencedirect.com/science/article/pii/S1574006400801705>.

⁸ Source: Rhode Island Marketplace Affordability Program Act of 2026. Summary and Assumptions Relevant to the Rate Review Process. Page 2.

⁹ BCBS-RI Actuarial Memorandum – Individual Market.

laptops, and call-center hardware), storage, cybersecurity applications, and vendor technology services.”¹⁰ Yet, these expenses related to tariffs are also “not assumed to impact operating expenses.”¹¹ Thus, given these conflicting statements, it is not clear the role that tariffs will play in administrative expenses.

Given the inconsistency between the initial filing and subsequent communication, I recommend that the Commissioner not approve tariff-related increases in administrative costs, as they are not assumed to impact operating expenses. Additionally, recent court decisions mean the legality, and thus the sustainability, of any announced tariffs remains dubious or uncertain.¹²

General Inflation

BCBSRI notes that “Significant inflation in the cost of goods and services in all sectors of the economy has had a profound impact on the cost of medical services the requested rate increase is influenced by inflation.”¹³ However, the economic data do not support the levels of increased inflation that would contribute to a nearly 10% increase in insurance premiums. Additionally, core inflation is not a direct component of a large portion of BCBSRI’s claim expenses.

First, while noted as a core reason for the request rate increase, inflation has been stable over the last few years and has receded from pandemic-era levels (Figure 2). General inflation is relevant for both overall operating costs and the Rhode Island hospital price cap policy, which limits non-ERISA commercial insurance prices for hospital care to an annual increase of CPI-U + 1%. Core CPI-U was 4.2% over the 12-month period ending in May 2026.¹⁴ Overall inflation was driven by energy-sector inflation. CPI-U excluding energy and food items was lower, 2.9%, over this period. The health

¹⁰ 7.23.26 Ltr to JBroadbent. Page 2.

¹¹ *Ibid*

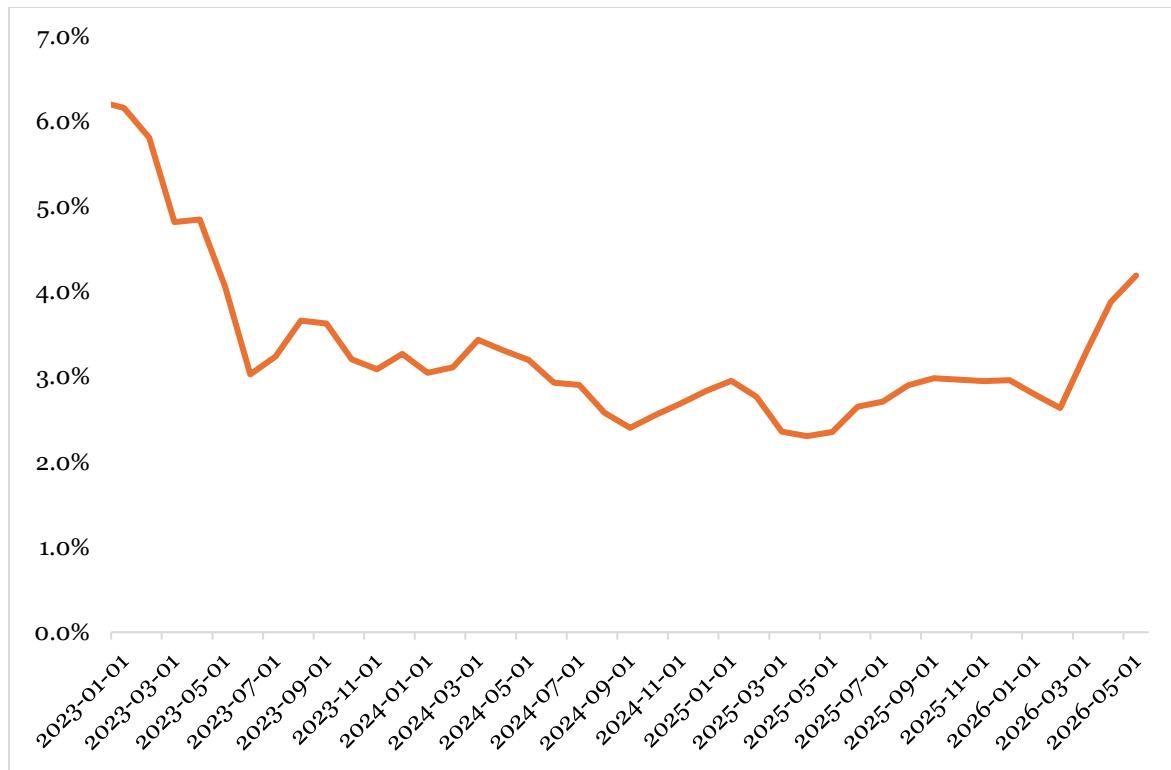
¹² Learning Resources, Inc. v. Trump, 607 U.S. ____ (2026).
<https://supreme.justia.com/cases/federal/us/607/24-1287/>.

¹³ Source: Actuarial Memorandum, page 10

¹⁴ Source: Bureau of Labor Statistics <https://www.bls.gov/cpi/>

care sector is less impacted by energy inflation, and so should expect less of a general inflationary impact.

Figure 2: Monthly Changes in Inflation (CPI-U)

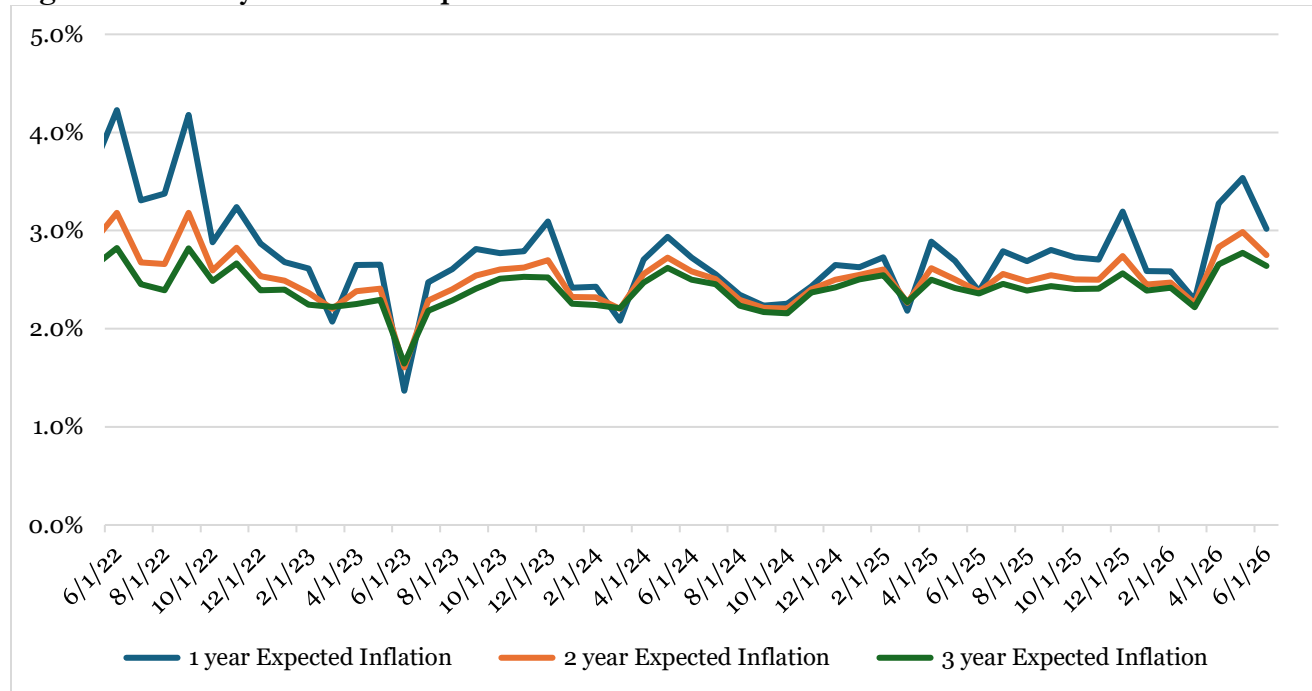


Note: Figure shows 12-month lagging inflation rates. October 2025 inflation numbers not reported due to the federal government shutdown.

These stable inflation trends are expected to continue. As highlighted in Figure 3, expert predictions of 1-, 2-, and 3-year expected inflation collected and reported by the Cleveland Federal Reserve Bank range from 3.1% to 2.7%.¹⁵ As additionally reported by the Federal Reserve Bank, the historical expectations have been similar to realized inflation and have also been stable over the last few years.

¹⁵ Source: <https://www.clevelandfed.org/indicators-and-data/inflation-expectations>

Figure 3: Monthly Trends in Expert Predictions of Future Inflation



Note: Figure shows trends in expert predictions of inflation obtained from the Cleveland Federal Reserve Bank's survey of inflation expectations.

Secondly, BCBSRI's rate filing request notes that inflation impacts the costs of medical services. Yet, payer-provider rates are most commonly established contractually and apply over a longer period of time and do not commonly directly apply inflation adjustments. Rhode Island hospital prices are also limited to a *maximum* of CPI-U (less food and energy) + 1% by the Rhode Island hospital Affordability Standards. Given that inflation rates are projected by leading experts and forecasts to remain stable, it is unlikely that there will be large increases in hospital price growth during plan year 2027. While core inflation can impact administrative expenses, these are capped at a maximum of 15% of overall expenses by Medical Loss Ratio regulations.

Positive Financial Situation

As an organization, BCBSRI has a Q12026 surplus that is \$68 million higher than at the same time last year.¹⁶ BCBSRI collectively has over \$1 billion in financial assets in reserves. Specific to the individual market, despite an approximately 2,000 person decrease in individual market enrollment, BCBSRI's overall premium revenue increased by approximately \$54 million relative to the same period last year.¹⁷ In its first quarter 2026 financial statement, BCBSRI notes a \$13 million positive difference between health premiums and paid expenses.¹⁸ Projecting these margins through the rest of the year predicts an over \$50 million positive differential between premium revenue and claims expenses from the Rhode Island individual market. The most recent BCBS financial statement also indicates strong financial performance in the Group and Medicare Advantage segments. Across all segments, current earned premium revenue exceeds claims incurred by nearly \$127 million.

The 41% difference between BCBSRI individual market premiums and paid expenses does not account for additional payments that further increase profitability. For example, BCBSRI assumes receiving \$96.47 PMPM from the RI risk adjustment program. The Q1 2026 financial statement reports \$21 million in additional risk adjustment receivables. Thus, BCBSRI's individual market total profit margin is even higher.

This high margin is contributed to by the high premium rate increase approved in the prior year. It is likely that the 22% rate granted last year has led to substantial individual market profits in the first part of 2026. Thus, it appears that the 22% plan year 2026 rate increase may have been overly generous. While financially beneficial to BCBSRI, this large rate increase creates financial pressures

¹⁶ Financial Statement as of March 31, 2026 of the BLUE CROSS & BLUE SHIELD OF RHODE ISLAND

¹⁷ *Ibid*

¹⁸ *Ibid*

and affordability challenges for many Rhode Island consumers. Given the financial status of BCBSRI, it is not clear that the requested 3% contribution to reserves is necessary to maintain financial health.

Pricing Strategies

BCBSRI has an obligation to employ strategies that increase health care affordability. For example, Rhode Island regulations note that nonprofit insurers are required to “[e]mploy pricing strategies that enhance the affordability of health care coverage.”¹⁹ The filing and subsequent documents do not mention such pricing strategies to improve health care affordability. Given the historical record of several years of premium growth that far exceeds medical inflation, as well as premiums that are approximately double the Rhode Island benchmark premium, it is not evident that BCBSRI has effectively employed these strategies for the benefit of Rhode Island consumers.

Faced with rising costs, other innovative insurers have implemented innovative pricing strategies to improve health care affordability. I am not aware of these efforts being applied by BCBSRI. Particularly given the cumulative increases in costs, these strategies are appropriate to apply, rather than continuing to burden Rhode Island consumers with excessive premium increases.

Other insurers and purchasers have addressed health care affordability challenges through a variety of solutions. For example, several insurers and purchasers have implemented reference-based pricing incentives to incentivize the use of lower-priced providers, yielding savings of approximately 20% for common services.²⁰ Other purchasers have used narrow or tiered network approaches to reduce spending by approximately 5%.²¹ More recently, a variety of purchasers have limited hospital

¹⁹ *Blue Cross & Blue Shield of R.I. v. McConaghy*, No. PC 04-6806 (R.I. Super. Ct. July 11, 2005)

²⁰ Robinson, James C., Timothy T. Brown, and Christopher Whaley. 2017. “Reference Pricing Changes The ‘Choice Architecture’ Of Health Care For Consumers.” *Health Affairs* 36 (3): 524–30.

²¹ Gruber, Jonathan, and Robin McKnight. 2016. “Controlling Health Care Costs through Limited Network Insurance Plans: Evidence from Massachusetts State Employees.” *American Economic Journal: Economic Policy* 8 (2): 219–50.

payment to a multiple of Medicare, reducing hospital-based spending by over 50%.²² Given the requirement to increase health care affordability, I recommend the BCBS be required to implement these or similar types of cost-containment strategies in lieu of a nearly 10% increase in consumer premiums.

III. Structural Reforms Needed to Improve Rhode Island Health Care Affordability

High requested and continued premium increases across the Rhode Island insurance landscape are indicative of broader Rhode Island health care market challenges and threats to health care affordability for consumers. If the stability of the Rhode Island individual insurance market is to be maintained, there are important structural changes that must be applied to ensure both the ability of insurers to operate and the ability of Rhode Island consumers to purchase affordable health insurance.

While requested rate increases may appear to be a one-time impact to consumers, there exists the potential that without structural reform to health care markets in Rhode Island, these rate increases may become commonplace. BCBSRI has had rate review hearings in the past two years. As noted above, several years of rate increases have compounded to a present rate that far exceeds medical inflation trends. These cumulative rate increases are both unsustainable for Rhode Island consumers and for the stability of the Rhode Island insurance market. Additionally, these rising costs will likely lead many Rhode Islanders to forgo insurance coverage. As a result, the requested premium is likely to reduce access to care, increase uninsurance, and place further strains on the Rhode Island delivery system.

Sinaiko, Anna D., Mary Beth Landrum, and Michael E. Chernew. 2017. "Enrollment In A Health Plan With A Tiered Provider Network Decreased Medical Spending By 5 Percent." *Health Affairs (Project Hope)* 36 (5): 870–75.

²² Murray, Roslyn C., and Christopher M. Whaley. 2026. "Commercial Prices Relative to Medicare Were Lower Under An Employer-Based Reference Pricing Program." *Health Affairs Scholar*, 2026, qxag156.

Other states have addressed underlying structural challenges in their health care markets through innovative approaches. One particular example comes from Vermont, which faced high premium growth, largely due to provider prices.²³ Vermont policymakers responded by implementing a policy that limits the prices hospitals can charge commercial insurers to 200 percent of Medicare rates.²⁴ My estimates suggest that this policy itself can reduce Vermont health care spending by over \$400 million.²⁵ Given the similar size and market dynamics, it is likely that savings in Rhode Island could be similar. Given differing market environments, a potential payment cap policy would require implementing a Rhode Island-specific payment cap. Other states have implemented varying payment caps, depending on their market environment, ranging from 200% of Medicare in Vermont to 265% of Medicare in Indiana.

High prices for specialty and administered drugs is a common driver of health care spending. Yet, administered drugs are commonly associated with high provider markups, often exceeding the underlying costs of the drug itself.²⁶ Vermont also experienced the nation's highest provider markups for clinician-administered specialty drugs (Whaley et al. 2024). Corresponding legislation in Vermont caps administered drug prices to 120 percent of Average Sales Price (ASP).

In large part due to these proactive approaches, Vermont insurers have requested premium increases of less than 5%.²⁷ Other states, including Indiana, Oregon, and Washington have adopted

²³ Fisher, Michael. 2026. "Vermont Could Become The National Leader In Reference-Based Pricing | Health Affairs Forefront." *Health Affairs Forefront*, May 5, 2026.

<https://www.healthaffairs.org/doi/10.1377/forefront.20260428.962900/full/>.

²⁴ Source: <https://gmcboard.vermont.gov/hospital-reference-based-pricing>

²⁵ Source: Vermont House Committee on Health Care. April 2025. S.126 Payment Reforms Presentation: "Vermont Healthcare Affordability: Cost Drivers and Economic Impacts" <https://gmcboard.vermont.gov/legislative-testimony>

²⁶ Robinson, James C., Christopher Whaley, and Sanket S. Dhruva. 2024. "Hospital Prices for Physician-Administered Drugs for Patients with Private Insurance." *New England Journal of Medicine* 390 (4): 338–45.

²⁷ Source: <https://vermontbiz.com/news/2026/may/12/blue-cross-vt-requests-lowest-premium-increase-five-years>

similar reference-based pricing programs. Oregon’s reference-based pricing model reduced spending among public employees by over \$100 million in its first two years, with no changes to hospital quality, staffing, or access.²⁸ Washington’s payment limits are attributed to lower-than-trend premium increases.²⁹ These policies address underlying structural drivers of health care cost growth, including how to limit the consequences of provider consolidation and how to pay for new and emerging technologies. Rather than grant double-digit premium growth to insurers, Rhode Island policymakers could look at these other state-led innovations.

Relatedly, several studies and policymakers have noted the wide range in prices between hospital and non-hospital facilities for the same services. These “site-of-care” payment differentials are a key driver of increased spending and prices, despite no difference observed quality or patient outcomes.³⁰ In light of these differences, state and federal policymakers have considered a variety of site-neutral payment policies. Most notably, proposed legislation in New York seeks to adopt the site-neutral policy developed by the Medicare Payment Advisory Commission (MedPAC).³¹ My research shows that if Rhode Island adopted similar policies, per-capita spending could be reduced by \$60.³² Applying these estimates to BCBSRI’s requested 2027 individual market premium yields a 5% reduction in premiums.³³

²⁸ Murray, Roslyn C., Zach Y. Brown, Sarah Miller, Edward C. Norton, and Andrew M. Ryan. 2024. “Hospital Facility Prices Declined As A Result Of Oregon’s Hospital Payment Cap.” *Health Affairs* 43 (3): 424–32.

Murray, Roslyn C., Andrew M. Ryan, and Christopher M. Whaley. 2025. “Hospital Finances, Operations, And Patient Experience Remain Stable After Oregon’s Hospital Payment Cap Was Implemented.” *Health Affairs* 44 (12): 1482–89.

²⁹ Source: <https://www.hca.wa.gov/assets/pebb/peb-board-briefing-book-062526.pdf>

³⁰ Robinson, James, Christopher Whaley, and Sanket Dhruva. 2024. *Prices and Complications in Hospital-Based and Freestanding Surgery Centers*. April 2024, vol. 30 (April 2024): 179–84.

³¹ Source: <https://nashp.org/new-site-neutral-payment-model-legislation-for-states/>

³² Murray, Roslyn C., Haroon Janjua, and Christopher M. Whaley. 2025. “Site-Neutral Payment for Routine Services Could Save Commercial Purchasers and Patients Billions.” *Health Affairs Scholar* 3 (12): qxaf241.

³³ (\$736 - \$60) / \$736

Other potential approaches include addressing the structure of Rhode Island insurance markets. Currently, only two firms offer Exchange plan insurance offerings. The limited scope of competition among a duopoly limits the incentives to innovate and improve health care affordability. Insurer concentration also limits the incentives to pass along savings to patients and plan purchasers.³⁴ Other states, namely Colorado, have addressed limited insurer competition by implementing a public option plan. Colorado Exchange plans had several years of double-digit premium increases. In response, starting in 2023, public option plans were required to *reduce* premiums by 5 percent annually.

Starting in 2026, public option plan premiums are only allowed to increase at the medical inflation rate. My analysis finds that the Colorado public option plan premiums are more than \$100 less expensive than comparable plans.³⁵ A Mathematica report finds 3.4 to 7.8 percent lower premiums, depending on selected metal tier, and 15 percent lower patient out-of-pocket spending.³⁶ My research finds that this provision placed downward pressure on provider price growth.³⁷ If a key underlying source of consistently rising health insurance premiums in Rhode Island is due to rising provider prices or unchecked service utilization, a public option could yield similar savings.³⁸

Rhode Island has recently taken other steps that I estimate will, albeit over a longer time period, improve health care affordability. These policies include removing Certificate of Need policies that

³⁴ Dafny, Leemore, Mark Duggan, and Subramaniam Ramanarayanan. 2012. “Paying a Premium on Your Premium? Consolidation in the US Health Insurance Industry.” *American Economic Review* 102 (2): 1161–85.

³⁵ Sources : <https://www.healthaffairs.org/content/forefront/can-public-option-plans-improve-affordability-insights-colorado> and [https://cahpr.sph.brown.edu/sites/default/files/documents/Policy%20Brief_%20Colorado%20Option%20Premiums%20\(1\).pdf](https://cahpr.sph.brown.edu/sites/default/files/documents/Policy%20Brief_%20Colorado%20Option%20Premiums%20(1).pdf)

³⁶ Pohl, Vincent, Alli Steiner, Monica Davadi, Kara Nester, Leah Faunce, Monica Farid, and Becca Gordon. 2026. *Analysis of the Colorado Option*. Mathematica.

<https://www.mathematica.org/publications/analysis-of-the-colorado-option>.

³⁷ Source: <https://repository.library.brown.edu/studio/item/bdr:gzp4t9ra/>

³⁸ Murray, Roslyn, and Christopher Whaley. 2026. “Can Public Option Plans Improve Affordability? Insights From Colorado | Health Affairs Forefront.” *Health Affairs Forefront*, January 15, 2026. <https://www.healthaffairs.org/doi/10.1377/forefront.20250113.844529/full/>.

create barriers to provider entry and competition. Rhode Island has also expanded the ability of advance-practice nursing professionals to perform primary care services independent of a physician. These expanded Scope of Practice policies are likely to improve primary care access and quality, with longer-run reductions in per-visit prices.³⁹ While these benefits will not likely impact 2027 costs, they will likely have longer-run benefits to Rhode Island health care affordability.

In conclusion, approving the requested rate increase from BCBSRI will mean that health insurance costs increase for the approximately 16,000 Rhode Islanders enrolled in a BCBSRI plan will increase by 34 percent in just two years. Rhode Islanders are required to purchase insurance. Premium increases of this magnitude are likely to be harmful to Rhode Island consumers and further strain household budgets. The large and immediate financial shock of the proposed rate could threaten to pose economic hardship and potentially threaten insurance market stability. The effects of an approximately 10% annual increase in insurance premium rates, on top of last year's approved 22% rate increase, would place immediate and significant financial pressures on Rhode Island consumers and households. As a result of these increases, uninsurance rates in Rhode Island will likely increase. This potential increase in uninsurance will likely create access barriers to appropriate care and place additional financial strain on the Rhode Island health care system.

³⁹ Muench, Ulrike, Christopher Whaley, Janet Coffman, and Joanne Spetz. 2020. "Scope-of-Practice for Nurse Practitioners and Adherence to Medications for Chronic Illness in Primary Care." *Journal of General Internal Medicine*.

Xue, Ying, Zhiqiu Ye, Carol Brewer, and Joanne Spetz. 2016. "Impact of State Nurse Practitioner Scope-of-Practice Regulation on Health Care Delivery: Systematic Review." *Nursing Outlook* 64 (1): 71–85.