

## BRIEF REPORT

Rhode Island's Investment in Primary Care Transformation:  
A Case Study

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**Introduction:** Rhode Island has received national recognition as a leader in statewide, multipayer, multistakeholder initiatives that focus on investments in primary care as a strategy to build a strong delivery system foundation that delivers high-quality, affordable health care. **Method:** For this case study we summarize key structural, process and outcomes factors and lessons learned from internal and external evaluations and project based and stakeholder-engaged quality improvement efforts that helped Rhode Island become the most improved U.S. health system over the past 5 years. **Results:** Rhode Island's Office of the Insurance Commissioner through a collaborative process contractually established per-member, per-month payments to practices that engaged in the statewide transformation program to the patient-centered medical home model of care and paid incentives for achieving quality, patient experience, and hospital utilization targets. **Discussion:** Critical lessons learned include the importance of engaging stakeholders in systems change, measuring and monitoring primary care spending, and continuous learning and best-practice sharing.

**Keywords:** health care transformation, patient-centered medical home lessons learned, primary care investment, primary care innovation

Rhode Island has received national recognition as a leader in statewide patient-centered medical home (PCMH) implementation and in health care innovations that expand and im-

prove upon the PCMH model (AHRQ, 2018; Alletto & Ganim, 2019; Commonwealth Fund, 2019; Jabbarpour et al., 2019). Most recently, the Commonwealth Fund's, 2019 Annual Scorecard ranked Rhode Island's health care system as seventh in the nation overall (a jump from 16th in 2013) and ranked Rhode Island as the most improved health care system over the past 5 years (Commonwealth Fund, 2019). Table 1 shows Rhode Island made significant gains in access and affordability, healthy lives, and prevention and treatment. Rhode Island has been featured as an exemplar case study in the national health care report, Investing in primary care: A state-level analysis (Jabbarpour et al., 2019). Key accomplishments noted in that report include reducing the uninsured rate, increasing

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Table 1  
Commonwealth Fund Change in Rankings—Rhode Island

Variables	2019 rank	Change from baseline <sup>a</sup>
Overall ranking	7	+9
Access and affordability	3	+10
Prevention and treatment	5	+15
Avoidable hospital cost and use	26	−3
Healthy lives	11	+14
Disparity	13	+7
Medicaid expansion	Yes	
Top-ranked indicators	Adults without a usual source of care Children who did not receive needed mental health care High out-of-pocket medical spending	
Bottom-ranked indicators	Drug-poisoning deaths Central line-associated blood stream infection Diabetic adults without an annual hemoglobin A1c test	
Most improved indicators	Adults with any mental illness reporting unmet need Diabetic adults without an annual hemoglobin A1c test Uninsured adults	
Indicators that worsened the most	Adults who are obese Preventable hospitalizations aged 18–64 years Home health patients with a hospital admission	
Indicator domains	<ul style="list-style-type: none"> <li>• Access and affordability (seven indicators)</li> <li>• Prevention and treatment (15 indicators)</li> <li>• Potentially avoidable hospital use (13 indicators, including several measures reported separately for distinct age groups)</li> <li>• Healthy lives (12 indicators)</li> </ul>	

*Note.* Commonwealth Fund Scorecard on State Health Care Performance ([https://scorecard.commonwealthfund.org/files/Radley\\_State\\_Scorecard\\_2019.pdf](https://scorecard.commonwealthfund.org/files/Radley_State_Scorecard_2019.pdf)).

<sup>a</sup> Change from baseline is measured over 4 or 5 years, depending on measure/indicator.

investment in primary care while decreasing overall cost of health care expenditures, and expanded access to mental health care for children and adults (Jabbarpour et al., 2019). Notably, in 2018 Rhode Island's uninsured rate was 3.7% (Health-Source R.I., 2019) compared with a national rate of 8.8% (Cohen, Martinez, & Zammitti, 2018).

In this case study, we describe key structural, process, and measurement factors that helped make this happen, lessons learned along the journey, and what we still need to do to realize the quadruple aim of health care (Berwick, Nolan, & Whittington, 2008; Bodenheimer & Sinsky, 2014).

### Structure and Systems Factors

In 2004, legislators recognized there was a need for urgent action for systems-level change. Rhode Island's primary care system was broken (Stern & Majcher, 2005). Some providers were

picketing the state house, whereas others were leaving the state.

At a structural level, Rhode Island put into place legislation to create infrastructure, funding, and oversight. In 2004 the legislature created the Office of the Health Insurance Commissioner (OHIC), an agency unique to Rhode Island. OHIC's mandate is to regulate commercial insurers and to be an active member of the Governor's cabinet (RI Office of the Health Insurance Commissioner, 2019a).

There was also the recognition that to be effective in lowering costs and transforming the health care system, building a strong and vibrant primary care infrastructure was crucial. In 2008, OHIC used its purposes statute (42-14.5-2) and existing rate review statutes to create Affordability Standards (C. King, personal communication, September 24, 2019). These standards required insurers to increase investments in primary care and encouraged primary

care practices to adopt the PCMH model. The Affordability Standards also work to reduce costs through the adoption of payment reform strategies such as population-based contracting, alternative payment methodologies, improved hospital contracting practices, and controlling cost increases associated with population-based contracts (King, 2019; RI Office of the Health Insurance Commissioner, 2019b).

Operationally, the Affordability Standards required commercial payers to make a yearly 1% increase in primary care spend over 4 years. As shown in Figure 1, initial primary care spending was measured at 5.7% and was already up to 6.3% when the affordability standards were implemented. Primary care spending subsequently increased from 6.3% to 10.5% from 2010 through 2014. In 2018, primary care spending increased to 12.3%, and was projected to increase to 12.5% in 2019 (King, 2019).

The Affordability Standards established a funding mechanism to create a statewide public-private multipayer primary care transformation effort, the R.I. Chronic Care Sustainability Initiative (CSI-RI), incorporated in 2015 as the Care Transformation Collaborative of Rhode Island (CTC). Additionally, the legislature funded an all payer claims database to collect and monitor expenditure data and required that state and private payers invest in the Health Information Exchange. In this way, the legislature established policy and implementation structures to support health system change. Nationally, the Patient Protection and Affordable Care Act (2010)<sup>1</sup> and the Mental Health Parity and Addiction Equity Act (2008)<sup>2</sup> have supported Rhode Island's efforts in developing and expanding upon its PCMH model and in ensuring residents have access to health care.

Operating as an initiative since 2008, the CTC incorporated as a 501c3 in 2015 and is coconvened by the OHIC and the Executive Office of Health and Human Services. The CTC provides oversight to a statewide collaborative effort to transform primary care practice. The CTC has a diverse board of directors that includes the Health Insurance Commissioner, the Medicaid director (representing the Executive Office of Health and Human Services), and representatives from primary care practices, systems of care, the four major RI health plans, employers, and consumers. This broad group of stakeholders provides guidance, direction, and

support for strategy to drive innovation and help transform the health care system (CTC-RI, 2019b). The CTC established a Clinical Strategy Committee in 2015 by which clinical leaders from practices, systems of care, and health plans help set the innovation agenda. Furthermore, state agencies also used their convening power to bring health plans, primary care practices, and other key stakeholders to the CTC table to create a strong public-private partnership.

The CTC works to align its efforts with the Rhode Island Department of Health and has been an effective implementation partner for multipayer-, multisource-funded initiatives to continue to refine and expand comprehensive primary care in Rhode Island. Another key element of Rhode Island's success is the coconvening and ongoing relationship with OHIC and Medicaid. This relationship allowed antitrust protections for the CTC to set up a common contract between practices and the four major Rhode Island health plans.

CTC's efforts are driven by its learning collaboratives. These collaboratives invite practices to participate in sharing their experiences, best practices, and implementation barriers around targeted topics such as reducing inpatient hospitalization and emergency department usage rates, integrated behavioral health (IBH), and implementing evidence-based practice. Issues and possible solutions raised in the collaboratives serve as the basis for identifying systems improvement opportunities. For example, the learning collaboratives identified the need to focus on social determinants of health to improve patient outcomes.

Primary care innovation has also been funded through large federal and foundation grants. Examples include funding to pilot community health teams and IBH. The Rhode Island State Innovation Model grant also harmonized core and menu primary care quality measures based on the CTC PCMH measures. These quality measures then were used to help establish the core-aligned measure set for primary care, the Accountable Care Organization, and hospital contracts. As shown in Figure 2, quality measures improved as implementation proceeded.

<sup>1</sup> Public Law 111-148.

<sup>2</sup> Public Law 110-343.

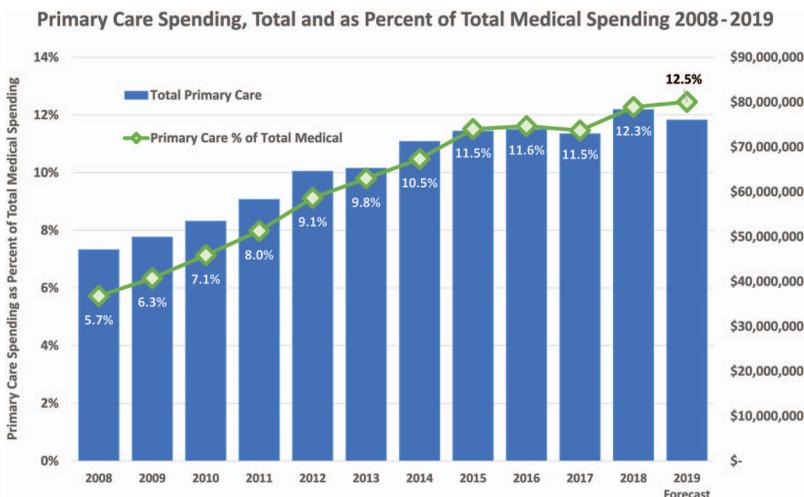


Figure 1. RI OHIC trend line of primary care spending 2008–2019. See the online article for the color version of this figure.

**Rhode Island’s PCMH Model**

The Common Contract establishes infrastructure payments and harmonized measures of success for PCMH transformation. Supplemental per-member, per-month (PMPM) payments are made to practices based on attributed lives to meet a common set of service delivery require-

ments needed to become a PCMH. Practices hire a nurse care manager, obtain PCMH National Committee for Quality Assurance recognition, report on key quality measures, and use information to improve performance. Practices that meet clinical quality, customer experience, and utilization thresholds are eligible for incen-

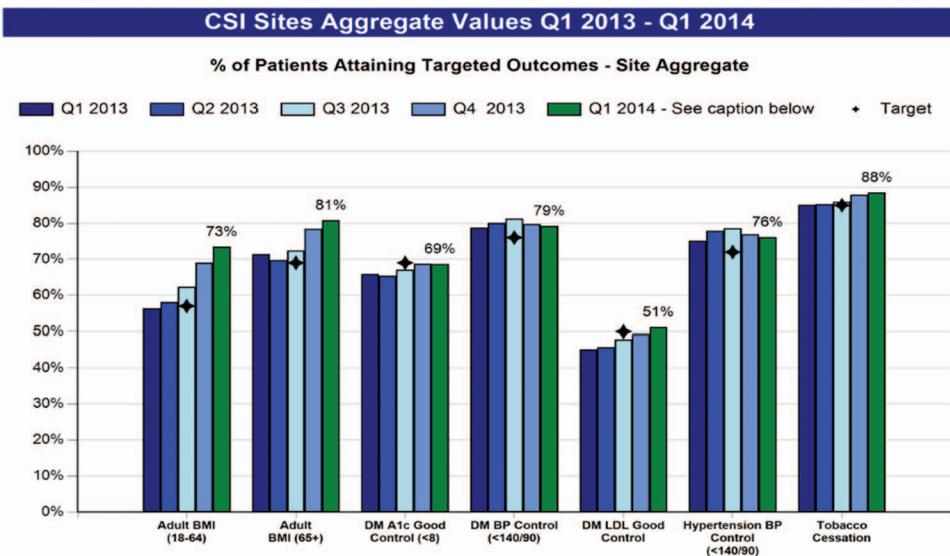


Figure 2. Clinical quality measure performance—CSI Sites Q1 2013 – Q1 2014. See the online article for the color version of this figure.

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tive payments. From the five original adult pilot practices in 2008, the CTC expanded to include pediatric practices that adopt the CTC's PCMH model (PCMH-Kids) at the start of 2016 and has since worked with more than 75% of Rhode Island primary care providers including 128 practices and all of the Rhode Island federally qualified health centers with the exception of Block Island (CTC-RI, 2019a).

### Implementing PCMH

To support practices as they transition to PCMH, the CTC uses a model of collaborative learning with best-practice sharing, financial support to recognize the effort at the practice level, and onsite practice facilitators who assist practices with meeting clear deliverables. CTC supports workforce development efforts using: online nurse care manager training; monthly and quarterly best-practice sharing for nurse care managers and care coordinators; and partnering with Rhode Island colleges and universities for medication-assisted treatment (MAT) training, screening, brief intervention and referral to treatment training, and community health worker training.

Early results showed improvements in clinical quality measures and customer experience and variable reductions in hospital admissions (Yeracaris, Campbell, Coleman, Cabral, & Hurwitz, 2019). Learning collaborative feedback made it clear that PCMH was an important foundation but not sufficient to impact total cost of care. Through a board-led strategic planning process, the CTC further defined an expanded vision of comprehensive primary care within the context of delivery system transformation.

### Enhancing the PCMH Model—Community Health Teams and Integrated Behavioral Health

Since 2014, the CTC has worked on two important additional initiatives to address the needs of patients with complex health needs: community health teams and the integration of behavioral health in primary care settings. In 2014, the CTC piloted the Community Health Team model (CHT) as an extension of primary care. CHTs help patients with complex behavioral health and social determinant of health needs. Practices refer high-risk patients to a

CHT, comprised of community health workers and a behavioral health clinician, for assessment and intensive care coordination services. In 2016, using State Innovation Model grant funds, the CTC was able to expand the CHT model to six geographic locations. In 2019, with multipayer support and braided funding from Medicaid and the State Mental Health Authority through the State Opioid Response, CTC is adding peer recovery coaches and further enhancing the CHT network to address the needs of children and families affected by substance use disorders.

In 2015, funding from the Rhode Island Foundation, Tufts Health Plan, and the State Innovation Model enabled the CTC to pilot IBH within primary care at 10 adult practices. Practices received infrastructure payments to implement universal screening for depression, anxiety, and substance use disorders and provide patients with warm hand-offs to on-site behavioral health clinicians (either a licensed independent clinical social worker or psychologist) embedded within primary care and a part of the PCMH care team. Practices were further supported with on-site behavioral health practice facilitation and peer learning opportunities. Based on initial success, the CTC has expanded the IBH program to eight additional adult practice sites and 12 pediatric practices.

Since 2016, practices that finish the CTC transformation program or who otherwise meet OHIC PCMH standards are entitled to sustainability payments from commercial health plans under OHIC regulations. Medicaid added sustainability requirements for PCMH-Kids practices July 2019. Additional enhancements to primary care include the CTC serving as a conduit for funding (a) to provide training for and expand screening, brief intervention, and referral to treatment across the state and (b) for nurse care managers to support providers who are offering MAT services for patients.

### Outcomes and Evaluation

At a systems level, the all-payer claims database (APCD) allows Rhode Island to monitor health care spending. Practices are able to report quality measures from their electronic health records for their entire population, the annual Consumer Assessment of Health care Providers and Systems survey provided patient experience

data, and the APCD provided claims data needed for utilization and total cost of care reporting. Data from the APCD shows an association between reduced total cost of care and primary care providers practicing in PCMH and an even larger reduction over time for those within an IBH practice. Figure 3 shows that in calendar year 2017 the CTC adult PCMH practices and adult PCMH with IBH had lower PMPM (Yeracaris et al., 2019).

The CTC secured funding to further evaluate the CHT and IBH pilot programs and a pilot MAT nurse care manager model (Coleman & Cabral, 2019; Coleman & Goldman, 2018; Sklar et al., 2017). Matched comparison-controlled evaluations of the IBH and CHT efforts are underway through Brown University School of Public Health.

### Next Steps

The CTC continues to make adjustments to the PCMH model. For 2018–2019, areas of focus included improving primary care-specialist collaboration, reducing low-value care, and improving clinician and care team well-being by addressing administrative burden. The CTC continues to work on innovations concerning comprehensive primary care, particularly expanding and enhancing community health teams, IBH, and primary care-based MAT. Engaging specialists, hospitals, and systems of

care, and reforming primary care payment, have emerged as necessary next steps to more effective and efficient care delivery.

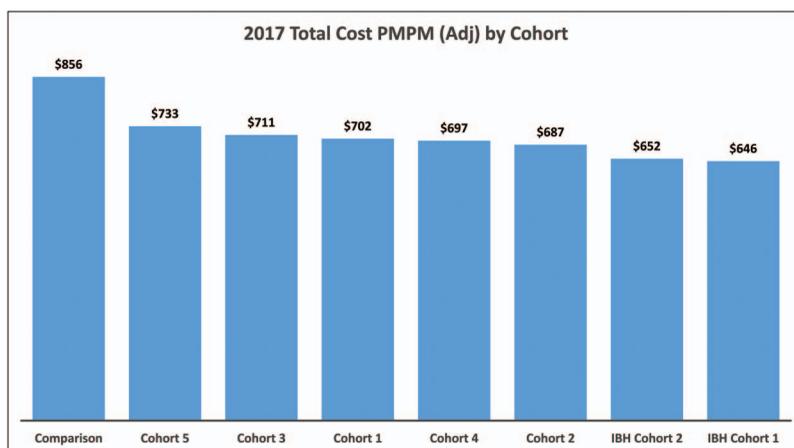
Innovation in Rhode Island includes not only programming but also sustainable financing. The CTC supports efforts by OHIC and payers to develop a prospective PMPM payment to sustain and further develop the expanded comprehensive primary care model.

Of note, in 2017 OHIC established an Annual Transformation Plan and identified mechanisms for primary care practices to be eligible for sustainability payments from the commercial health plans. Medicaid has joined in to support sustainability payments for PCMH-Kids pediatric practices.

### Lessons Learned for Policymakers and Payers

Based on the Rhode Island experience, we make the following recommendations for structural changes to support health care systems transformation:

- Use legislation and statute to create and support primary care investment and improvement standards. States can develop regulations and contract requirements for health plan participation in a statewide effort. Health plans in turn can become effective partners in launching innovative efforts.



Source: Rhode Island All-Payers Claims Database 2017

Figure 3. Average cost of care for CTC and comparison group practices, 2017. See the online article for the color version of this figure.

- Know that it takes top-down and bottom-up stakeholder vision and engagement to effect change. Rhode Island would not have been successful without broad and longitudinal commitment to primary care investment and transformation from the legislature, the governor, payers, funders, practices, providers, and other community stakeholders. The convening power of OHIC and Medicaid was important in gaining stakeholder participation. Positive results kept stakeholders at the table.
- Create and use a convening organization to manage statewide transformation. Addressing change as a statewide effort and having a public-private partnership oversight organization to lead the multistakeholder collaborative process was and remains critical to Rhode Island's success.
- Create centralized data collection and standardized measures to assess progress. Improving affordability is an important goal in primary care and health system transformation. It is critical to understand the key measures of success and to identify the data sources needed. Analytic support is needed to create analytic designs that key stakeholders will accept as valid and meaningful.
- Anticipate sustainability issues. As in many other states, Rhode Island's current payment models do not provide reliable and sustainable funding for comprehensive primary care. Rhode Island continues to explore alternative payment methods, such as primary care capitation and considering mixed-funding mechanisms to support services such as community health teams and IBH services.
- Support practices as they transition to the PCMH model and adopt new programs. Supports such as practice facilitation, learning collaboratives, and training promote best practices and increase provider satisfaction. Onsite practice facilitation and clear deliverables have been important in successful implementation.
- Expand the PCMH model to include children. Of note, expansion to PCMH-Kids took over 18 months of negotiation largely because children do not drive hospital utilization or costs. However, PCMH-Kids has proven an important addition to promote a statewide effort to improve population health for individuals, children and families (Flanagan, 2018; Flanagan & Lange, 2018).
- Evaluate and fine-tune programs. The CTC supported early and ongoing evaluations of the PCMH model, practice facilitation, community health teams, IBH programs, and grant-funded MAT programs. These evaluations served to strengthen those programs and ensured expansion programs avoided replicating any early missteps. Determine funding streams to support funding for patient outcomes research.

We also want to recommend programmatic approaches that have been critical to success in Rhode Island:

- Recognize primary care investments need to expand beyond the traditional patient centered medical home model to support community-based and integrated comprehensive primary care. Patient care needs extend beyond the walls of primary care into the community. The PCMH model alone was not sufficient to reach our goals of improving care, lowering costs, and improving patient and provider satisfaction.

## Conclusion

Faced with a crisis in health care, Rhode Island's leaders were determined to invest in a statewide, comprehensive, and multipayer approach built on stakeholder input that would transform health care at a systems, programmatic, and outcomes level. That approach included enabling legislation that facilitated primary care investment and provided regulatory authority through the Office of the Health Insurance Commissioner. It created an all payer claims database to support evaluation and monitor health care spending. The importance of statewide leadership and legislation cannot be overstated. However, perhaps equally important was the state's commitment to bring stakeholders together in a strategic, statewide approach to build comprehensive primary care and drive health system transformation.

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