ABSTRACT
As the Patient Centered Medical Home (PCMH) model has evolved nationally and in Rhode Island, there has been increased recognition that PCMH has not been sufficient to achieve desired cost and quality goals. In this article, we describe the evolving concept of "comprehensive primary care" in Rhode Island, which includes addressing the behavioral health and social determinants of health (SDOH) needs of patients. These needs are identified through systematic screening and dedicated care management and care coordination for patients who present with complex needs.

BACKGROUND
Rhode Island is one of the first States in the country to focus on investing in primary care transformation to the Patient Centered Medical Home (PCMH) model as a strategy to improve quality and affordability and provider satisfaction. The Care Transformation Collaborative of RI (CTC), co-convened by the Office of the Health Commissioner (OHIC) and Rhode Island Executive Office of Health and Human Services (EOHHS), is a statewide multi-payer, multi-stakeholder, public-private partnership focused on primary care and health system transformation. The original focus was to assist primary care practices to become a PCMH.

As the model has evolved nationally, there has been increased recognition that PCMH is necessary but not sufficient to achieve desired cost and quality goals. In this article, we describe the evolving concept of "comprehensive primary care" taking place in Rhode Island, which includes addressing the behavioral health and social determinants of health (SDOH) needs of patients. These needs are identified through systematic screening and dedicated care management and care coordination for patients who present with complex needs.

INTRODUCTION
Established in 2008, the Care Transformation Collaborative of Rhode Island (CTC) was formed as part of the RI “Affordability Standards” that recognizes strong primary care as a critical foundation to reducing health care costs and improving quality. The effort is built around the “quadruple aim” of better patient-centered care, improved health of populations, lower costs, and improved provider and care team well-being.

In 2015, CTC extended practice transformation to practices serving children through its PCMH Kids initiative, a patient-family-community approach to comprehensive primary care. PCMH Kids is comprised of 37 practices, providing care to over 110,000 children and young adults ages 0–18, including more than 80% of the state’s pediatric Medicaid population.

Acting on the strategic direction from its diverse board of directors, CTC has deepened its efforts to promote innovation and strengthening of comprehensive primary care, additionally working with specialists, systems of care, and other key stakeholders in the RI health care delivery system. The work of advancing and strengthening the primary care foundation through sustainable funding and continuous multi-stakeholder efforts has led to the national recognition of Rhode Island as one of the leaders in health system transformation.

PROGRAMS AND OUTCOMES
Patient-Centered Medical Home (PCMH)
Since 2008 CTC has worked with 126 practices including all Federally Qualified Health Centers, representing over 750 adult and pediatric primary care providers, serving over 650,000 Rhode Islanders, or nearly two-thirds of the state’s population. Key features of the program include a common contract with payers for supplemental payments to support care management/care coordination resources, quality reporting, and PCMH transformation. Additionally CTC provides onsite practice facilitation and regular learning collaboratives for best-practice sharing. In 2014, Rhode Island led the country in having the lowest percent of residents without a personal physician at 12.2% compared with a national average of 22.5% and was in the top ten states for fewest residents without a usual place of care, 10.1% compared with a national average of 17.3%.
This transformation to PCMH is also associated with lower costs. As shown in Figure 1, according to HealthFacts RI [The RI All Payer Claims Database] in CY 2016, CTC adult practices outperformed the comparison group in total cost of care (with exclusions) by $122 Per Member Per Month (PMPM, a common way to describe insurance-related costs). This represents lower cost of care of $217 million for adult CTC practices in 2016. Exclusions from total cost of care include maternity and Behavioral Health hospitalizations.

Integrated Behavioral Health

**Figure 1.** Average Total Cost of Care for CTC and comparison group practices, 2016

![Chart showing average total cost of care for CTC and comparison group practices, 2016](source: Rhode Island All-Payers Claims Database 2016)

In 2015, CTC received funding from the Rhode Island Foundation, Tufts Health Plan and a State Innovation Model grant to conduct a three-year pilot program to integrate behavioral health services in primary care. Ten adult primary care practices representing a mix of six federally qualified health centers and private practices participated in the project in two separate waves – Cohort 1 (began January 2015) and Cohort 2 (began November 2016). Both cohorts were comprised of two private primary care practices and three community health center practices.

Both cohorts were required to: 1) implement universal screening for depression, anxiety and substance use disorders; 2) hire a behavioral health clinician to work as a member of the PCMH care team; 3) meet monthly with an onsite behavioral health practice facilitator; 4) conduct quality improvement projects to reduce ED visits associated with unmet behavioral health needs; and 5) identify and treat patients with co-morbid medical and behavioral conditions, and coordinate care for patients referred to behavioral health services; and 6) participate in quarterly learning network meetings with the other primary care practices participating in the pilot to report out on “lessons learned.”

In 2017, CTC contracted with external evaluators to conduct a qualitative evaluation of the IBH program. Universal, primary care practices communicated the positive impact IBH has had for providers and patients. “I would not want to practice without it” effectively summarized provider response to IBH. The evaluation offered recommendations to strengthen IBH implementation, including using a systematic approach to IBH program development and implementation. Barriers to IBH included billing challenges, with different codes being covered by different insurers, two same day copays when the patient meets with an IBH counselor and their primary care provider, and higher specialty copays for patients with commercial insurance. Supported by this evaluation, in 2018, the RI legislature passed a bill which was signed into law on July 2, 2018 requiring that behavioral health visit copays be equal to primary care copays. This is a step forward, although double copays still continue for services that occur on the same day.

CTC has conducted its own set of analyses and also contracted with Brown University to analyze cost results using a matched control group. **Figure 2** shows Cohort 1 and Cohort 2 practices were able to successfully implement universal screening to target thresholds over the 3-year study period. Both Cohorts had previously implemented universal depression screening, but not universal anxiety or substance use screening. Figure 2 shows both Cohorts continued to screen between 80–85% of their patients for depression across the study period. Cohort 1 improved anxiety screening rates from 6% to 84% and substance abuse screening from 22% to 81%. Cohort 2 improved anxiety screening rates from 22% to 75% and improved substance use screening rates from 20% to 75%.

**Figure 2.** Universal screening rates for depression, anxiety and substance use disorder, Cohorts 1 & 2, 2015–2018

![Chart showing universal screening rates for depression, anxiety and substance use disorder](source: CTC)

Figure 3 shows that CTC adult practices performed much better financially than the non-IBH CTC practices as well as the non-PCMH comparison group in risk-adjusted total cost of care. Using HealthFacts RI data comparing the change in PMPM costs from Jan–Dec, 2016 to the change in PMPM costs for April 2017–March 2018 we see a greater reduction over the 27-month period in total cost of care for the CTC IBH practices by $41–$43 PMPM compared to the non IBH
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CTC practices and over $65 PMPM compared to non PCMH practices (“Difference of Differences” methodology).

Figure 4 shows decreased ED visits for both the IBH pilot programs and the comparison group with the pilot programs show a slightly greater reduction. Not surprisingly, the IBH pilots showed a greater reduction in emergency department and inpatient utilization as well.

Community Health Teams
Community Health Teams (CHTs) provide community-based care coordination services to assist high-risk, high-cost patients with their complex social and behavioral health needs. In 2015, CTC piloted two regionally based CHTs. Teams include community health workers and a behavioral health clinician and are seen as an extension of primary care. An external, mixed-methods evaluation conducted in 2016 showed high patient and provider satisfaction with the CHTs. Both patients and providers reported CHTs helped link patients to needed services, provided opportunities for increased access to behavioral health services, diverted emergency department use and improved patient treatment compliance. Lessons learned from the evaluation included the need for a standardized approach to program management, patient screening and assessment, care planning, and data collection.

Subsequently, in 2017 CTC received funding from the RI State Innovation Model grant and from the RI Department of Behavioral Health, Developmental Disabilities, and Hospitals (BHDDH) to expand the statewide CHT network to eight regionally based CHTs aligned with Health Equity Zones.

Working with the RI Department of Health (RIDOH) and the Medical Legal Partnership [of Boston – MLPB] CTC was able to add pharmacy, nutrition services, and legal consultation services. CTC designed the program so that CHTs work with practices to identify and triage rising rising risk, high risk, or high cost patients; use standardized screens to assess the patient’s physical, behavioral and social needs; develop and coordinate care plans; provide or coordinate behavioral health and/or substance use treatment referrals; link patients to services; and support continued patient engagement with their PCP. Patients are identified as rising or high risk when they have multiple chronic conditions; special healthcare needs; impacts of social determinants of health; significant behavioral health diagnoses; do not access primary care on a regular basis; and/or have numerous inpatient or emergency department visits.

A 2018 analysis of CHT performance conducted by Rajotte and colleagues shows CHTs are achieving intended results. Rajotte’s analysis found CHTs worked with providers to identify, assess, and then engage with patients identified as having complex needs. Using different patient samples, these patients averaged 17.0 poor functioning days out of the past 30 days and at least 90% had at least one social determinant of health need. Outcome data on a sample of CHT patients show clinically and statistically significant reductions (29–43%) in health risk, depression, anxiety and substance use from CHT intake to discharge, with a duration in care from 7–10 months.

Additionally, a formal, patient-matched evaluation is underway, through the Brown School of Public Health, with an initial cohort of patients followed at the South County CHT. Very preliminary data shows an apparent, not statistically significant, reduced cost of $1,800 per member per quarter in the first two quarters after treatment. Additional data is expected in May and a final analysis including 2018 data from HealthFacts RI is expected at the end of 2019.

DISCUSSION
Nationally and in Rhode Island, the PCMH model has continued to evolve. The evidence increasingly shows coordinated primary care that addresses the patient’s behavioral health and health-related social needs improves patient care, patient outcomes, and reduces healthcare cost. Hence the
conceptual shift to “comprehensive primary care” to systematically address the social and behavioral health needs of patients. CTC and its many partners and collaborators have worked to imbed universal screening into the practice of comprehensive primary care. At the point of identification, the practice (and system of care) is responsible to “provide or arrange” for the appropriate care. CTC is also committed to conducting ongoing evaluations of these programs and to incorporate findings as we move forward in further development and expansion. Innovations are piloted through sets of learning collaboratives that often include practice facilitation, content expert involvement, clear deliverables, and measurement of quality and cost. CTC plans to continue that approach in helping to build a lower cost, higher quality, more organized and integrated primary care-based health delivery system in Rhode Island.

While primary care practices, health plans, systems of care, and state agencies have done much to innovate and expand the comprehensive primary care model, there is more work to be done. Additional efforts are currently underway to expand IBH to practices that serve pediatric patients, and to expand CHTs to serve children and families (including a special focus on pregnant mothers involved with, or effected by, substance use disorders). This requires collaborative work with the multiple programs offered through the RIDOH, the Division of Youth and Family Services, BHDDH, and other partners. CTC also recognizes the need to strengthen engagement with specialists, hospitals, and many other community partners in these, and other efforts. CTC continues to work closely with all payers, including Medicaid, and other state agencies, to develop payment strategies to support Community Health Teams as a public utility and to support the financial sustainability of Integrated Behavioral Health.

References

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